



## **AGENDA**

September 16, 2020

CITY COUNCIL  
6:00 p.m.  
Council Chambers  
311 Vernon Street  
Roseville, California  
[www.roseville.ca.us](http://www.roseville.ca.us)

To help minimize the spread of COVID-19, members of the public may not attend in person, but may view the meeting on Comcast channel 14, Consolidated Communications channel 73 and AT&T U-Verse. City Council meetings are also video streamed live and are available on the City's website and YouTube channel. Members of the public may offer public comment by the following means:

Dial in Phone Number: 916-774-5353  
Email: [publiccomment@roseville.ca.us](mailto:publiccomment@roseville.ca.us)

If you need a disability-related modification or accommodation to participate in this meeting, please contact Voice: 916-774-5200, TDD: 916-774-5220. Requests must be made as early as possible.

### **THE CITY OF ROSEVILLE WELCOMES YOUR PARTICIPATION**

If an agenda item is open to public comment, such public comment shall be addressed to the chair of the meeting.

**Public Comment** - Speakers have three minutes under Public Comment to speak on issues that are not listed on the agenda and are within the City's jurisdiction. The Brown Act does not permit any action or discussion on items not listed on the agenda.

**Consent Calendar** - If applicable, the Consent Calendar consists of routine items that may be approved by one motion. Any person can remove an item from the Consent Calendar to be discussed separately.

**Agenda Items** - Speakers have five minutes to address items that are listed on the agenda.

**Americans with Disabilities Act** - Notify the City Clerk or Secretary at least 72 hours in advance if special assistance is required to participate in a meeting including the need of auxiliary aids or services.

**Audio/Visual Presentations** - If making a presentation regarding an agenda item, audio/visual materials must be submitted to the City Clerk or Secretary at least 72 hours in advance.

Security procedures are in place to attend Roseville City Council meetings. All attendees must successfully pass through a security metal detector. Any person with a prohibited item will not be allowed entry. Prohibited items include, but are not limited to: firearms (even with valid CCW), knives, pepper spray/mace, explosives of any kind/ any weapons and/or dangerous devices of any kind, illegal drugs and alcohol.

Roseville City Clerk 311 Vernon Street, Roseville, CA 916-774-5200 TDD 916-774-5220

1. **CALL TO ORDER**
2. **ROLL CALL**
3. **PLEDGE OF ALLEGIANCE**
4. **MEETING PROCEDURES**
5. **PRESENTATIONS**

5.1. City Response to COVID-19

CONTACT: Dominick Casey 916-774-5362 dcasey@roseville.ca.us

6. **PUBLIC COMMENTS**
7. **CONSENT CALENDAR**

**BEGINNING OF CONSENT CALENDAR**

**Bids / Purchases / Services**

7.1. Personal Protective Equipment - Purchase Order

Memo from Assistant Fire Chief Brian Diemer and Fire Chief Rick Bartee recommending the City Council approve a purchase order for \$315,000 for the purchase of personal protective equipment to Allstar Fire Equipment, a Lion Corporation authorized reseller, based on the Master Price Agreement as a qualified government member of National Purchasing Partners. The total purchases for FY2020-21 will not exceed \$105,000 which is included as part of the Fire Department's approved annual budget. For the remaining term of the contract, it will not exceed \$105,000 for FY2021-22 and \$105,000 for FY2022-23, for a combined total of \$315,000 over the term of the contract.

CC #: 0992

File #: 0203-12

CONTACT: Brian Diemer 916-746-1392 bdiemer@roseville.ca.us

7.2. Roseville Electric Power Plant Dedicated Fiber Network - Contract Purchase Agreement

Memo from Senior Power Plant Engineer Nathan Ribordy and Electric Utility Director Michelle Bertolino recommending the City Council adopt RESOLUTION NO. 20-371 APPROVING A SOLE SOURCE CONTRACT PURCHASE AGREEMENT BETWEEN CITY OF ROSEVILLE AND



CONSOLIDATED COMMUNICATIONS OF CALIFORNIA COMPANY, AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE (3000842) to install and maintain a dedicated fiber optic communications line for use at the Roseville Energy Park. This multi-year service agreement shall not exceed a total of \$39,600 through June 30, 2025. Funding is included in the Electric Department's FY2020-21 budget and will be included in proposed future budgets.

CC #: 0994

File #: 0800-03

CONTACT: Nathan Ribordy 916-746-1673 nribordy@roseville.ca.us

7.3. Body Armor Replacement - Contract Purchase Agreement

Memo from Administrative Analyst Shelly Bracco and Police Chief James Maccoun recommending the City Council adopt RESOLUTION NO. 20-373 APPROVING A CONTRACT PURCHASE AGREEMENT BETWEEN THE CITY OF ROSEVILLE AND GALLS, LLC DBA BLUMENTHAL UNIFORMS, AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE (3000860). Staff requests approval of a contract purchase agreement with Galls, LLC dba Blumenthal Uniforms, for concealable body armor in the amount of \$30,000, utilizing a City of Los Angeles contract. Funding is already approved in the Police Department's FY2020-21 budget.

CC #: 1000

File #: 0203-12

CONTACT: Shelly Bracco 916-774-5018 sbracco@roseville.ca.us

## **Resolutions**

7.4. Oak Street Parking Facility 7th Floor Sealing Project – Notice of Completion

Memo from Assistant Engineer Beth Taylor and Public Works Director Jason Shykowski recommending the City Council adopt RESOLUTION NO. 20-367 ACCEPTING THE PUBLIC WORK KNOWN AS THE OAK STREET PARKING FACILITY 7TH FLOOR SEALING PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING THE PUBLIC WORKS DIRECTOR TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE. The project consisted of an application of a methacrylate coating on the 7th floor of the Oak Street Parking Facility. The final construction cost for the project was \$160,320. This project was funded with the Public Facility Fee Fund, Redevelopment Successor Agency available resources, and a design consultant reimbursement. No General Fund resources were used for this project.

CC #: 0989

File #: 0400-04-02-1

CONTACT: Beth Taylor 916-746-1300 bftaylor@roseville.ca.us

7.5. Utility Billing Field Collection System - Master Sales Agreement Amendment

Memo from Finance Supervisor Jason Kemp and Assistant City Manager/Chief Financial Officer Dennis Kauffman recommending the City Council adopt RESOLUTION NO. 20-374 APPROVING A FIRST AMENDMENT TO MASTER SALES AGREEMENT, BY AND BETWEEN THE CITY OF ROSEVILLE AND ITRON, INC., AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE. The City currently contracts with Itron to provide hardware and software for meter reading and billing purposes. The City's current version of software is being discontinued and is being replaced with the Field Collection System (FCS). The First Amendment to the Itron Master Sales Agreement for FCS includes software, installation, training, licenses, and maintenance fees for the next two (2) years. The total cost of the first amendment is not to exceed \$38,099 and the cost is included in the Finance Department's Utility Billing operating budgets in the Electric and Environmental Utilities funds.

CC #: 1003

File #: 0200

CONTACT: Jason Kemp 916-746-1284 [jkemp@roseville.ca.us](mailto:jkemp@roseville.ca.us)

Andrea Blomquist 916-774-5317 [ablomquist@roseville.ca.us](mailto:ablomquist@roseville.ca.us)

7.6. Property Tax Management, Information and Audit Services – Professional Services Agreement

Memo from Budget Manager Scott Pettingell and Assistant City Manager/Chief Financial Officer Dennis Kauffman recommending the City Council adopt RESOLUTION NO. 20-370 APPROVING A PROFESSIONAL SERVICES AGREEMENT, BY AND BETWEEN THE CITY OF ROSEVILLE AND HDL COREN & CONE, AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE. Staff recommends City Council approve a nine-month professional services agreement with HdL Coren & Cone to conduct property tax management and information services. The base fee in the agreement is not to exceed \$16,686. Additionally, the consultant is entitled to twenty-five percent (25%) of any new net property tax revenues recovered for the City. The FY2020-21 budget includes adequate funds for this agreement.

CC #: 0993

File #: 0200 & 0210

CONTACT: Scott Pettingell 916-746-1306 [spettingell@roseville.ca.us](mailto:spettingell@roseville.ca.us)

7.7. Water Infrastructure Finance and Innovation Act - Authorization to Submit Application

Memo from Assistant Environmental Utilities Director Kenneth Glotzbach and Environmental Utilities Director Richard Plecker recommending the City Council adopt RESOLUTION NO. 20-376 APPROVING THE SUBMISSION OF THE WATER INFRASTRUCTURE FINANCE AND INNOVATION ACT (WIFIA) APPLICATION and pay the associated application fee of \$100,000 which is applied to the cost for the necessary credit review and loan agreement development. The application fee will be paid from the Water Construction Fund and the Wastewater Rehabilitation Fund. The WIFIA program provides long-term low interest loans for investment in water, wastewater, and

recycled water infrastructure projects.  
CC #: 1005

File #: 0800-02

CONTACT: Richard Plecker 916-774-5714 rplecker@roseville.ca.us  
Kenneth Glotzbach 916-774-5754 kglotzbach@roseville.ca.us

7.8. Per Capita Grant Program - Approval of Project Application

Memo from the Park Planning & Development Superintendent Tara Gee and Parks, Recreation & Libraries Director Jill Geller recommending the City Council adopt RESOLUTION NO. 20-369 APPROVING THE CITY OF ROSEVILLE PER CAPITA GRANT PROGRAM APPLICATION TO THE STATE DEPARTMENT OF PARKS AND RECREATION, AND AUTHORIZING THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE ALL RELATED FORMS AND AGREEMENTS ON BEHALF OF THE CITY OF ROSEVILLE. Staff requests Council certify by resolution the approval of a project application which is required prior to submitting applications to the State Department of Parks and Recreation's Per Capita Grant Program. The per capita amount for the City is \$177,952 and can be applied towards new capital, rehabilitation/replacement or new parkland acquisition.

CC #: 0991

File #: 0704

CONTACT: Tara Gee 916-774-5253 tgee@roseville.ca.us

7.9. Metering Services for Energy Imbalance Market - Professional Services Agreement

Memo from Electric Business Analyst Joe Pasco and Electric Utility Director Michelle Bertolino recommending the City Council adopt RESOLUTION NO. 20-366 APPROVING A PROFESSIONAL SERVICES AGREEMENT, BY AND BETWEEN THE CITY OF ROSEVILLE AND TRIMARK ASSOCIATES, INC., AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE. This item requests approval of a professional services agreement with Trimark Associates, Inc. for metering services required for participation in the Western Energy Imbalance Market. The total cost of services will not exceed \$166,690. Costs through June 2021 of \$55,170 are included in the Electric Department FY2020-21 budget. The remaining costs will be budgeted in subsequent fiscal years and subject to City Council approval.

CC #: 0988

File #: 0800-03

CONTACT: Joe Pasco 916-746-1663 jpasco@roseville.ca.us

7.10. Old Roseville Fire Station, 400 Lincoln Street – Lease Agreement Amendment

Memo from Development Analyst Robert Cline and Economic Development Director Laura Matteoli recommending the City Council adopt RESOLUTION NO. 20-368 APPROVING A FIRST AMENDMENT TO LEASE AGREEMENT, BETWEEN THE CITY OF ROSEVILLE AND ROSEVILLE FIRE MUSEUM, AND AUTHORIZING THE CITY MANAGER TO

EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE. The requested lease agreement amendment will defer the Roseville Fire Museum's first year of rent of \$6,204 to years two, three and four.

CC #: 0990

File #: 0717

CONTACT: Robert Cline 916-746-1172 [racline@roseville.ca.us](mailto:racline@roseville.ca.us)

#### 7.11. Child Care Software - Professional Services Agreement Amendment

Memo from Parks, Recreation & Libraries Manager Natasha Martin and Parks, Recreation & Libraries Director Jill Geller recommending the City Council adopt RESOLUTION NO. 20-356 APPROVING A FIRST AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT, BY AND BETWEEN THE CITY OF ROSEVILLE AND CIRBUS GROUP, LLC, AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE. This agreement is for software solution that manages Adventure Club registration, billing, accounts receivable, human resources, reporting and analytics. The requested amendment will extend the agreement through June 30, 2022 at a cost of \$88,000, to be paid from the Youth Development Fund.

CC #: 0976

File #: 0704

CONTACT: Natasha Martin 916-774-5234 [nmartin@roseville.ca.us](mailto:nmartin@roseville.ca.us)

#### 7.12. Creekview Offsite Sewer Project - Notice of Completion

Memo from Construction Inspector Ignacio Vizcarra and Development Services Director Mike Isom recommending the City Council adopt RESOLUTION NO. 20-357 OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS CREEKVIEW OFFSITE SEWER PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING A PORTION OF THOSE RESPECTIVE DEDICATIONS OFFERED ON THE RECORDED MAPS OF "THE FINAL MAP OF WESTPARK PHASE 4 LARGE LOT SUBDIVISION, SUBDIVISION NO. 000044". The Engineering Division has made final inspection of the project and has found the civil improvement work complete in accordance with the improvement plans and City specifications. This action has no impact to the City's General Fund. Construction costs were paid by the developer.

CC #: 0977

File #: 0400-04-09-1

CONTACT: Ignacio Vizcarra 916-774-5578 [ivizcarra@roseville.ca.us](mailto:ivizcarra@roseville.ca.us)

#### 7.13. Creekview, Westbrook Boulevard - Segment 1 - Notice of Completion

Memo from Construction Inspector Ignacio Vizcarra and Development Services Director Mike Isom recommending the City Council adopt RESOLUTION NO. 20-359 OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS CREEKVIEW,

WESTBROOK BOULEVARD - SEGMENT 1 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING A PORTION OF THOSE RESPECTIVE DEDICATIONS OFFERED ON THE RECORDED MAPS OF "THE FINAL MAP OF CREEKVIEW PHASE 1 LARGE LOT SUBDIVISION, SUBDIVISION NO. PL 18-0190". The Engineering Division has made final inspection of the project and has found the civil improvement work complete in accordance with the improvement plans and City specifications. This action has no impact to the City's General Fund. Construction costs were paid by the developer.

CC #: 0979

File #: 0400-04-09-01

CONTACT: Ignacio Vizcarra 916-774-5578 [ivizcarra@roseville.ca.us](mailto:ivizcarra@roseville.ca.us)

#### 7.14. Creekview, Blue Oaks Boulevard - Segment 3 - Notice of Completion

Memo from Construction Inspector Ignacio Vizcarra and Development Services Director Mike Isom recommending the City Council adopt RESOLUTION NO. 20-358 OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS CREEKVIEW BLUE OAKS BOULEVARD - SEGMENT 3 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING A PORTION OF THOSE RESPECTIVE DEDICATIONS OFFERED ON THE RECORDED MAPS OF "THE FINAL MAP OF CREEKVIEW PHASE 1 LARGE LOT SUBDIVISION. SUBDIVISION NO. PL18-0190." The Engineering Division has made final inspection of the project and has found the civil improvement work complete in accordance with the improvement plans and City specifications. This action has no impact to the City's General Fund. Construction costs were paid by the developer.

CC #: 0978

File #: 0400-04-09-1

CONTACT: Ignacio Vizcarra 916-744-5578 [ivizcarra@roseville.ca.us](mailto:ivizcarra@roseville.ca.us)

#### 7.15. Fiddymment Ranch Phase 2 Village F-11A1 - Notice of Completion

Memo from Construction Inspector Darin Crockett and Development Services Director Mike Isom recommending the City Council adopt RESOLUTION NO. 20-361 OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS FIDDYMENT RANCH PHASE 2 VILLAGE F-11A1 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING ALL DEDICATIONS OFFERED ON THE RECORDED MAP OF THE SUBDIVISION. The Engineering Division has made final inspection of the project and has found the civil improvement work complete in accordance with the improvement plans and City specifications. This action has no impact to the City's General Fund.

Construction costs were paid by the developer.  
CC #: 0983

File #: 0400-04-09-01

CONTACT: Darin Crockett 916-746-1324 dcrockett@roseville.ca.us

7.16. Fiddymment Ranch Phase 2 Village F-11A2 - Notice of Completion

Memo from Construction Inspector Darin Crockett and Development Services Director Mike Isom recommending the City Council adopt RESOLUTION NO. 20-363 ACCEPTING THE PUBLIC WORK KNOWN AS FIDDYMENT RANCH PHASE 2 VILLAGE F-11A2 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING ALL DEDICATIONS OFFERED ON THE RECORDED MAP OF THE SUBDIVISION. The Engineering Division has made final inspection of the project and has found the civil improvement work complete in accordance with the improvement plans and City specifications. This action has no impact to the City's General Fund. Construction costs were paid by the developer.

CC #: 0984

File #: 0400-04-09-01

CONTACT: Darin Crockett 916-746-1324 dcrockett@roseville.ca.us

7.17. Fiddymment Ranch Phase 2 Village F-11A3 - Notice of Completion

Memo from Construction Inspector Darin Crockett and Development Services Director Mike Isom recommending the City Council adopt RESOLUTION NO. 20-360 OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS FIDDYMENT RANCH PHASE 2 VILLAGE F-11A3 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING THE DEDICATIONS OFFERED ON THE RECORDED MAP OF THE SUBDIVISION. The Engineering Division has made final inspection of the project and has found the civil improvement work complete in accordance with the improvement plans and City specifications. This action has no impact to the City's General Fund. Construction costs were paid by the developer.

CC #: 0980

File #: 0400-04-09-01

CONTACT: Darin Crockett 916-746-1324 dcrockett@roseville.ca.us

7.18. Fiddymment Ranch Phase 2 Village F-12 - Notice of Completion

Memo from Construction Inspector Darin Crockett and Development Services Director Mike Isom recommending the City Council adopt RESOLUTION NO. 20-365 OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS FIDDYMENT RANCH PHASE 2 VILLAGE F-12 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY

ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING ALL DEDICATIONS OFFERED ON THE RECORDED MAP OF THE SUBDIVISION. The Engineering Division has made final inspection of the project and has found the civil improvement work complete in accordance with the improvement plans and City specifications. This action has no impact to the City's General Fund. Construction costs were paid by the developer.

CC #: 0986

File #: 0400-04-09-01

CONTACT: Darin Crockett 916-746-1324 [dcrockett@roseville.ca.us](mailto:dcrockett@roseville.ca.us)

#### 7.19. Fiddymment Ranch Phase 2I Infrastructure Plans - Notice of Completion

Memo from Construction Inspector Darin Crockett and Development Services Director Mike Isom recommending the City Council adopt RESOLUTION NO. 20-364 OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS FIDDYMENT RANCH PHASE 2I INFRASTRUCTURE PLANS PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING A PORTION OF THE DEDICATIONS OFFERED ON THE RECORDED MAP OF THE SUBDIVISION. The Engineering Division has made final inspection of the project and has found the civil improvement work complete in accordance with the improvement plans and City specifications. This action has no impact to the City's General Fund. Construction costs were paid by the developer.

CC #: 0985

File #: 0400-04-09-01

CONTACT: Darin Crockett 916-746-1324 [dcrockett@roseville.ca.us](mailto:dcrockett@roseville.ca.us)

#### 7.20. Westpark Phase 4, Westbrook Blvd. Extension - Notice of Completion

Memo from Construction Inspector Ignacio Vizcarra and Development Services Director Mike Isom recommending the City Council adopt RESOLUTION NO. 20-375 OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS WESTPARK PHASE 4, WESTBROOK BLVD. EXTENSION PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING A PORTION OF THOSE RESPECTIVE DEDICATIONS OFFERED ON THE RECORDED MAPS OF "THE FINAL MAP OF WESTPARK PHASE 4 LARGE LOT SUBDIVISION, SUBDIVISION NO. 000044". The Engineering Division has made final inspection of the project and has found the civil improvement work complete in accordance with the improvement plans and City specifications. This action has no impact to the City's General Fund. Construction costs were paid by the developer.

CC #: 1004

**Ordinances (for introduction and adoption - appropriation/urgency measures)**

**7.21. Affordable Housing Fund Resale Program - Budget Adjustment**

Memo from Administrative Analyst Melissa Hagan and Economic Development Director Laura Matteoli recommending the City Council adopt ORDINANCE NO. 6265 OF THE COUNCIL OF THE CITY OF ROSEVILLE AUTHORIZING CERTAIN AMENDMENTS TO THE FISCAL YEAR 2020-21 BUDGET AND DECLARING THIS ORDINANCE TO BE IMMEDIATELY EFFECTIVE AS AN APPROPRIATION MEASURE. This item requests a budget adjustment for \$200,000 to fund Affordable Resale Purchase Program loans from the Affordable Housing (In-Lieu) Fund. There is no impact to the General Fund.

CC #: 0981

File #: 0709-03 & 0201-01

CONTACT: Melissa Hagan 916-774-5476 [mhagan@roseville.ca.us](mailto:mhagan@roseville.ca.us)

**7.22. Stoneridge/Crocker Ranch and Diamond Creek Areas Park Upgrade Projects – Budget Adjustment**

Memo from the Park Planning & Development Superintendent Tara Gee and Parks, Recreation & Libraries Director Jill Geller recommending the City Council adopt ORDINANCE NO. 6267 OF THE COUNCIL OF THE CITY OF ROSEVILLE AUTHORIZING CERTAIN AMENDMENTS TO THE FISCAL YEAR 2020-21 BUDGET AND DECLARING THIS ORDINANCE TO BE IMMEDIATELY EFFECTIVE AS AN APPROPRIATION MEASURE. The requested budget adjustment allocates \$140,000 for adding a shade structure at Cambria Park (Stoneridge) and adding perimeter landscaping at Harry Crabb Park (Stoneridge). Both of these projects are funded with the savings recognized in FY2018-19 and FY2019-20 from the Roseville Finance Authority's 2017A bond refunding associated within the Stoneridge area. The budget adjustment also allocates \$143,000 from the Diamond Creek Community Facilities District No. 1 Fund for the addition of shade structures at Bill Hughes Park. These upgrades will have no impact on the General Fund.

CC #: 0998

File #: 0704-01 & 0201-01

CONTACT: Tara Gee 916-774-5253 [tgee@roseville.ca.us](mailto:tgee@roseville.ca.us)

**7.23. Placer Valley Event Center Sidewalk Extension - Funding Agreement and Budget Adjustment**

Memo from Assistant City Manager Ryan DeVore recommending the City Council adopt RESOLUTION NO. 20-355 APPROVING A FUNDING AGREEMENT BETWEEN THE CITY OF ROSEVILLE AND PLACER VALLEY SPORTS COMPLEX AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE; and adopt ORDINANCE NO. 6266 OF THE COUNCIL OF THE CITY OF



ROSEVILLE AUTHORIZING CERTAIN AMENDMENTS TO THE FISCAL YEAR 2020-21 BUDGET AND DECLARING THIS ORDINANCE TO BE IMMEDIATELY EFFECTIVE AS AN APPROPRIATION MEASURE. Staff recommends Council approve a funding agreement with Placer Valley Sports Complex in the amount of \$200,000 to install a sidewalk extension from Junction Boulevard through Event Center Drive @the Grounds. Staff also requests Council approve a budget adjustment in the amount of \$200,000 from the Strategic Improvement Fund. This will allow for safe bicycle and pedestrian access @the Grounds by avoiding conflicts with vehicles and will also accommodate the closest bus stop location which is located on Junction Boulevard at Barbara Drive.

CC #: 1006

File #: 0110-01 & 0201-01

CONTACT: Ryan DeVore 916-774-5349 rdevore@roseville.ca.us

### **Ordinances (for second reading and adoption)**

#### **7.24. Roseville Municipal Code Amendment - Title 7 Regarding Animals**

ORDINANCE NO. 6268 OF THE COUNCIL OF THE CITY OF ROSEVILLE REPEALING AND REPLACING TITLE 7 OF THE ROSEVILLE MUNICIPAL CODE REGARDING ANIMALS, for second reading and adoption.

CC #: 1007

File #: 0323-04

CONTACT: Brian Lewis 916-746-1051 blewis@roseville.ca.us

### **Reports / Requests**

#### **7.25. Sierra Vista - KT Properties Phase 2 Large Lot Subdivision Final Map**

Memo from Assistant Engineer Kerry Andrews and Development Services Director Mike Isom recommending the City Council approve the Sierra Vista - KT Properties Phase 2 Large Lot Subdivision final map. Engineering has completed its review of the final map and found that it is in compliance with the approved tentative map. This map will be creating 6 large lots for future development, 3 public park lots, 2 public open space lots, 1 public sewer lift station lot and 1 school site lot. The actions requested have no fiscal impact to the City's General Fund.

CC #: 0996

File #: 0400-04-12-01 & 0400-07

CONTACT: Kerry Andrews 916-774-5346 kandrews@roseville.ca.us

#### **7.26. Sierra Vista Village FD-24 and JM-20 Large Lot Subdivision Final Map**

Memo from Assistant Engineer Kerry Andrews and Development Services Director Mike Isom recommending the City Council approve the Sierra Vista Villages FD-24 and JM-20 Large Lot Subdivision final map. Engineering has completed its review of the final map and found that it is in compliance with the approved tentative map. This map will be creating 4 large lots for future

development. The actions requested have no fiscal impact to the City's General Fund.

CC #: 0997

File #: 0400-04-12-01 & 0400-07

CONTACT: Kerry Andrews 916-774-5346 kandrews@roseville.ca.us

## **Ceremonial Documents**

### **7.27. Resolution - Chef Q**

Commend Chef Q for serving his country and serving his community by opening Q1227 Restaurant and serving modern comfort cuisine.

CC #: 1001

File #: 0102-10

CONTACT: Katrina Six 916-774-5267 kmsix@roseville.ca.us

### **7.28. Resolution - Guy's For Lunch and Michelle Lehn**

Commend Michelle Lehn for her contribution to the community for sewing and donating over 2,000 masks.

CC #: 1002

File #: 0102-10

CONTACT: Katrina Six 916-774-5267 kmsix@roseville.ca.us

### **7.29. Proclamation - World Duchenne Awareness Day**

Proclaim September 7, 2020 World Duchenne Awareness Day and encourage the residents of Roseville to increase their understanding and awareness of Duchenne Muscular Dystrophy.

CC #: 1006

File #: 0102-06

CONTACT: Katrina Six 916-774-5267 kmsix@roseville.ca.us

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| <b>END OF CONSENT CALENDAR</b> |
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## **8. RESOLUTIONS**

### **8.1. Roseville Parkway Extension - Adoption of Initial Study/Mitigated Negative Declaration, Approval of the Mitigation Monitoring and Reporting Program, and Project Approval**

Memo from Assistant Engineer Daniel Lierly and Public Works Director Jason Shykowski recommending the City Council approve the project; and adopt RESOLUTION NO. 20-372 ADOPTING THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION AND APPROVING THE MITIGATION MONITORING AND REPORTING PROGRAM FOR THE ROSEVILLE PARKWAY EXTENSION PROJECT. The project scope includes the construction of four vehicle travel lanes (two in each direction); curb, gutter and sidewalk; on-street bike lanes; separated multi-use path; street lights; street

landscaping; and the construction of an overpass spanning the Union Pacific Railroad tracks and Industrial Avenue. The project is estimated to cost \$24 million and will be funded with Traffic Mitigation Fee funds. No General Fund resources will be used for the project.

CC #: 0995

File #: 0900-04-02 & 0400-06-02

CONTACT: Daniel Lierly 916-746-1300 delierly@roseville.ca.us

## **9. SPECIAL REQUESTS/REPORTS/PRESENTATION**

### **9.1. Fire Department Performance Audit Presentation**

Memo from Assistant Fire Chief Brian Diemer and Fire Chief Rick Bartee providing a summary report of the Fire Department performance audit, which was conducted by Fitch and Associates.

CC #: 0987

File #: 0324

CONTACT: Brian Diemer 916-746-1392 bdiemer@roseville.ca.us

## **10. APPOINTMENTS**

### **10.1. Public Utilities Commission - Unscheduled Vacancy Appointment**

Memo from Deputy City Clerk Katrina Six and City Clerk Sonia Orozco recommending the City Council appoint one (1) individual to the Public Utilities Commission to a term expiring June 30, 2023 from the applications received from: John DeLacy, Dawn Eggert, Amanda Hart, and Michael Tronnes.

CC #: 0975

File #: 0103 & 0103-09-02

CONTACT: Katrina Six 916-774-5267 kmsix@roseville.ca.us

## **11. DEPARTMENT UPDATES**

### **11.1. Electric Department Update**

CONTACT: Michelle Bertolino 916-774-5636 mbertolino@roseville.ca.us

## **12. PUBLIC HEARING**

### **NOTICE TO THE PUBLIC**

City Council, when considering the matter scheduled for hearing, will take the following actions:

1. Open the Public Hearing
2. Presentation by Staff
3. Presentation by applicant or Appellant
4. Accept Public Testimony
5. Appellant or Applicant Rebuttal Period
6. Close the Public Hearing

7. City Council Comments and Questions
8. City Council Action

In the future, if you wish to challenge in court any of the matters on this agenda for which a public hearing is to be conducted, you may be limited to raising only those issues, which you, or someone else raised orally at the Public Hearing or in written correspondence received by the City or before the hearing

Public Hearings listed for continuance will be continued as noted and posting of this agenda serves as notice of continuation.

**12.1. Community Development Block Grant 2019 Consolidated Annual Performance and Evaluation Report**

Memo from Housing Analyst Kristine Faelz and Economic Development Director Laura Matteoli recommending the City Council adopt RESOLUTION NO. 20-362 APPROVING THE 2019 CONSOLIDATED ANNUAL PERFORMANCE AND EVALUATION REPORT AND AUTHORIZING THE ECONOMIC DEVELOPMENT DIRECTOR TO SUBMIT THE COMMUNITY DEVELOPMENT BLOCK GRANT 2019 CAPER TO THE U.S. DEPARTMENT OF HOUSING & URBAN DEVELOPMENT. This item does not result in any impact to the City's General Fund.

CC #: 0982

File #: 0709-01

CONTACT: Kristine Faelz 916-774-5451 [kpfaelz@roseville.ca.us](mailto:kpfaelz@roseville.ca.us)

**12.2. Westpark Federico - Development Agreement Amendment**

Memo from Associate Planner Shelby Vockel and Development Services Director Mike Isom recommending the City Council consider five (5) findings of fact; and introduce for first reading ORDINANCE OF THE COUNCIL OF THE CITY OF ROSEVILLE ADOPTING A THIRD DEVELOPMENT AGREEMENT AMENDMENT BY AND BETWEEN THE CITY OF ROSEVILLE AND WESTPARK SIERRA VISTA, LLC, AS ASSIGNEE OF WESTPARK FEDERICO, LLC, MOURIER INVESTMENTS, LLC, AND FEDERICO-TYLER FAMILY LIMITED PARTNERSHIP RELATIVE TO THE SIERRA VISTA SPECIFIC PLAN. The applicant requests approval of the Third Amendment to the Westpark Federico Development Agreement for the Sierra Vista Specific Plan area to revise sections relating to development fees. The proposed amendment will result in equitable fees and fee deferrals on all of the large lot parcels within the Federico portion of the Sierra Vista Specific Plan.

CC #: 0999

File #: 0400-03 & 0400-04-09-1

CONTACT: Shelby Vockel 916-746-1347 [svockel@roseville.ca.us](mailto:svockel@roseville.ca.us)

**13. COUNCIL REPORTS / PUBLIC COMMENTS**

**14. ADJOURNMENT**



## COUNCIL COMMUNICATION

**CC #: 0992**  
**File #: 0203-12**

**Title:** Personal Protective Equipment - Purchase Order  
**Contact:** Brian Diemer 916-746-1392 bdiemer@roseville.ca.us

**Meeting Date: 9/16/2020**  
**Item #: 7.1.**

### RECOMMENDATION TO COUNCIL

Staff recommends Council Council approve a purchase order for \$315,000 for the purchase of Personal Protective Equipment (PPE) to Allstar Fire Equipment, a Lion Corporation authorized reseller, based on the Master Priced Agreement as a qualified government member of National Purchasing Partners (NPPGOV).

### BACKGROUND

Staff requests authorization to purchase personal protective equipment from Lion Corporation's authorized reseller, Allstar Fire Equipment, until April 13, 2023, based on a competitive bid contract through National Purchasing Partners. This is a publicly solicited contract established through a Request for Proposals process conducted by the League of Oregon Cities (Contract #PS20065) for the initial term of August 13, 2020 to April 13, 2023.

The Fire Department has an ongoing requirement to maintain proper personal protective equipment (PPE) for the operational staff. The PPE requirements and recommendations are outlined in the guidelines from the National Fire Protection Association and Occupational Safety Health Administration regulations. This includes a life span of ten years for structural turnout clothing.

The structural turnout clothing (PPE) is used by fire and rescue personnel when fighting fires, responding to vehicles, and when incidents such as gas leaks occur. The clothing provides protection from heat, steam, blood borne pathogens, falling objects, and provides for visibility/identification. It is imperative that this equipment is in good working order at all times. Every firefighter is assigned two sets of structural turnout clothing (PPE) to allow for cleaning, inspections, repair and if necessary replacement. As new staff are hired, new sets need to be purchased for those individuals.

### FISCAL IMPACT

The total purchases for FY2020-21 will not exceed \$105,000 which is included as part of the Fire Department's approved annual budget. For the remaining term of the contract, it will not exceed \$105,000 for FY2021-22 and \$105,000 for FY2022-23, for a combined total of \$315,000 over the term of the contract.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. The purchase of personal protective equipment meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Brian Diemer, Assistant Fire Chief

Rick Bartee, Fire Chief

A handwritten signature in blue ink, consisting of several overlapping loops and a horizontal line, positioned above a horizontal line.

---

Dominick Casey, City Manager



## COUNCIL COMMUNICATION

**CC #: 0994**  
**File #: 0800-03**

**Title:** Roseville Electric Power Plant Dedicated Fiber Network - Contract Purchase Agreement  
**Contact:** Nathan Ribordy 916-746-1673 nribordy@roseville.ca.us

**Meeting Date: 9/16/2020**  
**Item #: 7.2.**

### RECOMMENDATION TO COUNCIL

Staff recommends the City Council approve a contract purchase agreement with Consolidated Communications for installation, maintenance, and continued use of dedicated fiber optic communications line at the Roseville Energy Park.

### BACKGROUND

Roseville Electric Utility is preparing to join the California Independent System Operator's (CAISO) Energy Imbalance Market (EIM). This market will require the Roseville Energy Park to respond to short notice dispatch signals and change output in as little as five minutes. The automated dispatch will provide economic benefit and better position Roseville to support renewables integration.

In support of this effort, a new dedicated communications line is required between Roseville and the Sacramento Municipal Utility District for the control signal.

### FISCAL IMPACT

This multi-year service agreement shall not exceed a total of \$39,600 through June 30, 2025. Funding is included in the Electric Department's FY2020-21 budget and will be included in proposed future budgets.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. The service agreement for a dedicated communications line at the

Roseville Energy Park meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Nathan Ribordy, Senior Power Plant Engineer

Michelle Bertolino, Electric Utility Director

A handwritten signature in blue ink, consisting of several overlapping loops and a horizontal line, positioned above a horizontal line.

---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-371

Contract Purchase Agreement 300842



,

RESOLUTION NO. 20-371

APPROVING A SOLE SOURCE CONTRACT PURCHASE AGREEMENT BETWEEN CITY OF ROSEVILLE AND CONSOLIDATED COMMUNICATIONS OF CALIFORNIA COMPANY, AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE

WHEREAS, a sole source contract purchase agreement (3000842) for a dedicated fiber network at the Roseville Electric power plant, between City of Roseville and Consolidated Communications of California Company, has been reviewed by the Council; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Roseville that said sole source contract purchase agreement is approved and that the City Manager is authorized to execute it on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 20\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk



## Contract Purchase Agreement 3000842

### Supplier Details:

Company Consolidated Communications of California Company  
Contact Mark Smith  
Address 211 Lincoln St.

Roseville, CA 95678

### Submit your response to:

Company City of Roseville  
Contact "Becky" Rebecca Philipp  
Address Purchasing Division  
2075 Hilltop Circle  
Roseville, CA 95747  
Phone (916) 774-5724  
Fax (916) 774-5736  
E-mail BPhilipp@roseville.ca.us

This Contract Purchase Agreement is sent for your review and acceptance. Notify the Buyer via email of any needed changes to the company name, address, and contact information. The Buyer will update the agreement prior to you signing the document.

Return (2) signed originals of the agreement to the Buyer noted on the agreement. Alterations or modifications to the agreement are not allowed. Upon receipt of all necessary documents, the City will sign the agreement and return a fully executed copy to you. Receipt of the signed copy will be your notice to proceed with the work in accordance with the terms and conditions of the agreement. Work must not begin until the contract has been fully executed.

The following guidelines must be followed for the signature block on the agreement:

**Sole proprietorship** - **By owner**  
**Partnership** - **Any general partner**

**Corporation** - **Two options:**

(1) A signature from the President and the corporate seal; **OR**

(2) One signature from the Chairman of the Board, President, or any Vice President **AND** one signature from the Secretary, any Assistant Secretary, Chief Financial Officer, or any Treasurer or Assistant Treasurer of the corporation

\*General Manager, Office Manager and/or Sales Manager are not corporate officer titles. The agreement will be rejected if not signed in accordance with these guidelines.

### Insurance requirements:

The City's insurance requirements are referenced on Attachment A of the agreement. By signing the agreement, you are confirming that your company has the minimum insurance limits required.



Contract Purchase Agreement 3000842

|                  |               |
|------------------|---------------|
| Agreement        | 3000842       |
| Agreement Date   | 07-AUG-2020   |
| Revision         | 0             |
| Agreement Amount | 39,600.00 USD |

Invoice To **City of Roseville**  
**Accounts Payable**  
**311 Vernon St**  
**ROSEVILLE CA 95678**

**Phone:** (916) 774-5488  
**Fax:** (916) 784-3796  
**Email:** [accountspayable@roseville.ca.us](mailto:accountspayable@roseville.ca.us)

Supplier **Consolidated Communications of California**  
**Company**  
 211 Lincoln St.

Roseville, CA 95678  
**Phone:** (916) 223-0811  
**Fax:** ()  
**Email:**

Description of Labor, equipment and/or materials: VENDOR TO PROVIDE A FIBER-BASED SWITCHED ETHERNET 20MB CIRCUIT FROM 5120 PHILLIP ROAD, ROSEVILLE TO 6001 S STREET, SACRAMENTO IN ACCORDANCE WITH THE ATTACHED CONSOLIDATED COMMUNICATIONS PROPOSAL FOR SERVICES - RSVL AND SAC 20MB 00033601 DATED 8/7/20 AND BUSINESS SERVICES AGREEMENT.

START DATE: UPON EXECUTED AGREEMENT  
 END DATE: 6/30/25

PLEASE CONTACT NATHAN RIBORDY AT (916) 746-1673 OR NRIBORDY@ROSEVILLE.CA.US OR SAGE ARMSTRONG AT 916-774-5679 OR SARMSTRONG@ROSEVILLE.CA.US FOR QUESTIONS REGARDING THIS AGREEMENT.

| Customer #                                   | Supplier # | Payment Terms | Freight Terms                       | FOB         | Shipping Method |
|----------------------------------------------|------------|---------------|-------------------------------------|-------------|-----------------|
|                                              | 12245      | Net 30        | Freight on Board at the destination | Destination | Best Method     |
| Start Date                                   | End Date   | Confirm To    |                                     |             |                 |
| "Becky" Rebecca Philipp Phone 1-916-774-5724 |            |               |                                     |             |                 |

Attention: Total Cost not to exceed the agreement amount without prior approval of the Purchasing office.

### **Contract Terms and Conditions**

1. To the fullest extent allowed by law, Contractor shall defend, indemnify, and save and hold harmless City, its officers, agents, employees and volunteers from any claims, suits or actions of every name, kind and description brought forth, or on account of, injuries to or death of any person (including but not limited to workers and the public), or damage to property, resulting from or arising out of Contractor's willful misconduct or negligent act or omission while engaged in the performance of obligations or exercise of rights created by this Agreement, except those matters arising from City's sole negligence or willful misconduct. The parties intend that this provision shall be broadly construed. Contractor's responsibility for such defense and indemnity obligations shall survive the termination or completion of this Agreement for the full period of time allowed by law. The defense and indemnity obligations of this Agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this Agreement.
2. Contractor is an independent contractor, and shall not be considered an officer, agent or employee of the City.
3. Without the written consent of the City, this Agreement is not assignable by Contractor either in whole or in part.
4. Time is of the essence of this Agreement.
5. At any time during the term of this Agreement, the City has the right to terminate this Agreement, provided Contractor is given thirty (30) days written notice. City's termination shall be without further liability to City; however, Contractor shall be entitled to all costs reasonably incurred prior to the date of termination. Contractor acknowledges that City may terminate this Agreement should funds not be appropriated by its governing body to continue services under this Agreement.
6. This Agreement may only be amended or modified in writing. It is integrated and contains the complete understanding of the parties.
7. All equipment, supplies and services sold to the City of Roseville shall conform to the general safety orders of the State of California.
8. Unless notified to the contrary, in writing, the City assumes that the Contractor has accepted the work in accordance with the plans and specifications (if any) and agrees to do the work in compliance with this Agreement.
9. All fair employment practices must be adhered to. In addition, if the project referenced on this service agreement is a Public Works project, all prevailing wage laws must be complied with. For prevailing wage contracts over \$25,000, copies of certified payroll must be submitted with invoices. Prevailing wage rates may be obtained from the State Department of Industrial Relations and/or the following website address: <http://www.dir.ca.gov/dlsr/DPreWageDetermination.htm>.
10. Contractor agrees to the below insurance requirements:
  - a. Unless otherwise specified, the Contractor shall maintain the policies of insurance outlined in Attachment A, incorporated herein by this reference, in full force and effect during the term of this Agreement. The City of Roseville retains sole discretion in determining the types and proper levels of insurance coverage.

- b. Form. Contractor shall submit a certificate evidencing such coverage for the period covered by this Agreement in a form satisfactory to Risk Management and the City Attorney, prior to undertaking any work hereunder. Any insurance written on a claims made basis is subject to the approval of Risk Management and the City Attorney.
- c. Additional Insureds. Contractor shall also provide a separate endorsement or section of the policy showing City, its officers, agents, employees, and volunteers as additional insureds for each type of coverage, except for Workers' Compensation. Such insurance shall specifically cover the contractual liability of Contractor. The additional insured coverage under the Contractor's policy shall be primary and noncontributory, as evidenced by a separate endorsement or section of the policy, and shall not seek contribution from City's insurance or self-insurance. In addition, the additional insured coverage shall be at least as broad as the Insurance Services Office (ISO) CG 20 01 Endorsement. Any available insurance proceeds in excess of the specified minimum insurance coverage requirements and limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be:
  - (1) the minimum coverage and limits specified in this Agreement; or
  - (2) the full coverage and maximum limits of any insurance proceeds available to the named insureds, whichever is greater.
- d. Cancellation/Modification. Contractor shall provide ten (10) days written notice to City prior to cancellation or modification of any insurance required by this Agreement.
- e. Umbrella/Excess Insurance. The limits of insurance required in this Agreement may be satisfied by a combination of primary and excess insurance. Any excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and noncontributory basis for the benefit of City (if agreed to in a written contract) before City's own insurance shall be called upon to protect it as a named insured.
- f. Subcontractors. Contractor agrees to include in its contracts with all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Furthermore, Contractor shall require its subcontractors to agree to be bound to Contractor and City in the same manner and to the same extent as Contractor is bound to City under this Agreement. Additionally, Contractor shall obligate its subcontractors to comply with these same provisions with respect to any tertiary subcontractor, regardless of tier. A copy of City's indemnity and insurance provisions will be furnished to the subcontractor or tertiary subcontractor upon request.
- g. Self-Insured Retentions. All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any SIR provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named insured or City. City reserves the right to obtain a full certified copy of any insurance policy and endorsements. The failure to exercise this right shall not constitute a waiver of such right.
- h. Waiver of Subrogation. Contractor hereby agrees to waive subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss under a Workers Compensation, Commercial General Liability or Automobile Liability policy. All Workers Compensation, Commercial General Liability and Automobile Liability policies shall be endorsed with a waiver of



subrogation in favor of City, its officers, agents, employees and volunteers for all work performed by Contractor, its employees, agents and subcontractors.

- i. Liability/Remedies. Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve Contractor of liability in excess of such coverage, nor shall it preclude City from taking such other actions as are available to it under any other provisions of this Agreement or law.
11. Contractor shall comply with all federal, state and local laws and ordinances, including but not limited to the City's storm water regulations, as may be applicable to the performance of services under this Agreement. Failure to comply with local ordinances may result in monetary fines and cancellation of this Agreement. Refer to [www.roseville.ca.us/stormwater](http://www.roseville.ca.us/stormwater) for links to more information on the City's storm water regulations.
12. In the event that the terms of any attachment or exhibit conflict with any terms of this Agreement, the terms of this Agreement shall control.
13. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature page were an original hereof.
14. If either party commences any legal action against the other party arising out of this Agreement or the performance thereof, the prevailing party in such action shall be entitled to recover its reasonable litigation expenses, including but not limited to, court costs, expert witness fees, discovery expenses, and attorneys' fees. Any action arising out of this Agreement shall be brought in Placer County, California, regardless of where else venue may lie. This Agreement shall be governed by and construed in accordance with the laws of the State of California.
15. This Agreement shall be binding upon the heirs, successors, executors, administrators and assigns of the respective parties hereto.
16. If any of the provisions contained in this Agreement are for any reason held invalid or unenforceable, such holding shall not affect the remaining provisions or the validity and enforceability of the Agreement as a whole.
17. For purposes of this Agreement, the terms "Contractor," "Consultant," and "Supplier" are used interchangeably.
18. If the project referenced on this agreement is a Public Works project, then the following shall apply: No contractor or subcontractor may work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. During the performance of this agreement, Contractor and its subcontractors shall have a continuing legal obligation to maintain current registration with the Department of Industrial Relations. Contractor is hereby notified that this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
19. If the project referenced on this agreement is a Public Works project, then the following shall apply: Contractor must submit all claims as defined in and in accordance with the claim resolution process set forth in Section 9204 of the Public Contract Code. Each such claim must be sent to the City by registered mail or certified mail with return receipt requested and must contain reasonable documentation to support the claim. All claims must be received prior to acceptance of the work.

20. Contractor agrees to defend and indemnify City if, despite the parties intent and practice, any venue, agency, or court with competent jurisdiction determines that Contractor and/or any of its agents, officers, employees, volunteers, independent contractors, or subcontractors, are characterized as employee(s) of City. Contractor and City agree that: (a) Contractor is free from the control and direction of City in connection with the performance of the work; (b) Contractor is providing services directly to City; (c) Contractor has and will maintain at all relevant times a business license; (d) Contractor maintains a business location that is separate from City; (e) Contractor is customarily engaged in an independently established business of the same nature as that involved in the work performed hereunder; (f) Contractor actually contracts with other businesses to provide the same or similar services and maintains a clientele without restrictions from City; (g) Contractor advertises and holds itself out to the public as available to provide the same or similar services; (h) Contractor provides its own tools, vehicles, and equipment to perform the services; (i) Contractor has negotiated its own rates; (j) Contractor set its own hours and location of work in accomplishing City's on-call needs; and (k) Contractor has the right to control the manner and means of accomplishing the result desired and exercises its own expert independent judgement.

The supplier named hereon by the acceptance of this order agrees to the provisions of this document titled "Contract Purchase Agreement" and all accompanying terms, conditions, and attachments.

Roseville Business License No. \_\_\_\_\_

Contractor License No. \_\_\_\_\_

DIR Registration No. \_\_\_\_\_

Check mark the applicable company type below:

\_\_\_\_\_ Corporation

\_\_\_\_\_ Limited Liability Company

\_\_\_\_\_ Partnership

\_\_\_\_\_ Sole Proprietor

*City Reserves the right to withhold any payments to contractor in the event of noncompliance with insurance requirements or if required by law.  
General T&C - AB5  
REV 3/26/20 JS*

ATTACHMENT A  
HUMAN RESOURCES/RISK MANAGEMENT DIVISION  
INSURANCE REQUIREMENTS  
AGREEMENT UNDER FORMAL BID LIMIT

General - Required Coverage:

- General Liability: \$1 Million per occurrence /\$2 Million aggregate
- Automobile Liability: \$1 Million combined single limit
- Workers' Compensation: Statutory \*Must provide a Waiver of subrogation
- Additional Insured Endorsement (AIE) - General Liability policy: CG 20 38 04 13 or an equivalent, blanket endorsement or section of the policy. Endorsement shall cover the City of Roseville, its officers, agents, employees and volunteers as additional insured.
- Policies must be primary and non-contributory
- A 30 day notice of cancellation must be provided

Additional Liability/Insurance Requirements if required by Agreement (and marked below):

Construction: \_\_\_\_\_

General Liability:

\$2 Million/occurrence

\$4 Million aggregate

Design Professional: \_\_\_\_\_

General Liability:

\$2 Million/occurrence

\$4 Million aggregate

Professional Liability:

\$2 Million/occurrence

Professional Consultant: \_\_\_\_\_

Professional Liability:

\$1 Million/occurrence

IT Services: \_\_\_\_\_

Professional Liability:

\$1 Million/occurrence

No auto required

Special Events/Caterers-Vendors: \_\_\_\_\_

No auto required

No workers' comp required

Professional Counseling/ Psychological: \_\_\_\_\_

Professional Liability:

\$1 Million/occurrence

No auto required

Insurance Verification

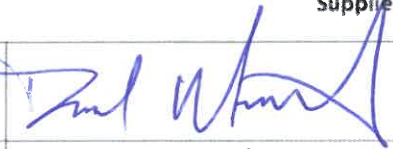
By signing the agreement included with this document, you are confirming that your company has the minimum insurance limits required above.

A copy of your insurance certificate is not required at this time. The City may request proof of insurance at any time.

Questions Regarding Insurance Requirements Contact Risk Management at (916) 774-5202



| Supplier    |                                                                                   |
|-------------|-----------------------------------------------------------------------------------|
| Signature:  |  |
| Print Name: | Michael Olson                                                                     |
| Title:      | Vice President                                                                    |

| Supplier    |                                                                                   |
|-------------|-----------------------------------------------------------------------------------|
| Signature:  |  |
| Print Name: | David Herrick                                                                     |
| Title:      | SVP and Controller                                                                |

| City of Roseville, A Municipal Corporation |                |
|--------------------------------------------|----------------|
| Signature:                                 |                |
| Print Name:                                | Dominick Casey |
| Title:                                     | City Manager   |

**Proposal for Services – Rsvl and Sac 20mb**  
**00033601****August 7, 2020****Primary Address**  
City of Roseville  
316 Vernon St  
Roseville, CA 95678**Primary Contact**  
Leonard Ladd  
9167745699  
lladd@roseville.ca.us**Valid until 8/8/20**  
**Contract Term - 60 Months****AE - Mark Smith**  
(916) 786-1175  
markp.smith@consolidated.com**Site:****Roseville City of Phillip Rd Roseville**  
**5120 Phillip Rd**  
**Roseville, CA 95747-9116**

| Product Name      | Features               | Qty | Unit MRC | Unit NRC | Total MRC | Total NRC |
|-------------------|------------------------|-----|----------|----------|-----------|-----------|
| Switched Ethernet | 20M Install fee        | 1   | 0.00     | 500.00   | 0.00      | 500.00    |
| Switched Ethernet | 20M Install fee waived | 1   | 0.00     | (500.00) | 0.00      | (500.00)  |
| Switched Ethernet | 20M to 6001 S St, Sac  | 1   | 330.00   | 0.00     | 330.00    | 0.00      |

**Roseville City of Phillip Rd Roseville Site Total:****Site MRC: \$330.00**  
**Site NRC: \$0.00****Site:****Roseville City 6001 S St Sac**  
**6001 S St**  
**Sacramento, Ca 95817**

| Product Name      | Features                  | Qty | Unit MRC | Unit NRC | Total MRC | Total NRC |
|-------------------|---------------------------|-----|----------|----------|-----------|-----------|
| Switched Ethernet | 20M Install fee           | 1   | 0.00     | 500.00   | 0.00      | 500.00    |
| Switched Ethernet | 20M Install fee waived    | 1   | 0.00     | (500.00) | 0.00      | (500.00)  |
| Switched Ethernet | 20M pointing back to Rsvl | 1   | 330.00   | 0.00     | 330.00    | 0.00      |

**Roseville City 6001 S St Sac Site Total:****Site MRC: \$330.00**  
**Site NRC: \$0.00**



**Total MRC:**           **\$660.00**  
**Total NRC:**           **\$0.00**

| Site Name | Site Notes |
|-----------|------------|
|           |            |

\*The pricing above does not include taxes or regulatory fees and surcharges, including facility access charges, network access charges, administration fee, 911 fees, TAP/TAM fees, universal service charges, and federal, state and local taxes. All such taxes, fees and surcharges shall be paid by Customer and will be shown on invoices to Customer. Prices quotes on this Proposal for telecom services are valid for 30 days from printed date. This is not an executable Agreement. The actual Agreement with executed signatures will have an Initial Term of services commence on the Service Commencement Date described in the Commercial Terms and Conditions.

## BUSINESS SERVICES AGREEMENT

BSA ID 00033601  
Term Length 60 Months

This Business Services Agreement is entered into by City of Roseville ("You" or "Customer") and the Consolidated Communications, Inc. affiliate located in the state in which the Service(s) are being provided (the "Company" or "CCI" or "We") and along with the General Terms and Conditions attached hereto and incorporated herein constitute the agreement (the "Agreement") for the provision of the Services requested by Customer below. Additionally, Customer and CCI may enter into one or more Service Addendum(s) with service-specific terms and conditions. Each such Addendum shall be attached to, governed by and incorporated into this Agreement. This Agreement is binding on Customer when Customer signs it (the "Effective Date"). The initial term ("Term") for each Service is set forth below. This Agreement shall continue in force for so long as any Service is provided hereunder.

**SERVICES REQUESTED.** The Service(s) requested by Customer to be provided by CCI under the Agreement are as follows:

Roseville City of Phillip Rd  
5120 Phillip Rd  
Roseville, CA 95747-9116

| (a)<br>Quantity<br>Ordered | (b)<br>Service<br>(Equipment may be listed here<br>or on an extra page) | Features                              | (d)<br>Non-Recurring<br>Charge(s) ("NRCs")<br>(if any) | (e)<br>Unit Price or Base<br>Monthly Recurring<br>Charge <u>per Unit</u><br>(Base Monthly<br>Rate) | (f)<br><u>Total</u> of Monthly<br>Recurring Charges<br>("MRC(s)") by<br>Service |
|----------------------------|-------------------------------------------------------------------------|---------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 1                          | Switched Ethernet                                                       | 20M pointing to 6001 S St, Sacramento | 0.00                                                   | 330.00                                                                                             | 330.00                                                                          |
| 1                          | Switched Ethernet                                                       | 20M Installation Fee                  | 500.00                                                 | 0.00                                                                                               | 0.00                                                                            |
| 1                          | Switched Ethernet                                                       | 20M Installation Fee Waived           | (500.00)                                               | 0.00                                                                                               | 0.00                                                                            |

Roseville City of Phillip Rd Site Total:

Site MRC: \$ 330.00  
Site NRC: \$ 0.00

Roseville City 6001 S St Sac  
6001 S St  
Sacramento, Ca 95817

| (a)<br>Quantity<br>Ordered | (b)<br>Service<br>(Equipment may be listed here<br>or on an extra page) | Features                                   | (d)<br>Non-Recurring<br>Charge(s) ("NRCs")<br>(if any) | (e)<br>Unit Price or Base<br>Monthly Recurring<br>Charge <u>per Unit</u><br>(Base Monthly<br>Rate) | (f)<br><u>Total</u> of Monthly<br>Recurring Charges<br>("MRC(s)") by<br>Service |
|----------------------------|-------------------------------------------------------------------------|--------------------------------------------|--------------------------------------------------------|----------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| 1                          | Switched Ethernet                                                       | 20M pointing to 5120 Phillip Rd, Roseville | 0.00                                                   | 330.00                                                                                             | 330.00                                                                          |
| 1                          | Switched Ethernet                                                       | 20M Installation Fee                       | 500.00                                                 | 0.00                                                                                               | 0.00                                                                            |
| 1                          | Switched Ethernet                                                       | 20M Installation Fee Waived                | (500.00)                                               | 0.00                                                                                               | 0.00                                                                            |

Roseville City 6001 S St Sac Site Total:

Site MRC: \$ 330.00  
Site NRC: \$ 0.00

Total MRC: \$ 660.00  
Total NRC: \$ 0.00

| Site Name                              | Site Notes |
|----------------------------------------|------------|
| Roseville City 6001 S St Sac           |            |
| Roseville City of Phillip Rd Roseville |            |
|                                        |            |

**CHARGES AND FEES.** The following reflect the charges and fees applicable to the Services ordered:

- (a) **Total base monthly recurring charge(s)** ("Monthly Recurring Charge(s)", or "MRC(s)") (the total of the base amounts payable each month for all Services (taxes and other charges are extra): \$ 660.00.
- (b) **(If applicable): One-time hardware** and related license purchases: \$ 0.00.
- (c) **Installation fee** (a one-time, non-recurring charge): \$ 0.00.

Any and all taxes, fees, universal service and similar public policy assessments, are in addition to the amounts set out above, and are also payable by Customer. If a tariff governs a Service, the terms of the tariff will take precedence over this Agreement. For information regarding Trouble Reporting and Maintenance Scheduling see [https://www.consolidated.com/trouble\\_reporting](https://www.consolidated.com/trouble_reporting). All pricing is exclusive of (i) any non-recurring charges incurred that are not reflected above, (ii) any usage or variable charges, (iii) all taxes and fees, and (iv) all charges incurred in connection with governmental or quasi- governmental assessments, which are payable by Customer. Any long distance package pricing excludes charges related to international calls, which will be payable as incurred according to then-applicable rates. Customer is responsible for all individually-charged calls, whether domestic or international, and whether through hosted services or otherwise, including charges that are unauthorized or fraudulently incurred. All Services are provided subject to verification of good credit before installation, your timely payment and your continued good credit. Costs for in-building or other site work beyond the demarcation point, including but not limited to installation of risers, ports, jacks, data drops or inside wiring, are additional. Rates are available upon request if Customer is interested in CCI performing installation of jacks, data drops, inside wiring or other items on Customer's premises.

**TERM OF SERVICES.** The initial Term for each Service is 36 Months and will begin on the date that the Service is first made available to Customer for use. Each of the Services will be provided for the Term set out above, but not less than a Term of twelve (12) months from the Service availability date except where either month to month is the contracted term or where applicable law provides otherwise. After the initial Term, this Agreement and the Term for each Service will automatically be extended on a month to month basis, unless either party provides at least thirty (30) days written notice of termination to the other.

**CANCELLATION CHARGE: EARLY TERMINATION CHARGE.** If you cancel this Agreement or any Service after the Effective Date but before the date that the Service is first made available to you, or installation fails because of your action or inaction, and is not later completed, you agree to pay to CCI a cancellation charge equal to four (4) months of Monthly Recurring Charge, plus all costs incurred by CCI in connection with the extension of facilities to your location and for installation, including both CCI and third party costs. The cancellation charge shall be paid to CCI not later than the later of any due date identified on the invoice or thirty (30) days after the date Service is terminated. If CCI or an affiliate has provided any equipment to you, the equipment must be returned to CCI in good condition or we will charge you for its cost. Notice of any Service termination must be submitted in writing to CCI. If you terminate any Service after the Service is first made available to you and before the end of the applicable Term for any reason not permitted by this Agreement, or if we terminate any Service or this Agreement for your breach, an early termination charge will become immediately due and payable by you to us for the Service(s) involved as follows (i) you are responsible for 100% of the Monthly Recurring Charges for each affected Service for each of the first twelve (12) months remaining in the Term; and (ii) you are responsible for 50% of the Monthly Recurring Charges for each affected Service for any remaining period after the first twelve (12) months of the Term, if any. In addition to this early termination charge, you will also be responsible for the following ancillary costs related to your Service: (i) any recurring Service charges that are due or that become due and that are unpaid as of termination, (ii) any non-recurring charges (including any non-recurring charges that were waived by CCI at the time the Services were ordered) that are due or that become due and that are unpaid as of termination, (iii) any unrecovered costs of installation including, without limitation, fiber build and similar costs, (iv) all costs incurred by CCI, including costs with a third party, for any service, equipment or access rights procured in order to install a Service and/or to serve you, and (v) all taxes, fees and assessments. You agree that the early termination charge and the ancillary costs described above are a fair estimate of the damages to CCI in connection with your early termination and is not a penalty. Early termination charges may be waived if you upgrade a service for a Term at least as long as the remaining Term on this Agreement.

**911 SERVICES: CONSENT TO SHARE INFORMATION.** If you are obtaining any Service that is not powered from within the CCI network, you acknowledge receipt of disclosure that there are possible limits on access to 911 Service, that you, and not CCI, must provide electrical power for any customer premises equipment and for connections to the underlying CCI network, and that outages may affect 911 access, 711 access and access to other services for users. You also acknowledge that you may be required to affix stickers or labels related to 911 limits or to otherwise provide notice of such limitations to users. You also acknowledge that location-based 911 Service is available, if at all, only at the location where the related CCI Service is actually installed by CCI. You may be provided with additional disclosures. It is your sole responsibility to determine if a Service is compatible with any security, alarm or monitoring service and/or system you use. To the extent that you operate or use a private network or multiline telephone system, you are solely responsible to maintain timely and correct specific location information in the 911 or other relevant emergency database of all your telephone units and associated numbers, so that the appropriate emergency agency will be contacted, and the responder will be able to determine the actual location from which an emergency call is made. You give consent to CCI to (i) share information with affiliates and



others where sharing can assist in initiating, providing, billing and collecting for Services, establishing and managing billing records, responding to Service issues and resolving payment questions, and (ii) provide information on other CCI Services.

**REGULATORY JURISDICTION ATTESTATION.** Customers must indicate whether traffic on their circuit(s) is interstate or intrastate. The traffic is considered Interstate if 10% or more of it does not originate or terminate in the same state where the circuit is located. It is considered Intrastate only if more than 90% originates and terminates in the same state in which the circuit is located. Please specify the circuits ordered as either jurisdictionally interstate or intrastate. Interstate service is subject to a recurring Federal Universal Service Charge (FUSC).

Please indicate jurisdiction:

Interstate ☐  
Intrastate ☐

CCI:

By: 

Name: Lisa Jo Gustafson

Title: Commercial Sales Manager

Signature Date: 8/7/2020  
00033601

**City of Roseville  
(Customer):**

By: \_\_\_\_\_

Name: \_\_\_\_\_

Title: \_\_\_\_\_

Signature Date: \_\_\_\_\_

Tax ID: \_\_\_\_\_

**Customer Contact Information:**

Name: Leonard Ladd  
Address: 401 Oak St  
Roseville, CA 95678  
Telephone: 9167745699  
Email Address: lladd@roseville.ca.us

The obligation of either party under this Agreement is not effective until it is signed by an authorized representative for each party.

## GENERAL TERMS AND CONDITIONS

1. **SERVICES.** These General Terms and Conditions along with the Business Services Agreement constitute the Agreement between the parties for the provision of Services requested by Customer hereunder. If a Service is tariffed the terms and conditions stated in the tariff apply. You acknowledge that we may elect to perform under this Agreement through one or more CCI affiliates or other entities and that the applicable CCI affiliate to this Agreement is located in the state in which the Service(s) are being provided as referenced at <https://www.consolidated.com/affiliates>.
2. **ACCESS.** You agree to provide or obtain for CCI reasonable access to the location(s) where Service will be installed and/or provided, and to cooperate with CCI during installation and other work related to the provision of Service. CCI will deliver Service to a demarcation point established in accordance with applicable law and/or regulation, or in lieu thereof, established by CCI at or near the Service location. If CCI is required to pay for access to serve you, whether on a one-time or recurring basis, you will be notified of the costs, and those costs will be passed on to you.
3. **COMPLIANCE WITH LAWS AND POLICIES.** Each party agrees to comply with all Federal, state and local laws, rules, regulations and ordinances applicable to the Services or their use. We reserve the right to suspend a Service if we determine that the use being made of that Service is or is likely to be in violation of applicable law or regulation. Our current Acceptable Use Policy (AUP) is on line at <https://www.consolidated.com/Support/Terms-Policies/Internet-Terms-Policies/Internet-Terms-Conditions-and-Acceptable-Use-Policy>. CCI may update the AUP or other terms and conditions of use applicable to the Service at any time. A material violation of our AUP by you or any users of your Service may result in suspension or termination of Service.
4. **PAYMENT.** You agree to pay for all Services on time and at the applicable rates and charges, plus all applicable taxes, fees and assessments, without any deduction or setoff. You agree to pay all amounts stated on the invoice by the due date, or if there is no date stated, within thirty (30) days of the date of our invoice to you (the "Due Date"). If you do not timely pay your bill, you will be responsible to pay prevailing interest and late charges applied to the amount unpaid. If your check is returned unpaid, or your payment does not clear, you will be billed our then-applicable fee for such occurrence. If you do not pay all undisputed amounts by the Due Date, we may elect to suspend or to disconnect any Service(s) until your account is brought current, including interest and late charges. A reactivation fee will apply.
5. **BILL DISPUTES.** If you dispute any charges stated on an invoice, you are required to notify CCI in writing within thirty (30) days of the date of the disputed invoice. Your dispute notice must identify the specific charge(s) that you dispute and provide a reasonable explanation of the basis for the dispute. Notification of disputed charges shall not excuse payment of the remainder of the invoice, and you agree to pay by the Due Date all other invoiced charges not disputed in accordance with this section. Regardless of the basis of the dispute and unless prohibited by applicable law, if you fail to provide to CCI a written dispute notice as set forth above within six (6) months after the date of the affected invoice in which the disputed charge initially appears, you waive the right to dispute the charge and the invoice will become final and not subject to dispute for any purpose. Upon CCI's resolution of a dispute you will either be credited for disputed amounts resolved in your favor or must pay the disputed amounts found to be due.
6. **USE OF SERVICES.** You are responsible to pay for all use of Service, including others' use of your Service and/or use of your equipment. We encourage you to investigate and implement available security options such as call blocking to protect yourself from fraud. Services are provided to you for your own use and cannot be resold by you unless specifically agreed to in writing by CCI.
7. **BREACH AND TERMINATION.** You will be in breach of this Agreement: (i) if you fail to timely pay any undisputed amount due to CCI under this Agreement within ten (10) days of the date that it is due; (ii) if you fail to perform any other obligation under this Agreement, and such failure continues for more than ten (10) days after written notice from CCI; (iii) if you cancel or repudiate this Agreement or any Service commitment; or (iv) if you are subject to voluntary or involuntary bankruptcy proceedings, make an assignment for the benefit of creditors, cease to operate as a going business, or become insolvent or seek protection from creditors. In the event of a breach that is not timely cured, CCI may elect to suspend or terminate any Services and/or this Agreement on written notice to you. If CCI takes action to collect amounts due, or to address any other breach, the prevailing party (with a court judgment) shall be entitled to reasonable attorneys' fees and costs. You can terminate this Agreement and/or a Service at any time on written notice to CCI, subject to payment of all applicable cancellation or early termination charges.
8. **EQUIPMENT AND WIRING.** We may lease or otherwise provide you with equipment and/or inside wiring. The equipment will be identified and listed on a schedule or attachment. Customer is responsible for all wiring maintenance on its side of the demarcation point. Additional charges based on time and materials may be applied to Customer bill if an optical handoff is required for Ethernet delivery. You may not move any CCI equipment without our written consent and you must return it to CCI when Service is terminated, in the same condition as when installed, reasonable wear and tear expected, and consistent with any requirement of law.
9. **INDEMNIFICATION.** Customer hereby agrees to indemnify, defend and hold the Company harmless from and against any damages, costs, liabilities and attorneys' fees (and costs) the Company may incur from any claim arising from Customer's use of the Service, or the use of Customer's Service by others, including without limitation, violation of the copyrights, trademarks or other intellectual property rights of others, Customer's combination of any Service with other products or services not provided by the Company, any modification of the Service, or any breach of the terms and conditions contained herein or any other terms and conditions of use applicable to the Service by the Customer. In such event, Customer agrees to defend and control any such litigation, including the payment of any settlement thereof, as the case may be; provided, however, Customer agrees not to acquiesce to any judgment or enter into any settlement that adversely affects the Company's rights or interests without the Company's prior written consent, such consent to be exercised in the Company's sole discretion. The Company hereby agrees to give Customer prompt notice of all claims and to cooperate in defending against the claim. Customer may not settle any claim under this section which includes an admission of criminal liability or the payment of a settlement amount without the Company's prior written consent, such consent to be exercised in the Company's sole discretion.
10. **REMEDIES; LIMITS ON LIABILITY.** Your remedies for any failure, interruption, degradation, outage, non-delivery or non-performance of any Services, including related equipment and facilities, and any loss of data, or for any breach by CCI or a CCI affiliate of this Agreement, are limited to the following: (i) repair of the Service, facilities, equipment or wiring; (ii) re-performance of work, where that can be done; (iii) cancellation or termination of any Service not remedied by repair or re-performance, with no cancellation or early termination charge; (iv) an adjustment or credit to your bill; (v) a credit for certain qualifying outages; and (vi) in an appropriate case, injunctive relief related to confidentiality provisions.
- TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, THE COMBINED LIABILITY OF CCI AND ANY CCI AFFILIATE TO YOU SHALL BE LIMITED TO THE APPLICABLE REMEDY IDENTIFIED ABOVE AND SHALL IN NO EVENT EXCEED PROVEN DIRECT DAMAGES, NOT TO EXCEED THE TOTAL YOU HAVE PAID FOR ALL SERVICES FOR THE TWELVE (12) MONTH PERIOD PRIOR TO THE TRIGGERING EVENT. HOWEVER, THIS LIMITATION SHALL NOT APPLY TO BODILY INJURY, DEATH, OR DAMAGE TO REAL OR TANGIBLE PROPERTY DIRECTLY CAUSED BY OUR GROSS NEGLIGENCE OR INTENTIONAL MISCONDUCT. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, NEITHER YOU NOR CCI OR ANY CCI AFFILIATE SHALL BE RESPONSIBLE FOR ANY INDIRECT, SPECIAL, CONSEQUENTIAL OR INCIDENTAL DAMAGES, INCLUDING ANY LOSS OF BUSINESS, REVENUE OR PROFITS, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH LOSS, AND WITHOUT REGARD TO THE THEORY OF RECOVERY. To the maximum extent permitted by applicable law, neither CCI, any CCI affiliate, nor any person or entity utilized by CCI, shall be liable for any of the following: (1) any information or content that CCI or an affiliate transports or provides, and any and all claims related to such information or content; (2) any unauthorized access to or use of your Services or equipment, or of any equipment or facilities related to such Services; (3) any access, alteration, theft, damage, destruction or loss of any of your records, data or other information; (4) any claims for damage for which you are responsible, whether in whole or in part, whether through action or inaction, and regardless of degree; and (5) claims against you by any person or entity not a party to this Agreement.
11. **DISCLAIMER OF WARRANTY.** We will perform all installation and other work at the location where Service is provided in a competent manner, and any damage to such location will be promptly repaired or corrected. WE SPECIFICALLY DISCLAIM ANY AND ALL OTHER WARRANTIES, WHETHER EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY AND OF FITNESS FOR A PARTICULAR PURPOSE. WE DO NOT WARRANT UNINTERRUPTED AND/OR ERROR-FREE OPERATION OF ANY FACILITY, EQUIPMENT OR SERVICE UNLESS THAT IS UNAMBIGUOUSLY DESCRIBED AS SUCH IN THIS AGREEMENT. WE DO NOT WARRANT OR GUARANTEE SPECIFIC INTERNET UPLOAD OR DOWNLOAD SPEEDS OR DATA QUALITY. WE COMPLY WITH APPLICABLE RELATED RULES, BUT SPEEDS ARE SUBJECT TO FACTORS OUTSIDE OF OUR CONTROL. ADVICE OR INFORMATION GIVEN BY THE COMPANY OR ITS CUSTOMER SUPPORT OR OTHER REPRESENTATIVES SHALL NOT CREATE A WARRANTY OF ANY NATURE OR TYPE WHATSOEVER.
12. **TRANSFER AND ASSIGNMENT.** You may not assign or transfer this Agreement, any Service or any of your rights or obligations under this Agreement without our prior written consent. Notwithstanding this provision, you may assign or transfer this Agreement and all Services to an entity that is successor to all or substantially all of your assets or capital stock on written notice to CCI if the successor entity agrees in writing to perform all terms and conditions applicable to the Services and is reasonably capable of doing so. CCI may assign this Agreement in whole or in part at any time subject to the requirements of applicable law. New customers are subject to credit review. An assignment or transfer in violation of this section shall be void.
13. **FORCE MAJEURE.** We are not responsible for performance if we are delayed or hindered by any action, inaction or event that is outside of our reasonable control (a force majeure event). This includes but is not limited to fire, flood, severe weather, civil unrest, terrorist or similar acts, any strike or labor stoppage, war, action or inaction by another person or entity, or any Acts of God.
14. **NOTICES.** All legal notices to Customer will be sent to the contact person and address set forth on the first page of this Agreement. All legal notices to CCI must be sent to: Consolidated Communications, Attn: Legal Department, 350 South Loop 336 West, Conroe, Texas 77304. All legal notices must be in writing and shall be mailed by certified or registered mail, postage prepaid, return receipt requested and shall be deemed given on the third (3rd) business day after the date of posting in a United States Post Office, or (iii) given by a nationally recognized overnight courier and shall be deemed given one day after delivery to the overnight courier. Either party can change the notice address on written notice to the other in accordance with this Section.
15. **GOVERNING LAW; VENUE; WAIVER OF JURY TRIAL AND CERTAIN CLAIMS.** This Agreement, its formation, construction and interpretation shall be governed by the laws of the State of New York, without regard to its conflict of laws provisions. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to this Agreement. For the purpose of resolving any dispute regarding this Agreement, its formation, construction and interpretation, to the fullest extent allowed by law, the parties agree to submit to jurisdiction and to bring such action in a U.S. District Court, or absent federal court jurisdiction, in a state court of competent jurisdiction, where the original party defendant is domiciled. THE PARTIES KNOWINGLY, VOLUNTARILY, AND INTENTIONALLY WAIVE THEIR RIGHT TO A JURY TRIAL AND ANY RIGHT TO PURSUE ANY CLAIM RELATED TO THIS AGREEMENT ON A CLASS OR CONSOLIDATED BASIS OR IN A REPRESENTATIVE CAPACITY, TO THE EXTENT PERMITTED BY LAW.
16. **GENERAL.** The person signing this Agreement for you represents and warrants that he/she is authorized to execute this Agreement. For certain Services, Moves, Adds and Changes (MACs), a person authorized on your account may request a change to the Services via an email to your account representative or a CCI customer service representative. Otherwise the terms and conditions of this Agreement can only be amended by a writing signed by both parties. The failure of either party to insist on strict performance of any provision of this Agreement is not a general waiver of that provision or of any future performance. If any part of this Agreement is found to be invalid or unenforceable, the rest of the Agreement remains enforceable. This Agreement with all attachments and exhibits constitutes the entire agreement of the parties.

## ATTACHMENT 1

### INSERT ANY SERVICE SPECIFIC TERMS AND CONDITIONS AND ANY APPLICABLE SLA RELATED TO THE INITIAL SERVICE ORDER

#### Ethernet Switched Services

##### Interconnection Specifications

Ethernet service will be delivered at standard 10/100/1000 Mbps interfaces. The signal characteristics and supported MAC Layers at the Network Interface (NI) will be as specified in the IEEE 802.3-2002 standard. Unless mutually agreed upon by Provider and Customer, the Physical NI for Gigabit Ethernet Services delivered on the core ring will be a duplex FC-PC connector on Provider's Fiber Distribution Panel (FDP). For 10/100 Ethernet Service at remote sites, the Physical NI will be at an RJ-45 jack on the Rate Interface Converter (Media Converter).

##### Performance Standards

Ethernet service standards apply on a one-way basis between the Ethernet Service points of demarcation (DEMARC), which are Provider installed designated Category 5 Patch Panel for electrical, FDP for optical interfaces or Provider edge equipment service port when patch panels are not utilized. When a 3rd party provider is used to extend the Provider network, standards apply only to the Provider networks handoff (Network to Network Interface) to the 3rd party. Ethernet service standards exclude nonperformance due to force majeure or planned interruptions for necessary maintenance purposes. The actual end-to-end availability and performance of Ethernet service may be affected by the Customer provided equipment, dependent upon the type and quality of Customer equipment used.

##### Availability Objective

Availability is a percentage of total time that service is operative when measured over a 30 consecutive day (720 hour) period. The end-to-end availability standards for Ethernet service are:

| Specification                                                    | Availability |
|------------------------------------------------------------------|--------------|
| Fiber Access – Linear and Ring Protection with Redundant CPE     | 99.999%      |
| Fiber Access – Linear and Ring Protection with Non Redundant CPE | 99.99%       |
| Copper Access                                                    | 99.95%       |

##### Inoperability

Ethernet service is considered inoperative when there has been a loss of signal, or Packet Loss, Jitter or Latency does not meet the performance specifications below within any Calendar month.

##### Packet Loss

Performance is noted in terms of packet loss. Packet Loss Ratio is defined as percentage of in-profile Ethernet frames not reliably delivered between Provider DEMARCs over a given measurement interval. The Packet Loss Ratio standards for end-to-end portions of Internet service are:

| Specification     | Monthly Average   |
|-------------------|-------------------|
| Packet Loss Ratio | No more than 0.5% |

##### Latency

Latency, also known as delay, is a measure of the time required to transmit a Service Frame from the source to the destination across the Layer 2 Ethernet network and back to the source. The Latency standard for Ethernet service is:

| Specification | Monthly Average    |
|---------------|--------------------|
| Latency       | <30ms (Round Trip) |

##### Jitter

Jitter is a variation of latency. It is the variation in time between packets arriving, caused by network congestion, timing drift, or route changes. End-to-end Jitter standards for Ethernet service are:

| Specification | Ethernet Service |
|---------------|------------------|
| Jitter Rate   | No more than 1ms |

##### Mean Time to Repair

Mean Time to Repair (MTTR) is a basic measure of the maintainability of repairable items. It represents the average time required to repair a failed component or device.

| Specification       | Monthly Average |
|---------------------|-----------------|
| Mean time to Repair | 4 hours         |

##### Mean Time to Repair CPE Extended Service Area



Mean Time to Repair (MTTRepair) is a basic measure of the maintainability of repairable items. It represents the average time required to repair a failed component or device. Extended Service Area refers to areas outside of direct field technician coverage, whereas the use of a third party may be utilized for purposes of installation and repair support.

|                                                             |                   |
|-------------------------------------------------------------|-------------------|
| Ethernet Switched Service – Extended Service Area           | Next Business Day |
| Ethernet Switched Service – Extended Service Area - Upgrade | 4 hours           |

**Mean Time to Respond**

Mean Time to Respond (MTTRespond) is a measure of the average time required to acknowledge the trouble ticket and dispatch technical personnel if required.

| <b>Specification</b> | <b>Monthly Average</b> |
|----------------------|------------------------|
| Mean time to Respond | 1 hour                 |

**Repair and Scheduled Maintenance**

Repair efforts will be undertaken upon notification of trouble by internal network surveillance and performance systems or by notification of trouble and release of Ethernet service by the customer for testing. Customer will be notified a minimum of five (5) business days in advance of any scheduled maintenance. Scheduled maintenance will be performed in a manner that minimizes any system interruption. Performance and availability standards shall not apply during scheduled maintenance periods.



## COUNCIL COMMUNICATION

**CC #: 1000**  
**File #: 0203-12**

**Title:** Body Armor Replacement - Contract Purchase Agreement  
**Contact:** Shelly Bracco 916-774-5018 sbracco@roseville.ca.us

**Meeting Date: 9/16/2020**  
**Item #: 7.3.**

### RECOMMENDATION TO COUNCIL

Recommend Council adopt a resolution to approve a Contract Purchase Agreement (3000860) with Galls, LLC dba Blumenthal Uniforms, for concealable body armor, and authorize the City Manager to execute it.

### BACKGROUND

The Police Department has an ongoing requirement for body armor for their staff. The National Institute of Justice (NIJ) sets safety standards for law enforcement soft body armor, including the replacement of body armor every five years. The department will purchase the body armor on an as-needed basis to replace vests that will reach the end of their five-year warranty period, in addition to outfitting newly hired police officers and other field personnel.

### FISCAL IMPACT

The total amount of the agreement is \$30,000. Funding is included in the Police Department's FY2020-21 operating budget.

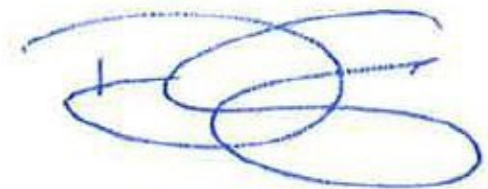
### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. A contract purchase agreement for concealable body armor meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Shelly Bracco, Administrative Analyst

James Maccoun, Police Chief



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Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution No. 20-373

CPA

RESOLUTION NO. 20-373

APPROVING A CONTRACT PURCHASE AGREEMENT BETWEEN THE CITY OF ROSEVILLE AND GALLS, LLC DBA BLUMENTHAL UNIFORMS, AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE

WHEREAS, a contract purchase agreement (3000860) for the purchase of concealable body armor, between the City of Roseville and Galls, LLC dba Blumenthal Uniforms, has been reviewed by the City Council;

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Roseville that said contract purchase agreement is approved and that the City Manager is authorized to execute it on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 2020, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk



## Contract Purchase Agreement 3000860

### *Supplier Details:*

Company Galls LLC dba Blumenthal Uniforms  
Contact Vernon Torgerson  
Address 17600 Fabrica Way

Cerritos, CA 90703

### *Submit your response to:*

Company City of Roseville  
Contact "Becky" Rebecca Philipp  
Address Purchasing Division  
2075 Hilltop Circle  
Roseville, CA 95747  
Phone (916) 774-5724  
Fax (916) 774-5736  
E-mail BPhilipp@roseville.ca.us

This Contract Purchase Agreement is sent for your review and acceptance. Notify the Buyer via email of any needed changes to the company name, address, and contact information. The Buyer will update the agreement prior to you signing the document.

Return (2) signed originals of the agreement to the Buyer noted on the agreement. Alterations or modifications to the agreement are not allowed. Upon receipt of all necessary documents, the City will sign the agreement and return a fully executed copy to you. Receipt of the signed copy will be your notice to proceed with the work in accordance with the terms and conditions of the agreement. Work must not begin until the contract has been fully executed.

The following guidelines must be followed for the signature block on the agreement:

**Sole proprietorship - By owner**

**Partnership - Any general partner**

**Corporation - Two options:**

**(1)** A signature from the President and the corporate seal; **OR**

**(2)** One signature from the Chairman of the Board, President, or any Vice President **AND** one signature from the Secretary, any Assistant Secretary, Chief Financial Officer, or any Treasurer or Assistant Treasurer of the corporation

\*General Manager, Office Manager and/or Sales Manager are not corporate officer titles. The agreement will be rejected if not signed in accordance with these guidelines.

### Insurance requirements:

The City's insurance requirements are referenced on Attachment A of the agreement. By signing the agreement, you are confirming that your company has the minimum insurance limits required.



Contract Purchase Agreement 3000860

|                  |               |
|------------------|---------------|
| Agreement        | 3000860       |
| Agreement Date   | 24-AUG-2020   |
| Revision         | 0             |
| Agreement Amount | 30,000.00 USD |

Invoice To **City of Roseville**  
**Accounts Payable**  
**311 Vernon St**  
**ROSEVILLE CA 95678**

**Phone:** (916) 774-5488  
**Fax:** (916) 784-3796  
**Email:** accountspayable@roseville.ca.us

Supplier **Galls LLC dba Blumenthal Uniforms**  
17600 Fabrica Way

Cerritos, CA 90703

**Phone:** ()  
**Fax:** ()  
**Email:** Torgerson-Vernon@galls.com

Description of Labor, equipment and/or materials THE VENDOR SHALL PROVIDE MEASUREMENT, FITTINGS AND CONCEALABLE BODY ARMOR TO THE ROSEVILLE POLICE DEPARTMENT ON AN AS NEEDED BASIS IN ACCORDANCE WITH ALL SPECIFICATIONS, TERMS AND CONDITIONS, AND RELATED DOCUMENTS UTILIZING THE CITY OF LOS ANGELES CONTRACT ARC 40 59463 18 AND THE ATTACHED GALLS QUOTE 16420190 DATED 8/21/20.

START DATE: UPON EXECUTED AGREEMENT  
END DATE: 6/30/21

PLEASE CONTACT SHELLY BRACCO AT (916) 774-5018 OR  
SBRACCO@ROSEVILLE.CA.US FOR QUESTIONS REGARDING THIS  
AGREEMENT.

\*\*Total cost listed is an approximation only. The City does not guarantee whatsoever the  
actual value of this agreement.

| Customer # | Supplier # | Payment Terms | Freight Terms                       | FOB         | Shipping Method |
|------------|------------|---------------|-------------------------------------|-------------|-----------------|
|            | 12353      | Net 30        | Freight on Board at the destination | Destination | Best Method     |
| Start Date | End Date   | Confirm To    |                                     |             |                 |

"Becky" Rebecca Philipp Phone 1-916-774-5724

Attention: Total Cost not to exceed the agreement amount without prior approval of the Purchasing office.

### **Contract Terms and Conditions**

1. To the fullest extent allowed by law, Contractor shall defend, indemnify, and save and hold harmless City, its officers, agents, employees and volunteers from any claims, suits or actions of every name, kind and description brought forth, or on account of, injuries to or death of any person (including but not limited to workers and the public), or damage to property, resulting from or arising out of Contractor's willful misconduct or negligent act or omission while engaged in the performance of obligations or exercise of rights created by this Agreement, except those matters arising from City's sole negligence or willful misconduct. The parties intend that this provision shall be broadly construed. Contractor's responsibility for such defense and indemnity obligations shall survive the termination or completion of this Agreement for the full period of time allowed by law. The defense and indemnity obligations of this Agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this Agreement.
2. Contractor is an independent contractor, and shall not be considered an officer, agent or employee of the City.
3. Without the written consent of the City, this Agreement is not assignable by Contractor either in whole or in part.
4. Time is of the essence of this Agreement.
5. At any time during the term of this Agreement, the City has the right to terminate this Agreement, provided Contractor is given thirty (30) days written notice. City's termination shall be without further liability to City; however, Contractor shall be entitled to all costs reasonably incurred prior to the date of termination. Contractor acknowledges that City may terminate this Agreement should funds not be appropriated by its governing body to continue services under this Agreement.
6. This Agreement may only be amended or modified in writing. It is integrated and contains the complete understanding of the parties.
7. All equipment, supplies and services sold to the City of Roseville shall conform to the general safety orders of the State of California.
8. Unless notified to the contrary, in writing, the City assumes that the Contractor has accepted the work in accordance with the plans and specifications (if any) and agrees to do the work in compliance with this Agreement.
9. All fair employment practices must be adhered to. In addition, if the project referenced on this service agreement is a Public Works project, all prevailing wage laws must be complied with. For prevailing wage contracts over \$25,000, copies of certified payroll must be submitted with invoices. Prevailing wage rates may be obtained from the State Department of Industrial Relations and/or the following website address: <http://www.dir.ca.gov/dlsr/DPreWageDetermination.htm>.
10. Contractor agrees to the below insurance requirements:
  - a. Unless otherwise specified, the Contractor shall maintain the policies of insurance outlined in Attachment A, incorporated herein by this reference, in full force and effect during the term of this Agreement. The City of Roseville retains sole discretion in determining the types and proper levels of insurance coverage.



- b. Form. Contractor shall submit a certificate evidencing such coverage for the period covered by this Agreement in a form satisfactory to Risk Management and the City Attorney, prior to undertaking any work hereunder. Any insurance written on a claims made basis is subject to the approval of Risk Management and the City Attorney.
- c. Additional Insureds. Contractor shall also provide a separate endorsement or section of the policy showing City, its officers, agents, employees, and volunteers as additional insureds for each type of coverage, except for Workers' Compensation. Such insurance shall specifically cover the contractual liability of Contractor. The additional insured coverage under the Contractor's policy shall be primary and noncontributory, as evidenced by a separate endorsement or section of the policy, and shall not seek contribution from City's insurance or self-insurance. In addition, the additional insured coverage shall be at least as broad as the Insurance Services Office (ISO) CG 20 01 Endorsement. Any available insurance proceeds in excess of the specified minimum insurance coverage requirements and limits shall be available to the additional insureds. Furthermore, the requirements for coverage and limits shall be:
  - (1) the minimum coverage and limits specified in this Agreement; or
  - (2) the full coverage and maximum limits of any insurance proceeds available to the named insureds, whichever is greater.
- d. Cancellation/Modification. Contractor shall provide ten (10) days written notice to City prior to cancellation or modification of any insurance required by this Agreement.
- e. Umbrella/Excess Insurance. The limits of insurance required in this Agreement may be satisfied by a combination of primary and excess insurance. Any excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and noncontributory basis for the benefit of City (if agreed to in a written contract) before City's own insurance shall be called upon to protect it as a named insured.
- f. Subcontractors. Contractor agrees to include in its contracts with all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Furthermore, Contractor shall require its subcontractors to agree to be bound to Contractor and City in the same manner and to the same extent as Contractor is bound to City under this Agreement. Additionally, Contractor shall obligate its subcontractors to comply with these same provisions with respect to any tertiary subcontractor, regardless of tier. A copy of City's indemnity and insurance provisions will be furnished to the subcontractor or tertiary subcontractor upon request.
- g. Self-Insured Retentions. All self-insured retentions (SIR) must be disclosed to Risk Management for approval and shall not reduce the limits of liability. Policies containing any SIR provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named insured or City. City reserves the right to obtain a full certified copy of any insurance policy and endorsements. The failure to exercise this right shall not constitute a waiver of such right.
- h. Waiver of Subrogation. Contractor hereby agrees to waive subrogation which any insurer of Contractor may acquire from Contractor by virtue of the payment of any loss under a Workers Compensation, Commercial General Liability or Automobile Liability policy. All Workers Compensation, Commercial General Liability and Automobile Liability policies shall be endorsed with a waiver of

subrogation in favor of City, its officers, agents, employees and volunteers for all work performed by Contractor, its employees, agents and subcontractors.

- i. Liability/Remedies. Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve Contractor of liability in excess of such coverage, nor shall it preclude City from taking such other actions as are available to it under any other provisions of this Agreement or law.
11. Contractor shall comply with all federal, state and local laws and ordinances, including but not limited to the City's storm water regulations, as may be applicable to the performance of services under this Agreement. Failure to comply with local ordinances may result in monetary fines and cancellation of this Agreement. Refer to [www.roseville.ca.us/stormwater](http://www.roseville.ca.us/stormwater) for links to more information on the City's storm water regulations.
12. In the event that the terms of any attachment or exhibit conflict with any terms of this Agreement, the terms of this Agreement shall control.
13. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. In the event that any signature is delivered by facsimile transmission or by e-mail delivery of a ".pdf" format data file, such signature shall create a valid and binding obligation of the party executing (or on whose behalf such signature is executed) with the same force and effect as if such facsimile or ".pdf" signature page were an original hereof.
14. If either party commences any legal action against the other party arising out of this Agreement or the performance thereof, the prevailing party in such action shall be entitled to recover its reasonable litigation expenses, including but not limited to, court costs, expert witness fees, discovery expenses, and attorneys' fees. Any action arising out of this Agreement shall be brought in Placer County, California, regardless of where else venue may lie. This Agreement shall be governed by and construed in accordance with the laws of the State of California.
15. This Agreement shall be binding upon the heirs, successors, executors, administrators and assigns of the respective parties hereto.
16. If any of the provisions contained in this Agreement are for any reason held invalid or unenforceable, such holding shall not affect the remaining provisions or the validity and enforceability of the Agreement as a whole.
17. For purposes of this Agreement, the terms "Contractor," "Consultant," and "Supplier" are used interchangeably.
18. If the project referenced on this agreement is a Public Works project, then the following shall apply: No contractor or subcontractor may work on a public works project unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. During the performance of this agreement, Contractor and its subcontractors shall have a continuing legal obligation to maintain current registration with the Department of Industrial Relations. Contractor is hereby notified that this project is subject to compliance monitoring and enforcement by the Department of Industrial Relations.
19. If the project referenced on this agreement is a Public Works project, then the following shall apply: Contractor must submit all claims as defined in and in accordance with the claim resolution process set forth in Section 9204 of the Public Contract Code. Each such claim must be sent to the City by registered mail or certified mail with return receipt requested and must contain reasonable documentation to support the claim. All claims must be received prior to acceptance of the work.

20. Contractor agrees to defend and indemnify City if, despite the parties intent and practice, any venue, agency, or court with competent jurisdiction determines that Contractor and/or any of its agents, officers, employees, volunteers, independent contractors, or subcontractors, are characterized as employee(s) of City. Contractor and City agree that: (a) Contractor is free from the control and direction of City in connection with the performance of the work; (b) Contractor is providing services directly to City; (c) Contractor has and will maintain at all relevant times a business license; (d) Contractor maintains a business location that is separate from City; (e) Contractor is customarily engaged in an independently established business of the same nature as that involved in the work performed hereunder; (f) Contractor actually contracts with other businesses to provide the same or similar services and maintains a clientele without restrictions from City; (g) Contractor advertises and holds itself out to the public as available to provide the same or similar services; (h) Contractor provides its own tools, vehicles, and equipment to perform the services; (i) Contractor has negotiated its own rates; (j) Contractor set its own hours and location of work in accomplishing City's on-call needs; and (k) Contractor has the right to control the manner and means of accomplishing the result desired and exercises its own expert independent judgement.

The supplier named hereon by the acceptance of this order agrees to the provisions of this document titled "Contract Purchase Agreement" and all accompanying terms, conditions, and attachments.

Roseville Business License No. 00831715

Contractor License No. \_\_\_\_\_

DIR Registration No. \_\_\_\_\_

Check mark the applicable company type below:

\_\_\_\_\_ Corporation  
☒ Limited Liability Company  
\_\_\_\_\_ Partnership  
\_\_\_\_\_ Sole Proprietor

*City Reserves the right to withhold any payments to contractor in the event of noncompliance with insurance requirements or if required by law.  
General T&C - AB5  
REV 3/26/20 JS*

ATTACHMENT A  
HUMAN RESOURCES/RISK MANAGEMENT DIVISION  
INSURANCE REQUIREMENTS  
AGREEMENT UNDER FORMAL BID LIMIT

General - Required Coverage:

- General Liability: \$1 Million per occurrence /\$2 Million aggregate
- Automobile Liability: \$1 Million combined single limit
- Workers' Compensation: Statutory \*Must provide a Waiver of subrogation
- Additional Insured Endorsement (AIE) - General Liability policy: CG 20 38 04 13 or an equivalent, blanket endorsement or section of the policy. Endorsement shall cover the City of Roseville, its officers, agents, employees and volunteers as additional insured.
- Policies must be primary and non-contributory
- A 30 day notice of cancellation must be provided

Additional Liability/Insurance Requirements if required by Agreement (and marked below):

Construction: \_\_\_\_\_

General Liability:

\$2 Million/occurrence

\$4 Million aggregate

Design Professional: \_\_\_\_\_

General Liability:

\$2 Million/occurrence

\$4 Million aggregate

Professional Liability:

\$2 Million/occurrence

Professional Consultant: \_\_\_\_\_

Professional Liability:

\$1 Million/occurrence

IT Services: \_\_\_\_\_

Professional Liability:

\$1 Million/occurrence

No auto required

Special Events/Caterers-Vendors: \_\_\_\_\_

No auto required

No workers' comp required

Professional Counseling/ Psychological: \_\_\_\_\_

Professional Liability:

\$1 Million/occurrence

No auto required

Insurance Verification

By signing the agreement included with this document, you are confirming that your company has the minimum insurance limits required above.

A copy of your insurance certificate is not required at this time. The City may request proof of insurance at any time.

Questions Regarding Insurance Requirements Contact Risk Management at (916) 774-5202

| Supplier    |                                                                                   |
|-------------|-----------------------------------------------------------------------------------|
| Signature:  |  |
| Print Name: | David Scheve, CFO                                                                 |
| Title:      | CFO                                                                               |

| Supplier    |  |
|-------------|--|
| Signature:  |  |
| Print Name: |  |
| Title:      |  |

| City of Roseville, A Municipal Corporation |                |
|--------------------------------------------|----------------|
| Signature:                                 |                |
| Print Name:                                | Dominick Casey |
| Title:                                     | City Manager   |



## Quote

Customer: (1001091182) ROSEVILLE POLICE DEPT. (CA)  
Date: 08/21/2020  
Sales Rep: VERNON TORGERSON

Page 1 of 1  
Quote Number: 16420190  
Quote Expiration: 06/30/2021

Sold To:  
ROSEVILLE POLICE DEPT  
1051 JUNCTION BLVD  
ROSEVILLE, CA 95678  
SHELLY BRACCO

Ship To:  
ROSEVILLE POLICE DEPT  
1051 JUNCTION BLVD  
ROSEVILLE, CA 95678  
SHELLY BRACCO

| Line | Item               | Description                                                                                    | Qty | Retail | Your Price | Ext Total |
|------|--------------------|------------------------------------------------------------------------------------------------|-----|--------|------------|-----------|
| 1    | BP1164 BLK CTM WOT | LAPD BLACK SERIES AXBIIIA MALE<br>CONCEALABLE VEST W/ 1 HI LITE CARRIER<br>AND 1 SPEED PLATE   | 1   |        | 702.64     | 702.64    |
| 1.1  | BP0002             | MALE CUSTOM VEST                                                                               | 1   |        |            |           |
| 2    | BP1165 BLK CTM WOT | LAPD BLACK SERIES AXBIIIA FEMALE<br>CONCEALABLE VEST W/ 1 HI LITE CARRIER<br>AND 1 SPEED PLATE | 1   |        | 702.64     | 702.64    |
| 2.1  | BP0003             | FEMALE CUSTOM VEST                                                                             | 1   |        |            |           |
| 3    | BP1167 BLK CTM WOT | LAPD BLACK SERIES AXBIIIA TRUFIT<br>CONCEALABLE VEST W/ 1 HI LITE CARRIER<br>AND 1 SPEED PLATE | 1   |        | 702.64     | 702.64    |
| 3.1  | BP0003             | FEMALE CUSTOM VEST                                                                             | 1   |        |            |           |

Quote is valid per piggyback offer based on Los Angeles City Contract 59463 Lines 47 & 48.

SUBTOTAL: 2,107.92  
SHIPPING:  
TAX..... 163.35  
TOTAL.... 2,271.27

Galls is required to collect sales tax on shipments to certain states. Sales tax will be added where applicable. For tax exempt customers, state laws require us to have signed tax exemption or resale certificates on file at our office. If you are tax exempt, please email or fax this information, (including your Galls account number) to Tax@galls.com or fax 859-268-5946.

Export Restrictions - This may contain commodities restricted in the United States International Trade Regulations.

1340 Russell Cave Rd  
Lexington, KY 40505  
Tel: 800-876-4242 Fax: 877-914-2557

## Galls, LLC Invoice Credit Terms and Conditions of Sale

Payment - Invoices for items delivered pursuant to any sales order are payable only in United States currency. You, your business, and/or your agency (the "Buyer") understand that Galls, LLC (the "Seller") may impose and charge a finance charge that is the greater of 1.5% per month or the highest rate allowed by law on any amount which becomes past due and delinquent. Returned checks may be assessed a \$25.00 service fee. Additionally, Buyer shall be responsible for all collection costs, court costs, and reasonable attorney's fees in connection with the recovery of delinquent amounts.

All sales are made pursuant to these Credit Terms and Conditions of Sale, and Seller objects to any different or additional terms or conditions contained in Buyer's purchase order or any other document submitted by Seller. Payments may be applied against open balances at the sole discretion of Seller and may be applied across accounts if Buyer has more than one account with Seller. Credit memos are non-refundable and may be applied to open invoices at Seller's sole discretion.

Credit Terms - Any extension of credit is based upon all amounts payable on or before the due date on any written, quoted, or agreed terms, and shall be paid in accordance with such terms. If not paid on or before such date, accounts shall be considered delinquent and subject to the additional finance charges as set forth herein.

Buyer agrees to provide Seller, upon request, with an updated credit application as a condition to the continued extension of credit. Buyer acknowledges and agrees that Seller may utilize outside credit reporting services and financial institutions to obtain information on the Buyer as a condition precedent to or for continued extension of credit. Seller may terminate any credit availability within its sole discretion and without prior notice. Buyer's continued solvency is a precondition to any sale made by Seller.

Delays - Where a specific shipping date is not designated on the face hereof or in a subsequent writing signed by the Seller, the Seller shall not be responsible for any delays, nor shall Seller be liable for any loss or damages resulting from such delays. Seller shall not be liable for any delays in filling this order caused by accidents to machinery, differences with employees, strikes, labor shortage, fire, floods, priorities requested or required by an instrumentality of the United States Government or the government of any state, delays in transportation, restrictions imposed by any federal, state or municipal law or regulation, whether valid or invalid, or causes beyond the control of the Seller.

Warranty - Seller shall pass through to Buyer all manufacturer warranties and return policies applicable to Buyer's order. Seller shall take all reasonable actions to ensure that Buyer receives the benefit of such pass through warranties and return policies. Buyer's sole remedies for any goods sold hereunder shall be as provided in such warranties and return policies and shall be solely against the applicable manufacturer. SELLER, ON BEHALF OF ITSELF, DISCLAIMS ALL WARRANTIES, WHETHER EXPRESS, IMPLIED, OR STATUTORY, RELATING TO SUCH GOODS.

Restocking - If a cancellation of an order or a return by Buyer is accepted or initiated by Seller and/or the manufacturer, it may be subject to a restocking charge at the discretion of Seller.

Delivery and Transportation - Products sold herein are sold FOB at the place indicated on the face of this sales order unless otherwise agreed to in writing by Seller and Buyer. The method and agency of transportation and the routing will be designated by the Seller. In the event the Buyer requests alternative shipment or routing, all extra packing, shipping and transportation charges thereby resulting will be for the Buyer's account.

Waiver - No provision herein shall be deemed a waiver by reason of any previous waiver, and no breach of any provision shall be deemed a waiver by reason of any previous breach.

Governing Law - The sole jurisdiction and venue shall be the courts of the Commonwealth of Kentucky.

Export Restrictions - This transaction may contain commodities restricted in the United States International Trade Regulations. If at a later date the Buyer decides these commodities will be exported from the United States please reference the United States Department of Commerce Bureau of Industry and Security Export Administration Regulations (15 CFR 730-774), the United States Department of State International Traffic in Arms Regulations (22 CFR 120-130) as well as any other applicable laws. These laws apply to private, commercial, and government agency export transactions. As an exporter, the Buyer will be responsible for compliance with all U.S. laws relating to the export of these items.

\*Designates this item is on the Galls GSA Contract (GS-07F-0157M) all other items are OPEN MARKET.





## COUNCIL COMMUNICATION

**CC #: 0989**

**File #: 0400-04-02-1**

**Title:** Oak Street Parking Facility 7th Floor Sealing Project – Notice of Completion

**Contact:** Beth Taylor 916-746-1300 bftaylor@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 7.4.**

### RECOMMENDATION TO COUNCIL

Staff recommends the City Council accept the Oak Street Parking Facility 7th Floor Sealing Project as complete and adopt a resolution to authorize the Public Works Director to execute the Notice of Completion.

### BACKGROUND

The Oak Street Parking Facility 7th Floor Sealing Project scope of work provided for sealing the cracks on the 7<sup>th</sup> floor with a methacrylate coating. The items of work included removal and replacement of existing traffic stripes and legends, preparation of the concrete surface, and application of methacrylate. Sealing the cracks on the 7th floor of the parking garage was necessary to alleviate the potential for increased maintenance and repair costs due to water intrusion into and through the parking deck.

The Public Works Department's Engineering Division has made the final inspection of the Oak Street Parking Facility 7th Floor Sealing Project and has found the work to be completed in accordance with the improvement plans and City Specifications and is now ready for acceptance. As required by the Specifications and Faithful Performance Bond, the Contractor shall guarantee the installation of all improvements for a period of 12 months from the date of the Notice of Completion.

### FISCAL IMPACT

In their February 19, 2020 meeting, the City Council awarded the project for \$160,320 with a 5% construction contingency (change order authority). The final construction cost was \$160,320 and none of the contingency dollars were used. All bid items were lump sum quantities, and the estimated quantities matched those installed. This project was funded by the Public Facility Fee Fund, Redevelopment Successor Agency available resources, and a design consultant reimbursement. No General Fund resources were used for the project.

## ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. A Notice of Completion meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Beth Taylor, Assistant Engineer

Jason Shykowski, Public Works Director

A handwritten signature in blue ink, appearing to read 'Dominick Casey', with a horizontal line extending from the end of the signature.

---

Dominick Casey, City Manager

## **ATTACHMENTS:**

### **Description**

Resolution 20-367

NOC

Location Map

RESOLUTION NO. 20-367

ACCEPTING THE PUBLIC WORK KNOWN AS THE OAK STREET PARKING FACILITY  
7TH FLOOR SEALING PROJECT, APPROVING THE “NOTICE OF COMPLETION”, AND  
AUTHORIZING THE PUBLIC WORKS DIRECTOR TO EXECUTE SAID NOTICE ON  
BEHALF OF THE CITY OF ROSEVILLE

BE IT RESOLVED by the City Council of the City of Roseville as follows:

1. The “Notice of Completion” on file in the City Clerk’s Department relative to that public work known as the Oak Street Parking Facility 7th Floor Sealing Project, has been approved and the public work accepted.
2. The Public Works Director is hereby authorized and directed to execute said Notice on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_\_, by the following vote on roll call:

AYES            COUNCILMEMBERS:

NOES           COUNCILMEMBERS:

ABSENT        COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk

RECORDING REQUESTED BY AND WHEN  
RECORDED MAIL TO:

CITY CLERK  
CITY OF ROSEVILLE  
311 VERNON STREET  
ROSEVILLE, CA 95678

Exempt from recording fees  
Pursuant to Gov't Code §27383

---

**NOTICE OF COMPLETION**

NOTICE IS HEREBY GIVEN that the public work of improvement known as the  
Oak Street Parking Facility 7th Floor Sealing Project Project was completed and  
accepted by the City of Roseville on September 16, 2020. The location is  
situated in the City of Roseville, County of Placer, State of California and is indicated on the  
attached map, marked as Exhibit "A" and incorporated herein by this reference. The real  
property herein described is owned by the City of Roseville, 311 Vernon Street, Roseville CA  
95678.

The direct/general contractor on said project was The Design Build, Inc.

The surety on said project was \_\_\_\_\_  
Merchants Bonding Company (Mutual)

\_\_\_\_\_  
Jason Shykowski  
Public Works Director  
City of Roseville  
Owner

ATTEST:

\_\_\_\_\_  
Sonia Orozco, City Clerk

State of California    )  
County of Placer        )

I, Jason Shykowski, being first duly sworn, depose and say: I am the Public Works Director of the City of Roseville, a municipal corporation in the State of California, owner of the property described in the above Notice. I am duly authorized to make this verification for and on behalf of the City of Roseville. I have read the Notice of Completion and know its contents and the facts stated therein are true.

\_\_\_\_\_  
Jason Shykowski  
Public Works Director  
City of Roseville

|                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

State of California    )  
County of Placer        )

Subscribed and sworn to (or affirmed) before me on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, Jason Shykowski proved to me on the basis of satisfactory evidence to be the person(s) who appeared before me.

*Place Notary Seal and/or Stamp Above*

\_\_\_\_\_  
*Signature of Notary Public*

EXHIBIT A



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## COUNCIL COMMUNICATION

**CC #: 1003**

**File #: 0200**

**Title:** Utility Billing Field Collection System - Master Sales Agreement Amendment

**Contact:** Jason Kemp 916-746-1284 [jkemp@roseville.ca.us](mailto:jkemp@roseville.ca.us)  
Andrea Blomquist 916-774-5317 [ablomquist@roseville.ca.us](mailto:ablomquist@roseville.ca.us)

**Meeting Date: 9/16/2020**

**Item #: 7.5.**

### RECOMMENDATION TO COUNCIL

Staff recommends the City Council adopt a resolution authorizing the City Manager to execute a First Amendment to the Master Sales Agreement with Itron for the utility billing Field Collection System.

### BACKGROUND

The City currently contracts with Itron to provide hardware and software for meter reading and billing purposes. The City's current version of Itron's software (MVRS) is being discontinued and is being replaced with the Field Collection System (FCS). The First Amendment to the Itron Master Sales Agreement for FCS includes software, installation, training, licenses, and maintenance fees for the next two (2) years. The total cost of the first amendment is not to exceed \$38,099. It is expected that the FCS software will be utilized for the next two (2) years.

### FISCAL IMPACT

The total cost of the first amendment is not to exceed \$38,099. This cost is included in the Finance Department's Utility Billing operating budgets in the Electric and Environmental Utilities funds.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines

§15060(c)(3) and §15378. Approval of a first amendment to a Master Sales Agreement for the Field Collection System meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Jason Kemp, Finance Supervisor

Dennis Kauffman, Assistant City Manager/Chief Financial Officer

A handwritten signature in blue ink, consisting of several overlapping loops and a final horizontal stroke.

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Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution No. 20-374

Amendment



RESOLUTION NO. 20-374

APPROVING A FIRST AMENDMENT TO MASTER SALES AGREEMENT, BY AND BETWEEN THE CITY OF ROSEVILLE AND ITRON, INC., AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE

WHEREAS, a First Amendment to Master Sales Agreement for the utility billing Field Collection System, between Itron, Inc. and the City Of Roseville, has been reviewed by the City Council; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Roseville that said first amendment is hereby approved and the City Manager is authorized to execute it on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 2020, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk



### First Amendment

This First Amendment (this “**Amendment**”) is effective as of the last date of execution below (“**Amendment Effective Date**”).

#### RECITALS

WHEREAS Itron, Inc. (“Itron”) and City of Roseville, California (“**Customer**”) entered into that certain Master Sales Agreement dated December 20, 2017 (the “**Agreement**”).

WHEREAS the Parties wish to amend the Agreement for the purpose of licensing Field Collection Service and adding an Itron Mobile subscription to the Agreement.

NOW, THEREFORE, in consideration of the mutual promises and obligations below, Itron and *Customer* agree to the foregoing recitals and as follows:

1. Capitalized terms used herein that are not otherwise defined in this Amendment shall have their meanings specified in the Agreement.
2. Add to the Transaction Summary, the following rows to the “Technology & Services Addendum to Master Sales Agreement”.

|                          |                                     |
|--------------------------|-------------------------------------|
| 2. Software Addendum     | <input checked="" type="checkbox"/> |
| 9. Itron Mobile Addendum | <input checked="" type="checkbox"/> |

3. Add to Transaction Summary, the following row to the “Pricing Summary (Attached)”.

|                    |
|--------------------|
| BMR #18140-20 Ver4 |
|--------------------|

4. Add to Transaction Summary the following Identification of Licensed Software, License Term and Usage.

| Identification of Licensed Software                                                                                                                                                                                                                         |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|
| <b>Application Name</b>                                                                                                                                                                                                                                     |  |
| Field Collection Software                                                                                                                                                                                                                                   |  |
| <b>License Term</b>                                                                                                                                                                                                                                         |  |
| <input checked="" type="checkbox"/> Perpetual<br><input type="checkbox"/> Fixed Term (Click here to enter text. Years)<br>( <input checked="" type="checkbox"/> Check if fixed term license requires purchase of software maintenance and support services) |  |
| <b>Usage</b>                                                                                                                                                                                                                                                |  |
| <input checked="" type="checkbox"/> Tier Limitation, if applicable (Maximum Usage: 150,000)                                                                                                                                                                 |  |

5. Add to the Master Sales Agreement as Attachment A, the Software Addendum
6. Add to the Master Sales Agreement as Attachment B, the Itron Mobile Addendum
7. Add to the Master Sales Agreement as Attachment C, the Pricing Summary
8. Except as provided in this Amendment, all terms and conditions of the Agreement remain unchanged and in full force and effect. In the event of a conflict or ambiguity between this Amendment and the Agreement, this Amendment shall control.
9. This Amendment may be executed in counterparts, which may be delivered by email, facsimile transmission or similar means.

**INTENDING TO BE LEGALLY BOUND**, each party represents and warrants that it has all necessary power and authority to enter into this Amendment to the Agreement.

**AGREED:**

**Itron, Inc.**

DocuSigned by:



B423AAG598A54AD...

Signature

Robert Farrow

Printed Name

VP Treasury

Title

7/29/2020

Date

**Customer**

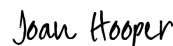
Signature

Printed Name

Title

Date

DocuSigned by:



81B92CA0E6CC417...

Signature

Joan Hooper

Printed Name

SVP & CFO

Title

7/29/2020

Date

## Attachment A

### SOFTWARE ADDENDUM

1. **Relationship to General Terms and Conditions.** This Addendum is subject to the Master Sales Agreement.
2. **Additional Definitions.** The following defined terms are in addition to those defined in the Master Sales Agreement:

**Endpoints** means a physical device (e.g., a meter, encoder-transmitter-receiver module, or other measuring, monitoring or sensing device) capable of being used in connection with Itron Software.

**Itron Software** means the machine readable (object code) version of computer programs listed on the Transaction Summary for licensing by Customer under this Agreement that are developed by or on behalf of Itron.

**License Term** means the duration of the Itron Software license granted by Itron to Customer under this Addendum.

**Software** means Itron Software and Third-Party Software.

**Third-Party Software** means the machine readable (object code) version of computer programs listed on the Transaction Summary for licensing by Customer that are not developed by or on Itron's behalf.

3. **Ordering Software.** Customer shall order Software by issuing a Purchase Order to Itron in accordance with this Agreement.
4. **Invoicing.** Itron will invoice Customer for Software upon the date of delivery.
5. **Itron Software License.** Subject to Customer's payment of all applicable Fees and compliance with this Agreement, Itron hereby grants to Customer a non-exclusive and non-transferable license to use Itron Software and related Documentation for Customer's internal business purposes within the Territory and during the License Term in connection with the number of Endpoints or other devices specified on the Transaction Summary. The "**Territory**" shall be the United States of America – or Canada, if Customer is a Canadian company that will be operating the Licensed Software in Canada. The License Term for all Itron Software shall be specified in the applicable Transaction Summary. Customer may make a reasonable number of copies of Itron Software for archival and back-up purposes.
6. **Third-Party Software.** All Third-Party Software, and related documentation, is separately licensed by the applicable third-party, and Customer's rights and responsibilities with respect to such software or documentation shall be governed in accordance with the third-party licensor's applicable software license. If Customer chooses to order Third Party Software, Customer shall enter into or accept one or more separate third-party agreements as part of the ordering, fulfillment, installation and/or download processes for such Third Party Software.
7. **Documentation.** Itron will make its standard Documentation for Itron Software available via download. Itron will provide Customer with download instructions.
8. **Itron Software License Restrictions.** Customer is not permitted to (i) modify or create any derivative

works from Itron Software, (ii) include or combine Itron Software with any software, equipment, or hardware other than as authorized by Itron, (iii) use Itron Software to provide services to third-parties, (iv) reverse assemble, decompile, reverse engineer Itron Software or otherwise attempt to derive its source code, (v) export Itron Software out of the Territory, or (iv) use any Itron Software to create products or services that compete with any of Itron's products or services. Customer is not permitted to copy Itron Software other than to make one machine readable copy for disaster recovery or archival purposes. Itron Software is only permitted to be installed on one production environment and one test environment on customer premises. Customer's breach of these restrictions shall constitute a material breach of this Agreement and shall result in revocation and immediate termination of all rights and licenses granted under this Agreement. Revocation does not preclude Itron from pursuing any legal and equitable remedies for Customer's breach of these restrictions.

9. **Limited Itron Software Warranty.** For a period of ninety (90) days from the date of delivery, Itron warrants solely to Customer that the Software will substantially conform in all material respects to the applicable Itron published specifications. As Customer's sole and exclusive remedy for any breach of this warranty, Itron will, at its option, during the warranty period set forth in this section, repair or replace non-conforming Itron Software to substantially conform to the foregoing warranty, provided that Itron will have no obligation to repair or replace any non-conforming Itron Software if this Agreement has terminated or expired. The foregoing warranty does not apply to non-conformities in Itron Software due to: (i) modifications not made or approved by Itron in writing; (ii) Customer's or any third party's negligence or intentional acts; (iii) misuse or abuse, including the failure to use or install Itron Software in accordance with the Documentation; (iv) incorrect data, or data entry or output, as applicable, by Customer or a third party; (v) third party software, hardware or firmware not provided or authorized by Itron in writing; (vi) a Force Majeure event; or (vii) viruses or security vulnerabilities introduced into the Itron Software or Customer's systems through no fault of Itron. After the ninety (90) day period described above, any Itron Software errors will be addressed under maintenance and support terms.
10. **Effect of Termination for Cause.** Upon termination of an Itron Software license for cause or expiration of a License Term, whichever occurs first, Customer shall immediately discontinue use of the applicable Itron Software and related Documentation, and Customer will destroy or return to Itron any and all copies. Upon Itron's request, Customer will confirm in writing that Customer has destroyed or has returned Itron Software and related Documentation in compliance with this section. This requirement applies to copies in all forms, partial and complete, in all types of media and computer memory, and whether or not modified or merged into other materials. Termination of an Itron Software license for cause will not restrict Itron from pursuing any other remedies available to it, including injunctive relief, nor will it relieve Customer of its obligation to pay all fees that accrued prior to such termination.
11. **Third-Party Software Warranty.** Itron is not the owner of Third-Party Software and makes no representations or warranties whatsoever, directly or indirectly, express or implied, as to the suitability, durability, and fitness for use, merchantability, condition, quality, performance or non-infringement of any Third-Party Software. Third-Party Software shall be subject to any warranties provided by the Third-Party Software provider. Itron will pass through to Customer, or make commercially reasonable efforts to enforce on Customer's behalf, any warranties and remedies received from the Third Party Software provider.
12. **U.S. Government Contracts Only.** If a Software license is acquired under a United States government contract, Customer acknowledges that Software, Updates and associated Documentation are (i)"Commercial Computer Software" as defined in 48 C.F.R. 12.212 of the Federal Acquisition Regulations (FAR) and in 48 C.F.R. 227.7014(a)(i) of the Department of Defense Federal Acquisition Regulations Supplement (DFARS), and (ii) are provided with only the commercial rights and subject to the restrictions described in this Agreement.

### **13. License Use Verification & Audit.**

- 13.1. **License Use Verification.** Promptly upon Itron's written request, and no more than once annually, Customer must furnish Itron with a letter signed by an officer of Customer, verifying that Itron Software is being used by Customer in compliance with the licenses granted, and confirming the number, identification, type and location of Endpoints and other devices being managed by Customer using Itron Software.
- 13.2. **Audit.** Itron has the right to audit Customer records to verify the number of Endpoints and other devices being managed by Customer using Itron Software and otherwise confirm Customer's compliance with license restrictions and Fee obligations of this Agreement. Itron must provide Customer with at least thirty (30) days prior written notice of the audit. The audit must be conducted during Customer's normal business hours at a mutually agreeable location. Itron's right to conduct an audit under this section is limited to one time per year, unless Itron has reason to believe that Customer is out of compliance with the license restrictions and Fee obligations of this Agreement. Itron has the right to use an independent auditor to conduct the audit. The audit shall be at Itron's sole cost and expense, unless the audit identifies a deficiency in Fees or other amounts owed or reimbursable by Customer during the audited period that is greater than five percent (5%) of the total amounts payable by Customer – in which case Customer must reimburse Itron for the reasonable cost of the audit. All amounts found to be owed by Customer under this Section will be payable within thirty (30) days after receipt of invoice from Itron.
14. **Survival.** The following sections of this Addendum shall survive termination or expiration of this Agreement or Statement of Work: 1 (Relationship to Terms and Conditions), 2 (Additional Definitions), 4 (Invoicing), 5 (Itron Software License) except to the extent applicable license rights expire or are terminated in accordance with this Agreement, 6 (Third-Party Software), 8 (Itron Software License Restrictions), 9 (Limited Itron Software Warranty), 10 (Effect of Termination for Cause), 11 (Itron Disclaimer of Third-Party Software Warranty), 12 (U.S. Government Contracts Only), 13 (License Use Verification & Audit) and 14 (Survival).

## Attachment B

### ITRON MOBILE ADDENDUM

1. **Tier-Based Annual Subscription Fee.** Itron Mobile is offered as an annual subscription service. The subscription fee is charged on fixed numerical range of meters or endpoints (a "Tier"). The annual subscription fee and the Tier are identified in the quote or pricing summary provided by Itron, Inc. or by Itron, Inc.'s distributor (hereafter, the "Quote"), Quote.
2. **Commencement of Annual Subscription.** The initial Itron Mobile subscription term begins when Itron Mobile is set-up by Itron.
3. **One-Time Itron Mobile Set-Up Fee.** Customer will be charged a one-time set-up fee.
4. **Subscription Auto-Renewal.** Customer's Itron Mobile subscription will renew automatically for one-year terms, unless either Itron or Customer gives ninety (90) days' prior written notice of intent not to renew.
5. **No Termination for Convenience.** Neither Itron nor Customer may terminate Itron Mobile during a subscription term.
6. **Annual Subscription Fee Adjustment.** Itron has the right to adjust the subscription fee for each renewal term, without regard to Tier.
7. **Tier Adjustment.** Itron has the right to adjust Customer's subscription fee at any time if Customer's use of Itron Mobile exceeds Customer's Tier. Fees adjusted under this Section will normally be invoiced within thirty to sixty days depending on when meter or endpoint provisioning occurs.
8. **Relationship to Licensed FCS Software and Maintenance & Support.** Customer may be required to update or upgrade its licensed FCS Software from time to time in order to ensure full functionality of Itron Mobile. Customer is required to purchase maintenance and support services for Itron's Field Collection System software ("FCS") during each Itron Mobile subscription term.
9. **Compatible Mobile Devices.** Itron Mobile is designed to work in connection with mobile devices that meet Itron minimum requirements. Itron will provide the minimum specifications to Customer. Itron is not required to make Itron Mobile work with any other mobile devices.
10. **Customer's Obligation to Protect Customer Information on Mobile Devices.** Customer must take steps to protect Customer information stored on mobile. User identification codes, passwords, and any information provided to Customer as part of Itron's security procedures must be treated by Customer as confidential and must not be disclosed to any third-party. Customer is at all times responsible for its employees and subcontractors' use of Itron Mobile. Itron has the right to disable any user identification codes or passwords if Customer or its employees and contractors have failed to comply with any of the provisions of this Agreement.
11. **Internet Connectivity.** Itron Mobile requires Internet connectivity, which Customer is solely responsible for obtaining and paying for.
12. **Disclaimer of Liability.** Itron accepts no responsibility for any internet services failure, mobile device failure, or for any loss or damage of any kind caused by such failure.
13. **No Other Changes.** No other changes are made to the Agreement by this Amendment.

## Attachment C



Electric / Gas / Water  
Information collection, analysis and application

2111 N. Molter Rd.  
Liberty Lake, WA 99019  
fax: 866-787-6910  
[www.itron.com](http://www.itron.com)

**Pricing Summary for  
Roseville, CA**

BLR# 10140-20 Ver4 Apr  
April 2, 2020

| Item                             | Part Number  | Description                                                                            | Qty | Unit Price | Extended Price     | Notes |
|----------------------------------|--------------|----------------------------------------------------------------------------------------|-----|------------|--------------------|-------|
| <b>Software</b>                  |              |                                                                                        |     |            |                    |       |
| 1                                | FCSAA-ED     | FCS Software License, 100,001-150,000 Endpoints                                        |     |            | No Charge          | (1,2) |
|                                  |              | <b>Software Total</b>                                                                  |     |            | <b>\$0.00</b>      |       |
| <b>Itron Mobile Subscription</b> |              |                                                                                        |     |            |                    |       |
| 2                                | One-Time     | Itron Mobile - Initial Set-up Fee                                                      |     |            | \$250.00           | (3)   |
|                                  |              |                                                                                        |     |            | <b>Annual</b>      |       |
| 3                                | Subscription | Itron Mobile Walk-By / Drive-By Only Subscription<br>Up to 150,000 Endpoints           |     |            | \$3,780.00         |       |
| 4                                | Subscription | Itron Mobile Walk-By / Drive-By Only Subscription - Year 2                             |     |            | \$3,969.00         |       |
|                                  |              | <b>Itron Mobile Subscription Total</b>                                                 |     |            | <b>\$7,999.00</b>  |       |
| <b>Client Services Delivery</b>  |              |                                                                                        |     |            |                    |       |
| 5                                | Services     | FCS v4 / Itron Mobile Implementation and Training Services<br>(from MV-RS) (FIXED FEE) |     |            | \$15,675.00        | (4-5) |
| 6                                | T&E          | Estimated Travel & Living Expenses to be Billed at Actual                              |     |            | \$2,125.00         |       |
|                                  |              | <b>Client Services Delivery Total</b>                                                  |     |            | <b>\$17,800.00</b> |       |
|                                  |              | <b>Total</b>                                                                           |     |            | <b>\$25,799.00</b> |       |
| <b>Annual Maintenance</b>        |              |                                                                                        |     |            |                    |       |
| 7                                | Maintenance  | FCS Software License, 100,001-150,000 Endpoints - Year 1 Maintenance                   |     |            | \$6,000.00         | (6)   |
| 8                                | Maintenance  | FCS Software License, 100,001-150,000 Endpoints - Year 2 Maintenance                   |     |            | \$6,300.00         |       |
|                                  |              | <b>Annual Maintenance Total</b>                                                        |     |            | <b>\$12,300.00</b> |       |

**Notes and Assumptions**

- (1) FCS Software License includes one copy of Crystal Reports Developer. Additional copies can be purchased separately at \$595.00 each.
- (2) Pricing shown here does not include third party products needed for this system such as servers, PCs, operating systems, and Oracle or SQL Server database server.
- (3) Itron Mobile is offered as an annual subscription with a minimum one-year term. FCS v4.0 must be fully tested and operational prior to Itron Mobile Application services.
- (4) FCS services includes remote Project Kickoff/system requirements, on-site system assessment/technical evaluation, single system FCS Installation in two environments (Test/Production) with up to 3 client workstations, on-site FCS configuration includes system settings & parameters, Itron Mobile setup and system testing. During same on-site, two days FCS Training on Desktop, handheld/smart device meter reading includes Itron Mobile training, remote consulting support during Test Phase, remote Go Live support, formal transition to Itron Support. Services for replacing MV-RS. Standard business days/hours Monday through Friday, 8AM to 5PM. Weekend or Holiday services are not included.
- (5) Estimated travel expenses will be billed as actual.
- (6) The Software Maintenance start date commences on the first of the month following Software delivery.
- (7) Pricing is based on existing agreements or Itron's standard terms and conditions.
- (8) Freight, taxes, duties, and tariffs are not included. Prices are in US dollars. Prices are valid through 12/31/2020.





## COUNCIL COMMUNICATION

CC #: 0993

File #: 0200 & 0210

**Title:** Property Tax Management, Information and Audit Services – Professional Services Agreement  
**Contact:** Scott Pettingell 916-746-1306 spettingell@roseville.ca.us

Meeting Date: 9/16/2020

Item #: 7.6.

### RECOMMENDATION TO COUNCIL

Staff recommends City Council adopt a resolution authorizing the City Manager to execute a professional services agreement with HdL Coren & Cone to provide property tax management and information services.

### BACKGROUND

The FY2020-21 budget includes funding to enter into an agreement with a consultant to provide property tax management and information services. These services include the preparation of reports detailing assessed property information and property tax revenue trends. This information will provide the City with another data set to consider when developing short and long term property tax forecasts for the City's second largest General Fund revenue source. This information is helpful for planning, economic development, and public information. Examples of the reports include one to five-year budget forecasts, top 25, 50, 100-property owner listings, multiple ownership properties, non-owner occupied parcels, identification of property ownership transfers and completed construction projects for tracking reassessments. This consultant will also provide property tax audit services to ensure the City is receiving all property tax revenue due. The compensation for these audit services is twenty-five percent (25%) of any new net property tax revenues recovered for the City. Over the past year, HdL identified approximately \$7,000 of additional property tax revenue for the City from these audit services. The Finance Department plans to conduct a Request for Proposals process and, after the conclusion of this HdL agreement, enter into a new agreement for property tax management and information services.

### FISCAL IMPACT

The professional services agreement contains an annual not-to-exceed base fee amount of \$16,686 through May 2021. Also, the consultant is entitled to twenty-five percent (25%) of any new net tax revenues recovered for the City. The Finance Department's FY2020-21 approved budget

includes adequate funding for the recommended agreement. No additional General Fund resources are required.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a professional services agreement for property tax management and information services meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Scott Pettingell, Budget Manager

Dennis Kauffman, Assistant City Manager/Chief Financial Officer



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Dominick Casey, City Manager

### **ATTACHMENTS:**

#### **Description**

Resolution No. 20-370

Professional Services Agreement

RESOLUTION NO. 20-370

APPROVING A PROFESSIONAL SERVICES AGREEMENT, BY AND BETWEEN THE  
CITY OF ROSEVILLE AND HDL COREN & CONE, AND AUTHORIZING THE CITY  
MANAGER TO EXECUTE IT ON BEHALF OF  
THE CITY OF ROSEVILLE

WHEREAS, a professional services agreement for Property Tax Management,  
Information and Audit Services, by and between the City of Roseville and HdL Coren & Cone,  
has been reviewed by the City Council; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Roseville that  
said agreement is hereby approved and that the City Manager is authorized to execute it on  
behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of  
\_\_\_\_\_, 20\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk

## PROFESSIONAL SERVICES AGREEMENT

### Property Tax Management, Information and Audit Services

THIS AGREEMENT is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 20\_\_,  
by and between the City of Roseville, a municipal corporation ("CITY"), and HdL Coren &  
Cone, a California corporation ("CONSULTANT"); and

### W I T N E S S E T H:

WHEREAS, CITY desires professional services consisting of property tax management,  
information and audit services; and

WHEREAS, CONSULTANT has prepared a proposal dated August 10, 2020, which  
describes the scope of work to be performed by CONSULTANT, the budget for the work, and  
the schedule for performance of the work; and

WHEREAS, CONSULTANT is qualified and experienced to provide such professional  
services.

NOW, THEREFORE, the parties agree as follows:

1. Term. The term of this Agreement shall commence upon execution and expire on  
May 31, 2021, unless terminated earlier pursuant to the provisions of Paragraph 17.
2. Services. CONSULTANT shall perform, at the direction of CITY, the scope of  
services as described in EXHIBIT "A," attached hereto and incorporated herein by this  
reference.

3. Compensation. For its services provided hereunder, CONSULTANT shall be compensated in accordance with the budget estimate as described in EXHIBIT "B," attached hereto and incorporated herein by this reference. Total fixed fee compensation shall not exceed sixteen thousand, six hundred eighty-six dollars (\$16,686.00). In addition, CONSULTANT shall be entitled to twenty-five percent (25%) of net tax revenues recovered for CITY in the audits performed over the period allowable by State statute.

CONSULTANT shall submit monthly invoices for its services. Such invoices shall be for the monthly fixed fee compensation amount described in EXHIBIT "B." CITY shall pay invoices within thirty (30) days after receipt, if the services specified in the invoice have been satisfactorily completed.

4. Indemnification. To the fullest extent allowed by law, CONSULTANT shall defend, indemnify, and save and hold harmless CITY, its officers, agents, employees and volunteers from any claims, suits or actions of every name, kind and description brought forth, or on account of, injuries to or death of any person (including but not limited to workers and the public), or damage to property, resulting from or arising out of CONSULTANT's willful misconduct or negligent act or omission while engaged in the performance of obligations or exercise of rights created by this Agreement, except those matters arising from CITY's sole negligence or willful misconduct. The parties intend that this provision shall be broadly construed.

CONSULTANT's responsibility for such defense and indemnity obligations shall survive the termination or completion of this Agreement for the full period of time allowed by law. The defense and indemnity obligations of this Agreement are undertaken in addition to, and shall not in any way be limited by, the insurance obligations contained in this Agreement.

5. Insurance. CONSULTANT agrees to continuously maintain, in full force and effect, the following minimum policies of insurance during the term of this Agreement.

| <u>COVERAGE</u>                               | <u>LIMITS OF LIABILITY</u>                                                                                                       |
|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| Workers' Compensation                         | Statutory                                                                                                                        |
| Commercial General Liability                  | \$1,000,000 each occurrence<br>\$2,000,000 aggregate<br>Personal Injury:<br>\$1,000,000 each occurrence<br>\$2,000,000 aggregate |
| Automobile Liability                          | \$1,000,000 combined single limit                                                                                                |
| Professional Liability (errors and omissions) | \$1,000,000 per claim<br>\$2,000,000 aggregate                                                                                   |

a. Form. CONSULTANT shall submit a certificate evidencing such coverage for the period covered by this Agreement in a form satisfactory to Risk Management and the City Attorney, prior to undertaking any work hereunder. Any insurance written on a claims made basis is subject to the approval of Risk Management and the City Attorney.

b. Additional Insureds. CONSULTANT shall also provide a separate endorsement form or section of the policy showing CITY, its officers, agents, employees and volunteers as additional insureds for each type of coverage, except for Workers' Compensation and Professional Liability. Such insurance shall specifically cover the contractual liability of CONSULTANT. The additional insured coverage under the CONSULTANT's policy shall be primary and noncontributory, as evidenced by a separate endorsement or section of the policy, and shall not seek contribution from CITY's insurance or self-insurance. In addition, the additional insured coverage shall be at least as broad as the Insurance Services Office ("ISO") CG 20 01 Endorsement. Any available insurance proceeds in excess of the specified minimum

insurance coverage requirements and limits shall be available to the additional insureds.

Furthermore, the requirements for coverage and limits shall be: (1) the minimum coverage and limits specified in this Agreement; or (2) the full coverage and maximum limits of any insurance proceeds available to the named insureds, whichever is greater.

c. Cancellation/Modification. CONSULTANT shall provide ten (10) days written notice to CITY prior to cancellation or modification of any insurance required by this Agreement.

d. Umbrella/Excess Insurance. The limits of insurance required in this Agreement may be satisfied by a combination of primary and excess insurance. Any excess insurance shall contain or be endorsed to contain a provision that such coverage shall also apply on a primary and noncontributory basis for the benefit of CITY (if agreed to in a written contract) before CITY's own insurance shall be called upon to protect it as a named insured.

e. Subcontractors. CONSULTANT agrees to include in its contracts with all subcontractors the same requirements and provisions of this Agreement, including the indemnity and insurance requirements, to the extent they apply to the scope of the subcontractor's work. Furthermore, CONSULTANT shall require its subcontractors to agree to be bound to CONSULTANT and CITY in the same manner and to the same extent as CONSULTANT is bound to CITY under this Agreement. Additionally, CONSULTANT shall obligate its subcontractors to comply with these same provisions with respect to any tertiary subcontractor, regardless of tier. A copy of CITY's indemnity and insurance provisions will be furnished to the subcontractor or tertiary subcontractor upon request.

f. Self-Insured Retentions. All self-insured retentions ("SIR") must be disclosed to Risk Management for approval and shall not reduce the limits of liability.

Policies containing any SIR provision shall provide or be endorsed to provide that the SIR may be satisfied by either the named insured or CITY. CITY reserves the right to obtain a full certified copy of any insurance policy and endorsements. The failure to exercise this right shall not constitute a waiver of such right.

g. Waiver of Subrogation. CONSULTANT hereby agrees to waive subrogation which any insurer of CONSULTANT may acquire from CONSULTANT by virtue of the payment of any loss under a Workers Compensation, Commercial General Liability or Automobile Liability policy. All Workers Compensation, Commercial General Liability and Automobile Liability policies shall be endorsed with a waiver of subrogation in favor of CITY, its officers, agents, employees and volunteers for all work performed by CONSULTANT, its employees, agents and subcontractors.

h. Liability/Remedies. Insurance coverage in the minimum amounts set forth herein shall not be construed to relieve CONSULTANT of liability in excess of such coverage, nor shall it preclude CITY from taking such other actions as are available to it under any other provisions of this Agreement or law.

6. Records. CONSULTANT and its subcontractors shall maintain all files and records relating to the services performed hereunder during the term of this Agreement and for a period of not less than one (1) year after the date of termination or expiration. Provided, however, that in the event of litigation or settlement of claims arising from the performance of this Agreement, CONSULTANT and its subcontractors shall maintain all files and records until such litigation, appeals or claims are resolved. Duly authorized representatives of CITY shall have right of access during normal business hours and after reasonable notice to CONSULTANT's and subcontractors' files and records relating to the services performed



hereunder, and may review and copy the files and records at appropriate stages during performance of the services and during the one (1) year period following termination or expiration of this Agreement. CONSULTANT shall include this provisions in its contracts with all subcontractors.

7. Time is of the Essence. Time is of the essence of this Agreement.

8. Compliance with Laws. CONSULTANT shall comply with all federal, state and local laws, ordinances and policies as may be applicable to the performance of services under this Agreement.

9. Ability to Perform. CONSULTANT agrees and represents that it has the time, ability and professional expertise to perform the services required under this Agreement.

10. Governing Agreement. In the event of any conflict between this Agreement and its EXHIBITS, the provisions of this Agreement shall govern. In the event of any conflict between any of the EXHIBITS, the provisions of the first in order of attachment shall govern.

11. Assignment. CONSULTANT is employed to perform unique personal services. CONSULTANT shall not assign this Agreement without the prior written consent of CITY. CONSULTANT shall not employ or otherwise incur any obligation to pay other specialists or experts for services in connection with this Agreement, without prior written consent of CITY.

12. Independent Contractor. CONSULTANT shall act as an independent contractor, and covenants and agrees that it will conduct itself consistent with such status, that it will neither hold itself out as, nor claim to be, an officer or employee of CITY by reason of this Agreement.

13. Representations and Warranties. CONSULTANT warrants that it has not employed or retained any company or person, other than a bona fide employee working for CONSULTANT, to solicit or secure this Agreement, and that it has not paid or agreed to pay any

company or person, other than a bona fide employee, any fee, commission, percentage, brokerage fee, gift or any other consideration, contingent upon or resulting from the award or making of this Agreement. For breach or violation of this warranty, CITY shall have the right to terminate as void this Agreement, without liability, or, in its discretion, to deduct from the Agreement price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

14. Successors in Interest. This Agreement shall be binding upon the heirs, successors, executors, administrators and assigns of the respective parties hereto.

15. Copyright, Ownership and Use of Materials. All tangible material ("Material") created or delivered pursuant to this Agreement is considered a work made for hire under the Copyright Act. To the extent such Material does not qualify as a work made for hire, CONSULTANT hereby assigns to CITY all right, title, and interest, including but not limited to all copyrights, in all Material created by CONSULTANT in its performance under this Agreement. Material constitutes the scope of work outlined in Exhibit A and attached hereto, and all written and other tangible expressions, including but not limited to, drawings (including computer aided drawings), papers, documents, reports, surveys, renderings, exhibits, sketches, maps, models, prints, paintings or photographs, in any and all media or formats in which such materials have been created or are maintained. All Material furnished by CONSULTANT is, and shall remain, the property of CITY.

CONSULTANT shall execute any documents necessary to effectuate such assignment. In the event that CONSULTANT uses, employs, designates, or retains any person or entity who is not an employee of CONSULTANT, to perform any work required of it pursuant to this

Agreement, CONSULTANT shall require said person or entity to execute an agreement containing the preceding paragraph.

16. Non-Disclosure of Proprietary Information. In performing its duties under this Agreement, CONSULTANT will produce reports, technical information and other compilations of data to CITY. These reports, technical information and compilations of data are derived by CONSULTANT using methodologies, formulae, programs, techniques and other processes designed and developed by CONSULTANT at a substantial expense. CONSULTANT's reports, technical information, compilations of data, methodologies, formulae, software, programs, techniques and other processes designed and developed by CONSULTANT shall be referred to as "Proprietary Information". CONSULTANT's Proprietary Information is not generally known by the entities with which CONSULTANT competes.

CONSULTANT desires to protect its Proprietary Information. Accordingly, CITY agrees that neither it nor any of its employees, agents, independent contractors or other persons or organizations over which it has control, will at any time during or after the term of this Agreement, directly or indirectly use any of CONSULTANT's Proprietary Information for any purpose not associated with CONSULTANT's activities. Further, CITY agrees that it nor any of its employees, agents, independent contractors or other persons or organizations over which it has control, will disseminate or disclose any of CONSULTANT's Proprietary Information to any person or organization not connected with CONSULTANT, without the express written consent of CONSULTANT.

Any use of the Proprietary Information or any other reports, records, documents or other materials prepared by CONSULTANT hereunder for other projects and/or use of uncompleted documents without specific written authorization by the CONSULTANT will be at

the CITY's sole risk and without liability to CONSULTANT, and the CITY shall indemnify the CONSULTANT for all damages resulting therefrom.

17. Termination of Agreement. The City may terminate this Agreement without cause by giving CONSULTANT ten (10) days advance written notice from the City Manager. CONSULTANT may terminate this Agreement without cause by giving CITY thirty (30) days advance written notice. In the event of termination through no fault of CONSULTANT, CITY shall compensate CONSULTANT for services performed as of the date of termination, upon the release to CITY of all Material hereunder, in any and all media or formats in which such materials have been created or are maintained. CITY retains the right to receive and use any Material, notwithstanding any termination or any dispute regarding the amount to be paid.

18. Attorney's Fees; Venue; Governing Law. If either party commences any legal action against the other party arising out of this Agreement or the performance hereof, the prevailing party in such action shall be entitled to recover its reasonable litigation expenses, including but not limited to, court costs, expert witness fees, discovery expenses, and attorney's fees. Any action arising out of this Agreement shall be brought in Placer County, California, regardless of where else venue may lie. This Agreement shall be governed by and construed in accordance with the laws of the State of California.

19. Modification. This Agreement and each provision contained herein may be waived, amended, supplemented or eliminated only by mutual written agreement of the parties.

20. Severability. If any of the provisions contained in this Agreement are for any reason held invalid or unenforceable, such holding shall not affect the remaining provisions or the validity and enforceability of the Agreement as a whole.

21. Notices. Any notices to parties required by this Agreement shall be delivered personally or mailed, U.S. first class postage prepaid, addressed as follows:

CITY OF ROSEVILLE

Dennis Kauffman  
Chief Financial Officer  
311 Vernon Street  
Roseville, CA 95678

CONSULTANT

Paula Cone  
President  
120 S. State College Blvd., Ste. 200  
Brea, CA 92821

Either party may amend its address for notice by giving notice to the other party in writing.

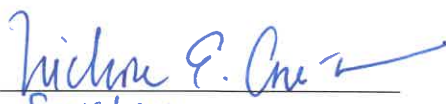
22. Integrated Agreement. This is an integrated agreement and contains all of the terms, considerations, understanding and promises of the parties. It shall be read as a whole.

IN WITNESS WHEREOF, the City of Roseville, a municipal corporation, has authorized the execution of this Agreement in duplicate by its City Manager and attested to by its City Clerk under the authority of Resolution No. \_\_\_\_\_, adopted by the Council of the City of Roseville on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, and CONSULTANT has caused this Agreement to be executed.

CITY OF ROSEVILLE, a  
municipal corporation

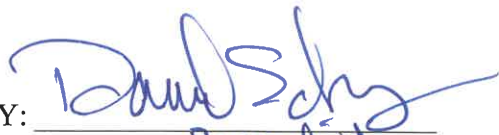
HdL COREN & CONE, a  
California corporation

BY: \_\_\_\_\_  
DOMINICK CASEY  
City Manager

BY:   
its: Secretary  
and

**SIGNATURES CONTINUED ON FOLLOWING PAGE**

ATTEST:

BY:   
its: vice President

BY: \_\_\_\_\_  
SONIA OROZCO  
City Clerk

APPROVED AS TO FORM:

BY: \_\_\_\_\_  
ROBERT R. SCHMITT  
City Attorney

APPROVED AS TO SUBSTANCE:

BY:   
DENNIS KAUFFMAN  
Assistant City Manager/Chief Financial Officer

## EXHIBIT “A”

August 10, 2020

**PROPERTY TAX MANAGEMENT, INFORMATION AND AUDIT SERVICES**

**SCOPE OF SERVICES**

Services provided include property tax management service, secured and unsecured parcel audits, assessment district processing, budget projections, and Successor Agency support, and bond fiscal analysis

**Reports and Management Analyses** (1)

The company will provide the following reports. Reports are also available from prior years if required.

- A five year history of the values within the city, successor agency and custom (city defined) geographic area;
- A listing of the largest value changes, positive and negative between tax years;
- A listing of the major property owners, including the assessed value of their property and property use code designation;
- A listing of the major property tax payers, including an estimate of the property taxes;
- A listing of property tax transfers which occurred since the lien date ordered by month;
- A multiple year comparison of growth by use code designation over a 10 year period;
- State Appropriation Limit calculations;
- Calculate an estimate of property tax revenue anticipated to be received for the fiscal year based upon the initial information provided by the County and subject to modification. This report is interactive for tax modeling. This estimate shall not be used to secure the indebtedness of the City.
- Property sales information, and Proposition 8 exposure and recapturing potential
- Analyses based on geo areas designated by the City to include assessed valuations and square footage computations for use in economic analysis and community development planning.



- Budget forecasting model for 1 and 5-year projections for General Fund, Successor Agency and VLF In Lieu Revenues.
- (1) Reports are based upon property tax information obtained from your county and supplemented by additional information from third parties. Some reports are dependent upon the availability of county data in electronic format.

### **Successor Agency Services**

Successor Agency Services including but not limited to:

- Tax increment projections by project area and for the Successor Agency
- Cash flows for the Successor Agency as requested
- Assistance with Redevelopment Obligation Payment Schedules as requested (additional charges may be required)
- Estimates of property tax revenues to be received by the City as requested
- Provide access to the Oversight Board to City and former redevelopment agency documents at the direction of the Successor Agency
- Monitor the County distribution of tax-sharing revenues to the City and to taxing entities of the former redevelopment agency
- Coordinate as necessary with the Auditor-Controller the relationship between the tax-sharing, debt service and other obligations of former redevelopment agency

### **Monthly/Quarterly Reports and System Updates**

- A listing of property tax appeals filed on properties in the City where data is available for purchase from the Clerk of the Board.
- A listing of property transfers that have occurred since the last report will be available through the software provided and updated on a monthly basis.

### **Web-Based Software**

- The HdLCC provides a web-based software application to clients as a user-friendly tool to access the City's property tax data. HdLCC provides updates to the data portion of the product on monthly basis to reflect changes in ownership, updated appeals filings, and deed recordings.
- As modifications and enhancements are made to the program, clients receive the enhanced version of the software at no additional cost. Training will be provided to city staff within the

first two months after the execution of the agreement for property tax management and audit services and is available annually for new staff members or staff requiring a refresher course. If additional training sessions are required, the fees in the compensation section under hourly fees will be charged.

**HdL Coren & Cone** The City Of Roseville 55,653 Assessments

2020-21 Entire City Of Roseville Other Filters 0

**Secured Assessment Details** Back to Search Results

Sec. Parcel: 017-123-016-000 Details [icon]  
 TRA: 005-001  
 Use Category: Commercial  
 Use Code: 11  
 Retail Store Building  
 Owner: TARGET CORPORATION [icon]  
 DBA: DBA TARGET #1502  
 Mail Name: TARGET CORPORATION  
 Mail Addr: PO BOX 9456  
 MINNEAPOLIS, MN 55440-9456  
 Absentee: ☒ Taxable: ☒

Location: 10451 FAIRWAY DR  
 City: ROSEVILLE  
 Zip Code: 95678  
 Agency: Roseville General Fund  
 Exem Desc:  
 Net AV: \$24,025,534  
 HOX: \$0  
 General Fund Revenue: \$32,510.21  
 Successor Agency Revenue: \$0.00  
 Tax Bill: \$0.00

**Value History**

| Year | Land        | Imprvmts.    | Fixtures  | Pers.Prop.  | Subtotal     | Exems | Net Total    | % Change | Taxable                             |
|------|-------------|--------------|-----------|-------------|--------------|-------|--------------|----------|-------------------------------------|
| 2020 | \$6,967,480 | \$14,368,924 | \$570,090 | \$2,119,040 | \$24,025,534 | \$0   | \$24,025,534 | 5.74%    | <input checked="" type="checkbox"/> |
| 2019 | \$6,030,863 | \$14,097,181 | \$209,360 | \$1,539,870 | \$22,721,274 | \$0   | \$22,721,274 | 1.55%    | <input checked="" type="checkbox"/> |

**General**  
**Sales**  
 No Associated Sales.  
**Overlays**  
**Appeals**  
 No Associated Appeals.

Map: Roads Aerial  
 Asmt Num: 017-123-016-000  
 Use Code: 11  
 Use Description: Commercial  
 Owner Name: TARGET CORPORATION  
 Situs Address: 10451 FAIRWAY DR  
 Taxable Value: \$24,025,534

Layers  
 Flagged: 0 Selected: 0

### Identification and Correction of Errors

HdL Coren & Cone has the technology, methodology and trained staff to analyze all secured parcels within the City to identify costly errors resulting in the misallocation of property taxes.

The company audits the secured and unsecured property tax rolls to ensure that each is coded to the appropriate taxing entity. The company performs an analysis of the Assessor Rolls to identify all parcels on both the secured and unsecured tax rolls and verify that parcel assessed valuations and the resulting taxes are correctly allocated to the City. This analysis is accomplished through the use of specialized computer software, GIS maps, assessor maps, city maps, city records, other pertinent documents, and field investigations.

**Fee for Services**

Please refer to Exhibit B.

**On-Going Consultation**

Please refer to Exhibit B.

HdL Coren & Cone  
120 S State College Boulevard, Suite 200  
Brea, California 92821  
714.879.5000

## EXHIBIT "B"

Based on the number of parcels within Roseville (49,562), the standard fee for property tax service is \$1,854 per month plus 25% of net tax revenues recovered for the City in the audits performed over the period allowable by State statute (current year and 3 prior lien date years). Net tax revenue mean the taxes received by the City through audit services.

September 2020 - \$1,854  
October 2020 - \$1,854  
November 2020 - \$1,854  
December 2020 - \$1,854  
January 2021 - \$1,854  
February 2021 - \$1,854  
March 2021 - \$1,854  
April 2021 - \$1,854  
May 2021 - \$1,854  
Total Not-To-Exceed Amount: \$16,686

Work that is requested by the City and that is beyond the scope of services outlined in this proposal shall be charged on a time and material basis. No work shall be performed without prior written approval of the City. Fees for these services are as follows:

Partner - \$225 per hour  
Principal - \$195 per hour  
Programmer - \$175 per hour  
Associate- \$150 per hour  
Senior Analyst - \$100 per hour  
Analyst - \$ 65 per hour  
Administrative - \$ 45 per hour  
Hourly rates are exclusive of expenses. Expenses, reasonable travel and lodging fees are billed at 1.15 times actual incurred costs.



## COUNCIL COMMUNICATION

**CC #: 1005**  
**File #: 0800-02**

|                 |                                                                                                                    |
|-----------------|--------------------------------------------------------------------------------------------------------------------|
| <b>Title:</b>   | Water Infrastructure Finance and Innovation Act - Authorization to Submit Application                              |
| <b>Contact:</b> | Richard Plecker 916-774-5714 rplecker@roseville.ca.us<br>Kenneth Glotzbach 916-774-5754 kglotzbach@roseville.ca.us |

**Meeting Date: 9/16/2020**  
**Item #: 7.7.**

### RECOMMENDATION TO COUNCIL

Recommend the City Council adopt a resolution to authorize staff to submit the Water Infrastructure Finance and Innovation Act (WIFIA) application and the associated application fee of \$100,000. Additionally, staff recommends giving the City Manager authority to make non-substantive changes as needed and as approved by the City Attorney's office.

### BACKGROUND

The WIFIA program, managed by the Office of Water at the United States Environmental Protection Agency (US EPA), accelerates investment in water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant water, wastewater, and recycled water projects. The City of Roseville (City) Environmental Utilities Department (EU) submitted a Letter of Interest to apply for a WIFIA loan in July 2019 and was subsequently invited to formally apply by the US EPA in October 2019, marking the successful completion of the first phase of the process. The Letter of Interest described Roseville's long-term objectives to expand recycled water and groundwater programs and requested approximately \$33 million in funding support to allow the City to initiate development of several water, wastewater, and recycled water projects.

The second phase involves submitting the formal application to the US EPA. EU staff developed the application materials and are now ready to submit the WIFIA application as part of Roseville's Water Future Initiative (Initiative). The Initiative is a package of water, wastewater, and water recycling infrastructure and technology projects that enhance infrastructure and overall water supply resiliency. These funds will allow EU to examine and implement promising technology to substantially expand the City's water recycling program and increase aquifer storage and recovery capabilities that will provide even better water supply reliability for Roseville when complete. The Initiative ensures an enhanced water supply for Roseville while promoting statewide water conservation.

Attached is the final application for WIFIA credit assistance for the Initiative with supplemental attachments for Sections A, B, and C. The supplemental attachments for Sections D and E were

not included due to the file size but are available to the public in the Clerk's Office via a hard copy print out. Additionally, the WIFIA application with supplemental attachments for Sections A, B, C, D, and E is also available to view on the Environmental Utilities website at [www.roseville.ca.us/WIFIA](http://www.roseville.ca.us/WIFIA).

The application provides additional information on the financial and engineering feasibility of the project to allow a more detailed review by EPA. It also expands upon technical and financial information provided in the letter of interest. If approved by City Council, the City will submit the application to EPA in September 2020. The following list outlines the key elements of the City's WIFIA application:

**Applicant Information:** This section provides basic information on the City and describes the City's organizational history, ownership, structure, and customer base.

**Detailed Project Information:** This section provides detailed information on the Water Component and Water Reuse Component of the Initiative, including the location, estimated costs, plans and specifications, and schedule. Additional information is provided in attached technical reports and documents which serve to support EPA's evaluation of the Initiative's engineering feasibility. These include preliminary plans and design documents, cost estimates, environmental review documentation, project management plans, and risk mitigation strategies.

**Operations and Maintenance Plan:** This section describes the City's plan to operate and maintain the project after construction. Both the Water Component and Water Reuse Component will be operated by City staff.

**Financing Plan:** This section details the City's comprehensive plan for how the Initiative will be financed and how financing will be repaid over the tenor of the requested WIFIA credit assistance. This includes a detailed financial model developed by City staff and a description of the dedicated sources of repayment. This section also identifies the City's proposed terms and conditions for the WIFIA credit assistance.

**Certifications:** In this section the City certifies that it will abide by all applicable laws and regulations, including the National Environmental Policy Act and the Davis-Bacon wage rules.

## FISCAL IMPACT

The WIFIA program requires each applicant to reimburse the federal government for the costs of retaining expert firms, including legal, engineering, and financial advisory services needed to review its application materials, negotiate, and close the loan agreement. These fees can be financed by the WIFIA loan as eligible project costs. Roseville's application fee is \$100,000. The application fee is payable upon submission of the application, without which the application will not be evaluated. The application fee is non-refundable but will be credited to the application processing cost incurred by the federal government. The application fee will be paid from the Water Construction Fund and the Wastewater Rehabilitation Fund.

## ENVIRONMENTAL REVIEW

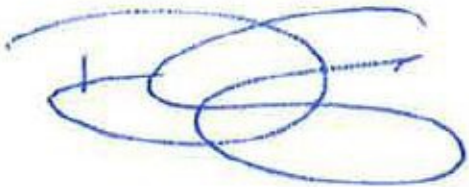
The California Environmental Quality Act (CEQA) only applies to projects which have the potential to cause a significant effect on the environment. Where it can be seen with certainty that there is

no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. (CEQA Guidelines §15061(b)(3)). Approving the WIFIA application has no potential to cause a significant effect on the environment and is therefore not subject to CEQA. The necessary environmental studies are being completed at this time and will be available for City Council consideration before physical infrastructure improvements are initiated.

Respectfully Submitted,

Kenneth Glotzbach, Assistant Environmental Utilities Director, Wastewater Division

Richard Plecker, Environmental Utilities Director



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Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-376

WIFIA Application

RESOLUTION NO. 20-376

APPROVING THE SUBMISSION OF THE WATER INFRASTRUCTURE FINANCE AND  
INNOVATION ACT (WIFIA) APPLICATION

WHEREAS, the WIFIA program, managed by the Office of Water at the United States Environmental Protection Agency (US EPA), accelerates investment in water infrastructure by providing long-term, low-cost supplemental loans for regionally and nationally significant water, wastewater, and recycled water projects; and

WHEREAS, the City of Roseville Environmental Utilities Department submitted a Letter of Interest to apply for a WIFIA loan in July 2019 and was subsequently invited to formally apply by the US EPA in October 2019 marking the successful completion of the first phase of the process; and

WHEREAS, the second phase involves submitting the formal application to the US EPA; and

WHEREAS, staff recommends City Council approval to submit the WIFIA application along with the associated application fee of \$100,000; and

WHEREAS, the City of Roseville's WIFIA application has been reviewed by the City Council; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Roseville that said City of Roseville Water Infrastructure Finance and Innovation Act application is hereby approved and staff is directed to file the application along with the associated application fee of \$100,000.

BE IT FURTHER RESOLVED that the City Manager is authorized to make non-substantive changes upon approval of the City Attorney's office.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 20\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk





## COVER PAGE

This document includes the Water Infrastructure Finance and Innovation (WIFIA) application and supplemental attachments for Sections A, B, and C. Supplemental attachments for Sections D and E are available via hard copy in the Clerk's Office or may be viewed here on the City of Roseville's website at [www.roseville.ca.us/WIFIA](http://www.roseville.ca.us/WIFIA).

The following list outlines the key elements of the City's WIFIA application:

**Sections A/B.** Applicant Information: This section provides basic information on the City and describes the City's organizational history, ownership, structure, and customer base.

**Section C.** Financing Plan: This section details the City's comprehensive plan for how the Initiative will be financed and how financing will be repaid over the tenor of the requested WIFIA credit assistance. This includes a detailed financial model developed by City staff and a description of the dedicated sources of repayment. This section also identifies the City's proposed terms and conditions for the WIFIA credit assistance.

**Section D.** Detailed Project Information: This section provides detailed information on the Water Component and Water Reuse Component of the Initiative, including the location, estimated costs, plans and specifications, and schedule. Additional information is provided in attached technical reports and documents which serve to support EPA's evaluation of the Initiative's engineering feasibility. These include preliminary plans and design documents, cost estimates, environmental review documentation, project management plans, and risk mitigation strategies.

**Section E.** This section describes the City's plan to operate and maintain the project after construction. Both the Water Component and Water Reuse Component will be operated by City staff.

For questions related to the application sections, please contact Marisa Tricas, Utility Government Relations Administrator, at [mtricas@roseville.ca.us](mailto:mtricas@roseville.ca.us) or (916) 225-1762.



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## WIFIA Application Instructions

The U.S. Environmental Protection Agency (EPA) will invite selected applicants to submit an application for Water Infrastructure Finance and Innovation Act (WIFIA) loans. Unsolicited applications will not be considered. Following selection, each selected applicant will be assigned a transaction team led by an underwriter. The transaction team can answer the applicant's questions regarding the application form, its attachments, and the project review, negotiation, and closing processes.

**The applicant should answer all questions in this form. It may indicate if a requirement is not applicable to its project.** Narrative answers can reference source documents by including the name of the document and relevant pages or sections and providing any referenced documents as attachments. The applicant must sign the Certification in the appropriate space and submit a scanned version of the signature pages to EPA. If the applicant anticipates a delay in one or more source documents, it should discuss the situation with its transaction team and indicate the anticipated date of submitting that document in the application. Additionally, the applicant is required to notify and submit to EPA any updated application materials that become available during the review period. EPA may request additional items from applicants on a case-by-case basis.

The applicant may assert a Confidential Business Information (CBI) claim covering part or all of the information submitted to EPA as part of its letter of interest, in a manner consistent with 40 C.F.R. 2.203, 41 Fed. Reg. 36902 (Sept. 1, 1976), by placing on (or attaching to) the information a cover sheet, stamped or typed legend, or other suitable form of notice employing language such as trade secret, proprietary, or company confidential. The applicant should also state whether it desires confidential treatment until a certain date or until the occurrence of a certain event. Information covered by a business confidentiality claim will be disclosed by EPA only to the extent and only by means of the procedures set forth under 40 C.F.R. Part 2, Subpart B. Information that is not accompanied by a business confidentiality claim when it is received by EPA may be made available to the public by EPA without further notice to the applicant. More information about CBI is available in the WIFIA program handbook and frequently asked questions (FAQ) available at <http://www.epa.gov/wifia>.

The applicant must submit a non-refundable application fee. The application fee is \$25,000 for an application for a project serving small communities (population of not more than 25,000 people). For all other project applications, the application fee is \$100,000. For further information regarding the application fee, as well as the credit processing fee which will be charged at loan closing, and any other applicable fees, please see the [WIFIA fee rule](#).

---

### WIFIA Application Submission

The final application submission must include:

1. Completed application form;
2. All attachments requested and referenced in this form; and
3. The application fee.



---

The applicant should reference the supporting document checklist provided on page 4 to ensure all needed information is provided in the application submission. Upon receipt of the application fee and materials, EPA will provide a confirmation email.

**Application Form and Attachment Submittal:** When finished, the application form and attachments must be uploaded to EPA's SharePoint site. To be granted access to the WIFIA SharePoint site, the applicant should email the WIFIA Underwriter assigned to the applicant with the names and emails of all staff that need access.

**Application Fee Submittal:** The applicant should use of Pay.gov to make electronic payments to EPA. In Pay.gov, the applicant can track its payments to EPA and schedule recurring or automatic payments. Although it is not mandatory to register for a user id to access and use Pay.Gov, registration is recommended to have access to all Pay.gov system functionality. To use Pay.gov, follow these instructions:

1. Access the Pay.gov system by going to <https://www.pay.gov> and search for WIFIA or click on the following hyperlink to directly launch the [WIFIA Loan Collection & Fees Form](#).
2. Provide the following information on the payment to ensure proper credit:
  - Remitter's contact phone number
  - Company/Organization Name as it appears on EPA document
  - Complete address, including city, state, zip code
  - Project Name
  - Loan Number: this is EPA WIFIA Loan number, NOT the remitter's number
  - From the "Payment Type" drop down menu select "Application Fee (Fee01)"
  - Other Description: please enter the EPA WIFIA Loan number followed by -FEE01, for example 16123DC-FEE01
3. Follow the remaining on-screen instructions to successfully process the payment to EPA.
4. Send an email to [lvfc-grants@epa.gov](mailto:lvfc-grants@epa.gov) and [wifia\\_portfolio@epa.gov](mailto:wifia_portfolio@epa.gov) informing that a payment has been made.

The application fee may also be paid via FEDWIRE or by check sent to US EPA; Las Vegas Finance Center; 4220 S. Maryland Pkwy, Bldg C, Ste 503; Las Vegas NV 89119. For questions about payments, contact the US EPA Las Vegas Finance Center at (702)798-2485 or [lvfc-grants@epa.gov](mailto:lvfc-grants@epa.gov). For detailed payment instructions, contact the WIFIA program.

---

### **Burden**

The public reporting and recordkeeping burden for this collection of information is estimated to average 200 hours per response. Send comments on the Agency's need for this information, the accuracy of the provided burden estimates, and any suggested methods for minimizing respondent burden, including through the use of automated collection techniques to the Director, Regulatory Support Division, U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW, Washington, D.C. 20460. Include the OMB control number in any correspondence. Do not send the completed form to this address.



**US Environmental Protection Agency**  
**WIFIA Program**  
**Application**

OMB Control No. 2040-0292

EPA Form No. 6100-032

Approval expires XX/XX/XXXX

---

**Warning**

Falsification or misrepresentation of information or failure to file or report information required to be reported may be the basis for denial of financial assistance by the Environmental Protection Agency. Knowing and willful falsification of information required to be submitted and false statements to a Federal Agency may also subject you to criminal prosecution. See, for example, 18 U.S.C. §1001.

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*Additional information is available at <https://epa.gov/wifia> and by contacting [wifia@epa.gov](mailto:wifia@epa.gov).*



## SUPPORTING DOCUMENT CHECKLIST

The applicant should submit its completed application form plus all relevant supporting documents listed in the checklist as attachments.

| Question                                                                                         | Supporting Document(s)*                                                                                                                                                                                         | Included                                |
|--------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|
| <b>Application Fee – Refer to fee instructions on page 2</b>                                     |                                                                                                                                                                                                                 |                                         |
| <b>Section A: Key Applicant and Loan Information* (No attachments)</b>                           |                                                                                                                                                                                                                 |                                         |
| 11. System for Award Management (SAM) registration                                               | <ul style="list-style-type: none"> <li>Screen shot verifying active SAM registration<sup>1*</sup></li> </ul>                                                                                                    | <input checked="" type="checkbox"/>     |
| <b>Section B: Applicant Background</b>                                                           |                                                                                                                                                                                                                 |                                         |
| 5. Capital Improvement Planning Process                                                          | <ul style="list-style-type: none"> <li>Current year and previous 3 years Capital Improvement Plans</li> </ul>                                                                                                   | <input checked="" type="checkbox"/>     |
| 7. Liabilities                                                                                   | <ul style="list-style-type: none"> <li>Liabilities Description</li> </ul>                                                                                                                                       | <input checked="" type="checkbox"/>     |
| 8. System Condition                                                                              | <ul style="list-style-type: none"> <li>System Master Plan</li> </ul>                                                                                                                                            | <input checked="" type="checkbox"/>     |
|                                                                                                  | <ul style="list-style-type: none"> <li>System Condition Assessment</li> </ul>                                                                                                                                   | <input checked="" type="checkbox"/>     |
| 10. Organization Chart                                                                           | <ul style="list-style-type: none"> <li>Organization Chart</li> </ul>                                                                                                                                            | N/A                                     |
| <b>Section C: Financing Plan</b>                                                                 |                                                                                                                                                                                                                 |                                         |
| 4. Preliminary Rating Letter                                                                     | <ul style="list-style-type: none"> <li>Preliminary Rating Letter*</li> </ul>                                                                                                                                    | <input checked="" type="checkbox"/>     |
| 5. Audited Financial Statements                                                                  | <ul style="list-style-type: none"> <li>Audited Financial Statements (3 years)*</li> </ul>                                                                                                                       | <input checked="" type="checkbox"/>     |
| 6. Cash flow pro forma(s)                                                                        | <ul style="list-style-type: none"> <li>Cash flow pro forma*</li> </ul>                                                                                                                                          | <input checked="" type="checkbox"/>     |
| 7. Rate Setting Process                                                                          | <ul style="list-style-type: none"> <li>Rate Studies</li> </ul>                                                                                                                                                  | <input checked="" type="checkbox"/>     |
|                                                                                                  | <ul style="list-style-type: none"> <li>Rate Schedules</li> </ul>                                                                                                                                                | <input checked="" type="checkbox"/>     |
| 8. Flow of Funds                                                                                 | <ul style="list-style-type: none"> <li>Flow of Funds</li> </ul>                                                                                                                                                 | <input checked="" type="checkbox"/>     |
| 9. Loan Agreement                                                                                | <ul style="list-style-type: none"> <li>Master Indenture</li> <li>Bond Ordinance</li> </ul>                                                                                                                      | N/A<br>(Using template WIFIA agreement) |
| <b>Section D: Federal Requirements</b>                                                           |                                                                                                                                                                                                                 |                                         |
| 1. National Environmental Policy Act (NEPA)/ Programmatic Environmental Assessment Questionnaire | <ul style="list-style-type: none"> <li>Environmental Assessment (Draft or Final)</li> </ul>                                                                                                                     | <input type="checkbox"/>                |
|                                                                                                  | <ul style="list-style-type: none"> <li>Environmental Impact Statement (Draft or Final)</li> </ul>                                                                                                               | <input type="checkbox"/>                |
|                                                                                                  | <ul style="list-style-type: none"> <li>Supporting Documentation</li> </ul>                                                                                                                                      | <input type="checkbox"/>                |
|                                                                                                  | <ul style="list-style-type: none"> <li>Programmatic Environmental Assessment Questionnaire</li> </ul>                                                                                                           | <input checked="" type="checkbox"/>     |
| 2. SRF Environmental Review                                                                      | <ul style="list-style-type: none"> <li>SRF Findings</li> </ul>                                                                                                                                                  | N/A                                     |
|                                                                                                  | <ul style="list-style-type: none"> <li>SRF Consultation Documentation</li> </ul>                                                                                                                                |                                         |
| 4. Cross-Cutter Consultation Agencies                                                            | <ul style="list-style-type: none"> <li>State Historic Preservation Officer</li> <li>Fish and Wildlife Service</li> <li>National Marine and Fisheries Service</li> <li>Coastal Zone Management Agency</li> </ul> | N/A                                     |

<sup>1</sup> Applicants must have an active registration in SAM to do business with the Federal Government. Registration information is available at <https://sam.gov/SAM/>.



|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <ul style="list-style-type: none"> <li>Other: <input type="text"/></li> </ul>                                                                               |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| 5. Additional Permits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | <ul style="list-style-type: none"> <li>Notice of Applicability Water Quality Order</li> <li><input type="text"/></li> <li><input type="text"/></li> </ul>   | <input checked="" type="checkbox"/><br><input type="checkbox"/><br><input type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
| 7. Additional Forms                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | <ul style="list-style-type: none"> <li><a href="#">EPA Form 4700-4</a></li> <li><a href="#">EPA Form 6600-06</a></li> <li><a href="#">SF-LLL</a></li> </ul> | Under review with City counsel                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| 8. Uniform Act                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <ul style="list-style-type: none"> <li>Narrative of Compliance</li> </ul>                                                                                   | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <b>Section E: Contract Information (Refer to Supplemental Spreadsheet)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Complete Section E of spreadsheet and indicate which of the following attachments are included:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                             | <input checked="" type="checkbox"/>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| <ul style="list-style-type: none"> <li>Project Map</li> <li>Preliminary Engineering Report</li> <li>Preliminary Design Report</li> <li>Planning Document</li> <li>Executed Contract Documents</li> <li>Procurement Documents</li> <li>Detailed project schedule(s)*</li> <li>Engineer's Cost Estimate associated with detailed project scope*</li> <li>Existing Operation and Maintenance Plan</li> <li>Professional Service Contract or similar evidence of new Operation and Maintenance Plan to be developed</li> <li>Risk Mitigation Plan/Matrix</li> <li>Project Management Plan</li> <li>Evidence of Experience with Similar Projects</li> <li>Draft of Final Bid Specifications with required language</li> <li>Sample of Final Bid Specifications with required language</li> </ul> |                                                                                                                                                             | <input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/><br><input checked="" type="checkbox"/> |
| <b>Certifications</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                             | Pending City Council meeting                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |

\*Required



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## APPLICATION FORM

*Provide the following information in this form. Narrative answers can reference source documents (include the name of the document and relevant pages or sections). Provide any referenced documents as attachments.*

### Section A: Key Applicant and Loan Information

1. Legal name of prospective borrower:

City of Roseville (Roseville)

2. Project name *(for purposes of identification assign a short name to the project)*:

City of Roseville's Water Future Initiative (Initiative)

3. Estimated total eligible project costs (in dollars):

The total eligible projects costs for Loan 1, which includes all portion of the Water Component and the carbon-based advanced treatment (CBAT) pilot study and tertiary treatment filtration system replacement for the Water Reuse Component are \$64,672,177 (also see question 4 below). The costs for the Water Component are \$39,444,477. The costs for the CBAT pilot study and tertiary treatment filtration system replacement are \$25,227,700.

The total estimated projects costs for Loan 2, which includes the full CBAT facility, is estimated to be \$21,700,000 (also see question 4 below).

☒ Check here if total eligible project costs have changed since the letter of interest submittal

4. Requested amount of the WIFIA loan (in dollars):

As discussed with EPA staff, the costs for the Initiative will be covered under two separate WIFIA loans. See **Attachment A.04.A** for a description of Roseville's loan strategy and descriptions of each loan. The loan amount for each WIFIA loan are provided as follows:

Loan 1: \$64,672,177

Loan 2: \$21,700,000

**Attachment(s):**

- A.04.A\_Roseville\_WIFIA\_Loan\_Strategy.pdf



5. Anticipated Closing Date and what is driving date:

Based on a September 2020 Application submission date, the anticipated closing date for Loan 1 is February 1, 2021. There are no City Council dates or contractual date driving this process; however, Roseville would like to move forward on implementing the Initiative as soon as possible.

6. Applicant Contact Information

| Team Member                            | Name and Title                                                        | Email                                                                      | Phone Number   |
|----------------------------------------|-----------------------------------------------------------------------|----------------------------------------------------------------------------|----------------|
| Authorized Signatory                   | Dominick Casey, City Manager                                          | <a href="mailto:dcasey@roseville.ca.us">dcasey@roseville.ca.us</a>         | (916) 774-5288 |
| WIFIA Point of Contact/Project Manager | Marisa Tricas, Utility Government Relations Administrator             | <a href="mailto:mtricas@roseville.ca.us">mtricas@roseville.ca.us</a>       | (916) 225-1762 |
| Financial Advisor                      | Janet Vargas, Environmental Utilities Business Services Administrator | <a href="mailto:jvargas@roseville.ca.us">jvargas@roseville.ca.us</a>       | (916) 774-5557 |
| Bond Counsel                           | Dave Fama, Attorney                                                   | <a href="mailto:dfama@joneshall.com">dfama@joneshall.com</a>               | (415) 391-5780 |
| Environmental Review Contact           | Terri Shirhall, Environmental Coordinator                             | <a href="mailto:tshirhall@roseville.ca.us">tshirhall@roseville.ca.us</a>   | (916) 774-5536 |
| Environmental Utilities Contact        | Rich Plecker, Environmental Utilities Director                        | <a href="mailto:rplecker@roseville.ca.us">rplecker@roseville.ca.us</a>     | (916) 774-5714 |
| Water Reuse Component Contact          | Ken Glotzbach, Assistant Director, Wastewater Division                | <a href="mailto:kglotzbach@roseville.ca.us">kglotzbach@roseville.ca.us</a> | (916) 774-5754 |
| Water Component Contact                | Sean Bigley, Assistant Director, Water Division                       | <a href="mailto:sbigley@roseville.ca.us">sbigley@roseville.ca.us</a>       | (916) 774-5513 |

7. Will the project financed by the WIFIA loan create pre- and post-construction jobs?

☒ Yes ☐ No

If yes, provide approximately how many and explain how this number was calculated.

The Initiative is anticipated to create 123 pre- and post-construction jobs. The Water Component is expected to create 22 pre-construction jobs, 68 construction jobs, and three post-construction jobs. The Water Reuse Component is expected to create eight pre-construction jobs, twenty construction jobs, and two post-construction jobs.





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Approval expires XX/XX/XXXX

8. Approximately how much in savings is expected with the WIFIA loan as compared to a bond issuance?

The WIFIA loan is expected to save Roseville \$13.6 million as compared to a bond issuance. **Attachments A.08.A, A.08.B, and A.08.C** describe how this calculation was made.

**Attachments:**

- A.08.A\_Roseville\_WIFIA\_Savings\_Calc.pdf
- A.08.B\_Roseville\_WIFIA\_Loan\_Cash\_Flows.pdf
- A.08.C\_Roseville\_WIFIA\_Bond\_Cash\_Flow\_Savings.xlsx

9. Employer/taxpayer identification number (EIN/TIN):

Employer Identification Number: 94-6000409

10. Dun and Bradstreet Data Universal Number System (DUNS) number:

Data Universal Number System (DUNS) number: 07-611-9643

11. Is the applicant registered in the System for Award Management (SAM)? If yes, provide

☒ Yes ☐ No

A screen shot of the email confirming Roseville's registration and expiration date is provided below:



EXTERNAL: This email originated from outside of the organization. Do not click on any links or open attachments unless you recognize the sender and know the content is safe.

This email was sent by an automated administrator. Please do not reply to this message.

Dear Jacquie Clarizio, ESTELA ROIG,

The registration for ROSEVILLE, CITY OF / 076119643 / 37020 is now active in the U.S. Government's System for Award Management (SAM). If you did not provide a Commercial and Government Entity (CAGE) Code during the registration process, one has been assigned to you by the Defense Logistics Agency (DLA) CAGE Program.

In order to remain eligible to do business with the Federal government, you must renew your entity's registration in SAM every year. The annual renewal date for the registration is 2021-07-20 14:28:33.408.



## Section B: Applicant Background

1. Describe the authorizing actions required by the applicant in order to enter into a loan agreement with the WIFIA program (e.g., board vote, local vote, ordinance).

Roseville will need to agendize the loan agreement for Roseville City Council approval. City Council meetings are held twice a month, and the process to place the loan agreement in front of City Council takes about 25 days.

2. Disclose any current, threatened, or pending litigation involving the applicant related to permitting, public involvement, environmental irregularities, construction defects, securities fraud, conflict of interest, failure to perform under a State or Federal contract, or other charges which may reflect on the applicant's financial position or ability to complete the project(s).

None

3. List the historical, if available, or projected customer concentration analysis, including a breakdown of customers by class (residential, non-residential, commercial, bulk, etc.), usage, and revenues for the past 12 months and a list of the top ten (10) customers by percentage of revenues.

**Table 1. Roseville Water and Wastewater Utility 2019 Consumption and Revenue**

| Customer Type | Customer Count | Revenue                 | Consumption (Acre-feet) |
|---------------|----------------|-------------------------|-------------------------|
| Residential   | 45,402         | \$ 22,032,171.14        | 15,374.41               |
| Commercial    | 2,234          | \$ 10,710,985.00        | 10,675.64               |
| <b>Total</b>  | <b>47,636</b>  | <b>\$ 32,743,156.14</b> | <b>26,050.04</b>        |

**Table 2. Top 10 Water and Wastewater Customers by Revenue**

| Customer                                   | Revenue               | % of Total Revenue |
|--------------------------------------------|-----------------------|--------------------|
| City of Roseville                          | \$1,647,629.00        | 5%                 |
| TSI Semiconductors LLC                     | \$361,077.23          | 1%                 |
| Roseville City School District             | \$251,903.58          | 1%                 |
| Roseville Joint Union High School District | \$177,584.71          | 1%                 |
| Breit Wave MF SC Owner LLC                 | \$139,153.19          | 0%                 |
| Kaiser Permanente                          | \$165,336.60          | 1%                 |
| Sutter Roseville Medical Center            | \$149,475.37          | 0%                 |
| Rosemeade Residential Holdings LLC         | \$127,811.42          | 0%                 |
| Union Pacific Railroad                     | \$127,705.56          | 0%                 |
| Watt Property Management                   | \$118,054.34          | 0%                 |
| <b>Total</b>                               | <b>\$3,265,731.00</b> | <b>10%</b>         |



4. Provide the average residential customer combined water and sewer rates as a percentage of Median Household Income.

0.6%

5. Describe the applicant's capital improvement planning process. Include a capital improvement plan, other planning documents, and capital budgets produced in the current year and previous three (3) years as attachments.

The Capital Improvement Projects (CIP) section of Roseville's budget documents provide the cost estimates, funding sources, and recommended project schedules for the city's CIPs for the next five years. Accordingly, the documents provide descriptions, justifications, status, costs, classifications, and any other relevant facts for each project. CIPs are composed of expenditures related to the acquisition, expansion, or rehabilitation of an element of the city's infrastructure (physical plant such as streets, water, sewer, public buildings, and parks). Projects are reviewed by the presenting department with input from the Executive Team. The ranking of projects may be rearranged according to the input received and funding availability. Enterprise fund CIPs are proposed by the department that manages the enterprise fund. Often the prioritization of these projects is dictated by the department's operational needs, strategic plan, or specific City Council direction.

**Attachments B.05.A, B.05.B, B.05.C, and B.05.D** provide the CIP's for Roseville's Water Utility for 2020, 2019, 2018, and 2017. **Attachments B.05.E, B.05.F, B.05.G, and B.05.H** provide the CIP's for Roseville's Wastewater Utility for 2020, 2019, 2018, and 2017.

**Attachment(s):**

- B.05.A\_Roseville\_CIP\_Water\_2020.pdf
- B.05.B\_Roseville\_CIP\_Water\_2019.pdf
- B.05.C\_Roseville\_CIP\_Water\_2018.pdf
- B.05.D\_Roseville\_CIP\_Water\_2017.pdf
- B.05.E\_Roseville\_CIP\_Wastewater\_2020.pdf
- B.05.F\_Roseville\_CIP\_Wastewater\_2019.pdf
- B.05.G\_Roseville\_CIP\_Wastewater\_2018.pdf
- B.05.H\_Roseville\_CIP\_Wastewater\_2017.pdf

6. Describe accounts receivables outstanding, including the 12-month trailing average of on-time payment amounts as a percentage of amount billed per period. Include a brief description of the process for collections.

Outstanding accounts receivables (AR) are monitored daily, including payments, timelines, individual accounts, and percentage of amount billed per period. The AR is constantly in flux as Roseville processes customer payments 24 hours a day, 7 days a week. On average, no more than 10% of Roseville's accounts are past due at any given time. Roseville's delinquency timelines also keep the AR in a healthy state. Roseville's delinquency processes for active accounts include notification of the account being past due at 6 days past due, late fee is



charged at 11 days past due, automated customer call at 12 days past due, automated customer call at 17 days past due and services are interrupted due to non-payment at 21 days past due (\$150 threshold for residential accounts and a \$500 threshold for commercial accounts). These delinquency timelines do not allow customers to retain a large past due balance over a long period of time.

7. Describe or provide an attachment with the status of liabilities and funding for pension contributions, defined benefits, and other post-employment benefits.

For information on pensions and other post-employment benefits, please refer to **Attachment C.05.C** for the City of Roseville Environmental Utilities Enterprise Funds - Basic Financial Statements for the year Ended June 30, 2019. These audited financial statements present the Roseville's Environmental Utilities enterprise funds that own and operate the water, wastewater, and solid waste systems for residential, commercial, and industrial customers in the city. Sections of the financial statements with pertinent information on pensions and other post-employment benefits are listed below.

- Notes to the Basic Financial Statements – Note 6 – Pension Plan
- Notes to the Basic Financial Statements – Note 7 – Postemployment Health Care Benefits
- Required Supplementary Information – Schedule of the Environmental Utilities Enterprise Funds' Proportionate Share of the City's Miscellaneous Plan Net Pension Liability
- Required Supplementary Information – Schedule of Pension Contributions
- Required Supplementary Information – Schedule of the Environmental Utilities Enterprise Funds' Proportionate Share of the City's Net (post-employment benefits) OPEB Liability
- Required Supplementary Information – Schedule of OPEB Contributions

**Attachment(s):**

- C.05.C\_2019\_Roseville\_Environmental\_Utilities\_Funds\_FS\_Final.pdf

8. Provide the latest system condition assessment report or master plan available for the water and/or wastewater system this project supports. a report or plan is unavailable, provide a brief description of significant facilities (i.e. pump stations or treatment plants) within the system, including construction and major rehabilitation dates, and any asset management processes utilized for the system.

The latest condition assessment report for Roseville's wastewater system is provided as **Attachment B.08.A** to this application. A description of Roseville's water system is provided in Roseville's Groundwater Strategic Plan, provided as **Attachment B.08.B** to this application.

**Attachment(s):**

- B.08.A\_WWTP\_Condition\_Assessment\_Final\_Report.pdf
- B.08.B\_Groundwater\_Strategic\_Plan\_Final.pdf



- 
9. If applicable, describe community outreach efforts conducted to date and planned for the project(s). Include community meetings, outreach sessions and groups contacted.

Roseville's Environmental Utilities Department has a comprehensive communications and outreach program geared towards informing, engaging, and educating customers on water and wastewater utility issues in Roseville.

As Roseville embarks on next generation water supply reliability projects, the need to proactively communicate to our customers is vitally important so that we can: 1) raise awareness and understanding, 2) address and allay concern, 3) communicate our thoughtful and deliberate process on technical considerations to ensure public health and safety, and 4) gain support with honest, proactive public engagement.

#### **Public engagement**

In 2016, Roseville conducted public opinion polling to uncover customers' perceptions and awareness levels associated with a range of water supply reliability options including using groundwater for water demands as well as looking at other ways of using treated wastewater beyond purple pipe irrigation practices. Generally, the results revealed a strong need to communicate to our customer base to enhance awareness levels, take early action to address potential community concerns, and begin changing the narrative.

Between 2016 and 2018, Roseville increased social media engagement, executed paid media strategies to increase awareness of our expanded water supply portfolio, authored blogs, and introduced open houses and tours at our facilities.

In 2019, Roseville conducted a second wave of public opinion research. What was found is that there is a very high level of support for expanding our groundwater and recycled water programs. The research revealed there was initially very low support for using recycled water as drinking water. However, support increased to a significant majority when information was provided regarding the technology, existing broad, safe usage, and the benefits of the program. Similar findings have been confirmed in other water recycling surveys.

#### **Ongoing and future plans**

Roseville knows from the experiences of other communities that public engagement is critical to explain the need and benefits of groundwater and advanced treatment processes, as well as provide opportunities to see and learn about the specific technology being considered.

With customer perceptions in mind from the 2019 wave of research, Roseville has developed outreach plans for both the groundwater expansion and the water reuse efforts using a multi-layered and varied channel approach to communication. Key strategies and tactics include:

- **Developing a website** using the *Roseville Water Future Initiative* branding, [www.roseville.ca.us/waterfuture](http://www.roseville.ca.us/waterfuture). The purpose of the website is to show Roseville's efforts to plan for and implement water reliability projects both now and into the future. To increase awareness and understanding, the City utilizes website news blogs,



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email engagement, videos, and social media to drive traffic to this water planning page.

- **Ongoing advertising to drive traffic and engagement** to project website. In 2020, Roseville purchased media space on public transportation, streaming, and social and digital media. These advertising pulses will continue to play a crucial role in building awareness and understanding of the City's water supply planning efforts.
- **Conducting tours and open houses** to "peel back the curtain" and familiarize customers with the processes, infrastructure, and staffing needed for groundwater replenishment and extraction, as well as provide an understanding of the wastewater treatment processes, particularly as the City embarks on a pilot to examine ways to expand the use of recycled water. With more to come, Roseville has developed animation to describe key concepts of its groundwater program based on research conducted. Roseville plans to do this for advanced purification as well. Roseville is also developing virtual learning to replace in-person tours both now and into the future.
- **Sharing information via informational meetings** – as part of both the Water and Water Reuse Component, Roseville has conducted and will plan future public meetings to give customers updates on expansion plans and construction milestones, particularly for the siting and development of groundwater wells placed in built communities. One such meeting was already conducted in July 2020 and plans are underway to host more.
- **Making the pilot site of our purification research study at the Pleasant Grove Wastewater Treatment Plant**, a place where constituents can come to learn more. Roseville staff has already started preliminary research by visiting purification projects on the east coast as well as in Monterey, California, at the Pure Water Monterey project, to gather ideas and best practices to market the pilot facility. Roseville is also looking at how to utilize the Utility Exploration Center (UEC) to create high quality, interpretive exhibits. The UEC promotes the value of the water and wastewater utilities by educating students, residents and businesses of Roseville and surrounding communities.
- **Exploring the launch of a water academy** in Roseville geared to community groups, neighborhood leaders, and thought leaders. The idea is to build a public-based advocacy approach to understanding Roseville's water picture. This will develop a group of community members with project familiarity, who can wholeheartedly be supporters and third-party endorsers. The goal would be to include information about the City's water supply strategy, our portfolio, and our future plans, and show them several of our facilities to build understanding and awareness.

*For Project and Corporate Financing Transactions Only:*

10. Provide a project-level organizational chart, include the major parties involved in planning, owning, financing, providing supply and/or offtake, constructing, operating, and/or maintaining



the project(s). Include the major service contractors that have been, or will be, retained for the project (e.g., architects, developers, engineers, attorneys, financial advisors and underwriters, environmental consultants). Please also disclose if there is a financial relationship between the project sponsor and any key project partners.

Based on call on March 18, 2020 with the USEPA, this question was determined as not applicable.

## Section C: Financing Plan

**Note for WIFIA reviewers:** The project costs and sources presented in this section and the financial model (provided as Attachment C.06.A to this application) only include the costs for the Water Component (Aquifer Storage and Recovery [ASR] production and monitoring wells) and the CBAT pilot study and tertiary filtration system replacement portions of the Water Reuse Component. As described in Section A, question 4 of this application and Attachment A.04.A and per discussions with EPA staff, the costs for the full CBAT facility will be covered under a separate WIFIA loan.

1. Provide a sources and uses of funds table for the construction period(s), including the proposed WIFIA assistance. For applicants other than Public Entities, please identify the amount and source(s) of project equity, letters of credit, and other sources of debt as applicable. Note any ineligible project costs. More information about eligible costs is available in the [WIFIA program handbook](#). If other debt is being issued, describe the timing and certainty.

**Note for WIFIA reviewers:** The sources and uses presented in this table only include the costs for the Water Component and the CBAT pilot study and tertiary filtration system replacement portions of the Water Reuse Component (Loan 1). As described in Section A, Questions 3 and 4 and Attachment A.04.A, the costs for the full CBAT facility will be covered under a separate WIFIA loan.

| Sources Category                                    | Estimated Dollar Value |
|-----------------------------------------------------|------------------------|
| 1. WIFIA Loan (cannot exceed 49% of eligible costs) | \$31,689,367           |
| 2. Revenue Bonds                                    | \$32,982,810           |
| 3. SRF Loan                                         | \$ 0                   |
| 4. Borrower Cash                                    | \$ 0                   |
| 5. Previously Incurred Eligible Costs*              | \$ 0                   |
| \$ 0                                                | \$ 0                   |
| <b>TOTAL SOURCES</b>                                | \$64,672,177           |
| Uses Category                                       | Estimated Cost         |
| 1. Construction                                     | \$50,904,477           |
| 2. Design                                           | \$ 6,217,700           |
| 3. Planning                                         | \$ 2,550,000           |
| 4. Land Acquisition                                 | \$ 0                   |
| 5. Other Capital Costs                              | \$ 0                   |





**US Environmental Protection Agency**  
**WIFIA Program**  
**Application**

OMB Control No. 2040-0292  
 EPA Form No. 6100-032  
 Approval expires XX/XX/XXXX

|                                     |                     |
|-------------------------------------|---------------------|
| 6. Contingency                      | \$ 5,000,000        |
| 7. Total Capital Costs              | \$64,672,177        |
| 8. Financing Costs                  | \$ 0                |
| 8. Ineligible Costs (if applicable) | \$ 0                |
| 9. Other (please specify)           | \$ 0                |
| 10. Other (please specify)          | \$ 0                |
| <b>TOTAL USES</b>                   | <b>\$64,672,177</b> |

\*Previously Incurred Eligible Costs are project related costs incurred prior to the WIFIA loan's execution. Please see the WIFIA Program Handbook for additional information on Eligible Costs.

2. Describe the proposed credit terms of the WIFIA assistance. Complete the following table and include additional text below.

| Credit Term              | Proposed                                                                                                                                                                                                                                                                                                                                                                                 |
|--------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Lien Priority            | <input checked="" type="radio"/> Senior Lien<br><br>Subordinate Lien: all project debt<br><input type="radio"/> having the same priority as the WIFIA loan.<br><br>Subordinate Lien: not all project debt has the same priority as the WIFIA loan. A springing lien will be used in a bankruptcy related event.                                                                          |
| Security Pledge          | <input checked="" type="radio"/> Senior Lien<br><br>Subordinate Lien: all project debt<br><input type="radio"/> having the same priority as the WIFIA loan.<br><br>Subordinate Lien: not all project debt has the same priority as the WIFIA loan. A springing lien will be used in a bankruptcy related event.<br><br><hr/> Net revenues of Water Enterprise, parity to 2015 obligation |
| WIFIA Loan Maturity Date | Anticipate interest only payments until FY2027. In FY2027, begin principal and interest payments for 30 years with loan maturity date in FY2056.                                                                                                                                                                                                                                         |





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3. Describe all dedicated revenue sources to be used to repay project financing, the expected rate(s), and the base to which such rates will be applied (e.g. average monthly consumption). Include rate covenant requirements that may affect these revenue sources.

*Dedicated Revenue Sources*

The dedicated revenue sources to be used to repay project financing are an annual pledge of net revenue of Roseville's water enterprise, generally to be defined as Roseville's Water Utility System's gross revenues minus maintenance and operation costs.

Consistent with an existing parity obligation "gross revenues" will generally be defined as all gross income and revenue received or receivable by Roseville from the ownership or operation of the Water Utility System, determined in accordance with Generally Accepted Accounting Principles, including the following:

- all rates, fees and charges (including all connection fees, contributions in aid of construction, and charges and standby water availability charges legally available for debt service) received by Roseville for the Water Service and the other services of the Water Utility System;
- all net proceeds of insurance covering business interruption loss relating to the Water Utility System; and
- all other income and revenue howsoever derived by Roseville from the ownership or operation of the Water Utility System or arising from the Water Utility System (excluding refundable deposits made to establish credit).

"Maintenance and operation costs" will generally be defined as costs paid or incurred by Roseville for maintaining and operating the Water Utility System, determined in accordance with Generally Accepted Accounting Principles, including, but not limited to:

- (a) all reasonable expenses of management and repair and other expenses necessary to maintain and preserve the Water Utility System in good repair and working order,
- (b) all costs of water purchased by Roseville,
- (c) all administrative costs of Roseville that are charged directly or apportioned to the operation of the Water Utility System, such as salaries and wages of employees, overhead, taxes (if any) and insurance premiums, payments into pension funds, and
- (d) all other reasonable and necessary costs of Roseville or charges required to be paid by it to comply with the terms of the documents securing bonds or other obligations, but excluding in all cases
  - (1) depreciation, replacement and obsolescence charges or reserves therefor and amortization of intangibles, premiums and discounts,
  - (2) interest expense,



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(3) amounts paid from funds of Roseville other than Revenues, and

(4) in-lieu transfers to Roseville's general fund.

### *Water Rates*

Current water rates are presented in **Attachment C.03.B**, Page 5, table "Current and Proposed Water Rates", column "Effective 7/1/2020". Water rates are composed of a monthly service charge component, designed to cover a portion of the fixed costs of the Water Utility System, and a monthly per cubic foot quantity charge which increases as consumption reaches various tiers, designed to cover a portion of the variable costs. Nearly all residential customers are metered. Non-metered customers (primarily mobile home units or isolated lots) are charged monthly flat rates for water service based on living units (for mobile home parks) or single-family lot size.

Roseville is currently performing a rate study to set new rates effective July 1, 2021 and July 1, 2022. Proposed rates from this study will be vetted through city senior management, the city's largest customers, and rate payers before being brought to Roseville's City Council for approval. In California, water rate changes are subject to ratepayer majority protest laws which could preclude implementation.

### *Water Connection Fees*

The current water connection fees are presented in **Attachment C.03.C**.

### *Rate Covenant*

The City of Roseville Water Utility Revenue Certificates of Participation, Series 2015, contains a rate covenant. See **Attachment C.03.A**, Page 9 for rate covenant information. The rate covenant would be equally applicable to all parity obligations of the Water System, without priority for the 2015 obligation.

### **Attachment(s):**

- C.03.A\_2015\_Water\_COPs\_Final\_Official\_Statement.pdf
  - C.03.B\_Prop218\_Notice.pdf
  - C.03.C\_Water\_Connection\_Fees.pdf
4. Provide the file name for and submit a new or recent preliminary rating letter from a nationally recognized statistical rating organization opining on the proposed WIFIA financing and describing the applicant's ability to obtain an investment grade rating on the project's senior obligations. An existing rating may be used in place of a preliminary rating letter if it is recent and actively maintained. The applicant should discuss using an existing rating with its transaction team prior to application submittal.



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Recent preliminary rating letters for Roseville are provided as **Attachments C.04.A, C.04.B, and C.04.C** to this application. The file names are provided below. **Attachment(s):**

- C.04.A\_Roseville\_Water\_Moodys\_Rating\_Report.pdf
- C.04.B\_Roseville\_Water\_Moodys\_2020\_Annual\_Comments.pdf
- C.04.C\_Roseville\_Water\_S&P\_Rating\_Report.pdf

5. Provide the year-end audited financial statement for the applicant for past three (3) years, as an attachment, and enter the file names below.

Roseville's year-end audited financial statements are provided as **Attachments C.05.A, C.05.B, and C.05.C** to this application. The file names are provided below.

**Attachment(s):**

- C.05.A\_2017\_Roseville\_Environmental\_Uilities\_Funds\_FS\_Final.pdf
  - C.05.B\_2018\_Roseville\_Environmental\_Uilities\_Funds\_FS-Final.pdf
  - C.05.C\_2019\_Roseville\_Environmental\_Uilities\_Funds\_FS-Final.pdf
6. Attach the financial model for the project(s) and provide its file name below. All amounts should be expressed on a cash (year-of-expenditure) basis and should clearly show assumptions used to arrive at such estimates. A sample pro forma can be found [here](#). The pro forma(s) should include:
- a. Details on projected revenues, operations and maintenance expense, capital expenditures and other key line items. Include rate changes and inflation factors as appropriate;
  - b. Estimated total debt service coverage. Also show senior and junior lien debt coverages separately, if applicable;
  - c. Disbursement and repayment schedule for all debt sharing the WIFIA security, addressing, as applicable, senior- and junior-lien debt. Same lien debt amounts may be aggregated;
  - d. Anticipated disbursement and repayment schedule of the requested WIFIA loan.

Roseville's financial model is provided as **Attachment C.06.A** to this document. The file name is provided below. The project expenditures presented in the financial model only include the costs for the Water Component and the CBAT pilot study and tertiary filtration system replacement portions of the Water Reuse Component. The costs for the full CBAT facility will be covered under a separate WIFIA loan.

**Attachment:**

- C.06.A\_Roseville\_Financial\_Pro\_Forma.xlsx
7. Describe the rate setting process, including regulations governing rate setting, approval requirements, timing for implementation, etc. Include 10 years of rate schedule history for the applicant and specify if recommended rate increases were ever rejected.



Roseville's rate setting process is described in **Attachment C.07.A** "City of Roseville 2019 Water and Wastewater Rate Study" under Section 2 *Introduction*. No recommended rate increases were ever rejected. A summary of the past 10 year's rate schedule history for Roseville's Water Utility is provided in **Table 3** below.

**Table 3. 10-Year Water Utility Rate Increases**

| Fiscal Year | Effective Date | Rate Increase Amount |
|-------------|----------------|----------------------|
| 2012        | 7/1/2011       | 9.50%                |
| 2013        | 7/1/2012       | 8.50%                |
| 2014        | 7/1/2013       | 2.50%                |
| 2015        | 7/1/2014       | 2.50%                |
| 2016        | 7/1/2015       | 8.00%                |
| 2017        | 7/1/2016       | 8.50%                |
| 2018        | 7/1/2017       | 7.00%                |
| 2019        | 7/1/2018       | 7.00%                |
| 2020        | 7/1/2019       | 3.00%                |
| 2021        | 7/1/2020       | 3.00%                |

**Attachment:**

- C.07.A\_Water\_WW\_Utility\_Rate\_Study\_Final\_Report.pdf

8. If available, provide a flow of funds diagram or description and summarize key obligations in the flow of funds.

A flow of funds diagram is provided as **Attachments C.03.A** and **C.08.A** to this application.

**Attachment(s):**

- C.03.A\_2015\_Water\_COPs\_Final\_Official\_Statement.pdf
- C.08.A\_2015\_Water\_COPs\_Flow\_of\_Funds.pdf

9. Describe what document(s) will be the starting point for the WIFIA loan agreement:

- ☒ Standard WIFIA loan agreement.
- ☐ Existing Master Indenture or Bond Ordinance. Included as an attachment is the Existing Master Indenture or Bond Ordinance.



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- ☐ Customized loan agreement for the project(s) and applicant.
- ☐ Other.

Additional notes for loan agreement:

Please see **Attachment C.09.A** for the September 1, 2015 Master Installment Purchase Contract between Roseville and the Roseville Finance Authority, and **Attachment C.09.B** for the related Trust Agreement.

**Attachment(s):**

- C.09.A\_2015\_Master\_Installment\_Purchase\_Contract.pdf
- C.09.B\_2015\_Trust\_Agreement.pdf



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## Section D: Federal Requirements Compliance

1. Describe the status of the environmental review in accordance with the National Environmental Policy Act (NEPA). If applicable, submit the [Programmatic Environmental Assessment \(PEA\) Questionnaire form](#), Environmental Assessment (draft or final), or Environmental Impact Statement (draft or final),

The Initiative includes both a Water Component and Water Reuse Component. Due to the difference in scale and type of work being conducted, Roseville prepared separate Programmatic Environmental Assessment (PEA) Questionnaire checklists for the Water and Water Reuse Components. Both the Water and Water Reuse Components were determined to be consistent with the finding of EPA's EA for the WIFIA Program and no significant impacts are anticipated for NEPA purposes as a result of the proposed actions. The completed PEA Questionnaire checklists are provided as **Attachments D.01.A** and **D.01.B** to this Application.

**Attachment(s):**

- D.01.A\_PEA\_Checklist\_Wastewater\_VAugust5\_DRAFT.docx
- D.01.B\_PEA\_Checklist\_Water\_VAugust5\_DRAFT.docx

2. Describe the status of the SRF environmental review, if applicable. Submit the available SRF Findings and/or SRF consultation documentation.

Roseville is preparing a Supplemental Environmental Impact Report (Supplemental EIR) for the Water Component to comply with CEQA. The Draft Supplemental EIR includes analyses to satisfy SRF environmental review documentation, specifically the General Conformity Rule for the federal Clean Air Act, Executive Order 12898, federal Endangered Species Act, and the National Historic Preservation Act. The Draft SEIR has been made available for public comment for a mandatory 45-day review period extending from August 7 to September 22, 2020. The Notice of Availability and Draft Supplemental EIR is provided as **Attachments D.02.A** and **D.02.B** to this application. The Final SEIR is anticipated to be adopted by Roseville City Council in November-December 2020.

**Attachment(s):**

- D.02.A\_Roseville\_Notice\_of\_Availability\_ASR\_Draft\_SEIR.pdf
- D.02.B\_Roseville\_Draft\_SEIR\_August\_2020.pdf



3. If the environmental review for the project is underway or complete, complete the following table to identify the anticipated impacts and mitigations. Mark a "X" in the appropriate column to identify the impacts anticipated for each resource type and, if applicable, provide a short explanation of the mitigations.

As documented in the PEA checklist for the Water Reuse Component, no potential significant environmental effects are anticipated to result from the proposed action. Therefore, the table below reflects anticipated impacts and mitigation of the Water Component only.

| Resource Type | Water Component Anticipated Impacts |                              |                                | Mitigations                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|---------------|-------------------------------------|------------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|               | No Impact                           | Less Than Significant Impact | Potentially Significant Impact |                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| Water         | X                                   |                              |                                | N/A                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Biological    |                                     | X                            |                                | <ul style="list-style-type: none"><li>- Conduct Pre-Construction Nesting Surveys as Needed Between February 15 and September 15</li><li>- Establish a No-Disturbance Buffer if Migratory Bird Treaty Act-Protected Birds or Raptors are Nesting or Adjacent to Well Sites</li><li>-Install Silt Fencing/Straw Wattles/Erosion Control Measures Following Wetland Verification or Determination from the US Army Corps of Engineers</li></ul> |
| Cultural      |                                     | X                            |                                | <ul style="list-style-type: none"><li>- Compliance with City of Roseville Internal Guidance for Management of Tribal Cultural Resources and Consultation (Tribal Consultation Policies)</li></ul>                                                                                                                                                                                                                                            |
| Noise         |                                     | X                            |                                | <ul style="list-style-type: none"><li>- Use of Sound Attenuation Measures During Well Drilling Operations</li><li>- Prior to Well Drilling =Roseville Will Provide Notice to All Residents Subject to Potential Noise Impacts</li><li>- Reduce Well Pump (Operational) Noise Levels</li></ul>                                                                                                                                                |
| Air Quality   |                                     | X                            |                                | <ul style="list-style-type: none"><li>- Compliance with National Pollutant Discharge Elimination System Best Management Practices</li><li>- Spread Soil Binders on Unpaved Roads/Use Vegetated Mats</li><li>- Minimize Diesel Idling to 10 Minutes Maximum</li><li>- Use Existing Power Sources or Clean Fuel Generators</li></ul>                                                                                                           |

4. Identify any agencies with which cross-cutter consultations have been undertaken for the project and include supporting documentation as attachments. (Check all that apply)

There are no cross-cutter consultations with federal agencies that have been undertaken for the Initiative. The proposed ASR production and monitoring well sites are located in areas previously developed or approved for development, and not adjacent to or within areas known to have state or federally protected resources. The CBAT pilot study and tertiary treatment filtration



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system will be located at Roseville's existing Pleasant Grove Wastewater Treatment Plant. As described in Section D, Question 5 below, Roseville is consulting with state and regional agencies as part of both the Water and Water Reuse Components.

- ☐ State Historic Preservation Officer
- ☐ Fish and Wildlife Service
- ☐ National Marine and Fisheries Service
- ☐ Coastal Zone Management Agency
- ☐ Other





5. Describe the status of any additional permits and approvals that the project(s) may require. Add additional rows as needed. If providing permit information as attachments, list the filenames below.

| Major Permits or Approvals Required                                                                                                                                                                                                                                        | Approving Authority                                                                                  | Status                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Expected Approval Date |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|
| Class V Injection Well Registration                                                                                                                                                                                                                                        | United States Environmental Protection Agency                                                        | To be completed after ASR Wells are installed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | 2021 to 2026           |
| Notice of Applicability Water Quality Order – General waste discharge requirements for ASR projects that inject drinking water into groundwater                                                                                                                            | California State Water Resources Control Board – Central Valley Regional Water Quality Control Board | Completed. Roseville was required to obtain a permit from the CVRWQCB to operate the city's ASR project. On September 19, 2012, the CVRWQCB adopted General Order 2012-0010 establishing general waste discharge requirements for ASR projects that inject drinking water into groundwater. On April 18, 2013, Roseville was granted a NOA (see <b>Attachment D.05.A</b> ) under General Order 2012-0010-DWQ-RB5S-0001 that allows the injection and extraction of water for the Roseville's ASR project. As part of the general order, Monitoring and Reporting Program R5-2013-0803 requirements were provided by the CVRWQCB that describe the specific water quality plan (i.e. in addition to DDW requirements) that Roseville adheres to when operating the ASR project. Data and information collected and analyzed in accordance with the Monitoring and Reporting Program is reported to the CVRWQCB in reports.<br><br>Roseville anticipates receiving an updated NOA in Fall 2020 for the expanded ASR program. | Fall 2020              |
| Drinking Water Source Assessment Plan                                                                                                                                                                                                                                      | California State Water Resources Control Board – Division of Drinking Water                          | Initial screening of potentially contaminates activities near site is complete. Completion of final report will be completed after ASR production wells are installed 2020 through 2025                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | 2020 to 2025           |
| Borehole and Well Construction Permits                                                                                                                                                                                                                                     | Roseville Environmental Utilities Department                                                         | Will be completed within 7 days of applying for each permit as Roseville controls and authorizes its own production well permits                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 2020 to 2025           |
| <b>Key:</b><br>ASR = aquifer storage and recovery<br>CVRWQB = Central Valley Regional Water Quality Control Board<br>DDW = State Water Resources Control Board, Division of Drinking Water<br>NOA = Notice of Applicability<br>SWRCB = State Water Resources Control Board |                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                        |



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**Attachment(s):**

- D.05.A\_CVRWQCB\_NOA.pdf

6. If applicable, specify if a new or relocated discharge, either permanent or temporary, to surface or groundwater is expected or new or relocated water intakes are expected.

The Initiative is not expected to result in a new or relocated discharge to surface or groundwater, or a new or relocated water intake. Therefore, this question is not applicable.

7. Additional forms will need to be completed and submitted prior to closing the WIFIA loan. Check all that are included with the application:

**NOTE:** This section is being evaluated by Roseville city counsel.

- ☒ Civil Rights Pre-Award Compliance Review Report: [EPA Form 4700-4](#)
- ☒ Certification regarding lobbying: [EPA Form 6600-06](#)
- ☐ Disclosure of Lobbying Activities: [SF-LLL](#)  
Not applicable.

**Attachment(s):**

- D.07.A\_Roseville\_EPAForm4700-4.pdf
- D.07.B\_Roseville\_EPAForm6600-06.pdf

8. If the project(s) include acquisition of real property, identify how the project complies or will comply with [Uniform Relocation Assistance and Real Property Acquisition Policies Act](#) (Uniform Act).

All parts of the Initiative will be located on property owned by Roseville. Therefore, no real property will be acquired as part of the Initiative and this question is not applicable.

## Section E: Contract Information

Complete the "Section E: Supplemental Spreadsheet." Instructions for each column are available on the first tab labeled "Instructions – Section E". Provide answers for each project in the application using separate rows designated, "Contract 1, Contract 2, etc."

| Contract Name/Number                                                                                  | Scope of Work                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Design Criteria/Useful Life                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Project Location                                                                                                                                                                                                                                                                                  | Project Delivery Method                                                                                                                                                                                                                              | Names of Technical Reports/Design Documentation                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|-------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Aquifer Storage and Recovery (ASR) Production Well - Campus Oaks                                      | Campus Oaks is one of six proposed locations for the new ASR production wells that would be installed as part of the Water Component of the initiative. For a full description of the ASR wells, please see the description of the Water Component in Section B, Question 4 of Roseville's WIFIA Letter of Interest.                                                                                                                                                                                                                                                                                                                                                       | See Attachment E.C.01 for a description of the design criteria for the ASR groundwater production wells. The estimated life expectancy for ASR production wells of this type is 30 – 40 years (see Attachment                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | The Campus Oaks well will be located at the following latitude/longitude: 38° 47' 30.271"N, -121° 19' 18.199"E. See Attachment E.D01 for a map of the initiative.                                                                                                                                 | Design-Assist (see cell E3 for a description of the Design-Assist method) or the design assist (DA) method, an alternate project delivery method that focuses on a collaborative approach between the participating parties (i.e., Roseville, design | See Attachment B.08.B for the Final Groundwater Strategic Plan (GwSP). At the time the LOI was submitted to EPA early drafts of GwSP efforts were documented within a series of draft technical memorandums (TMs). The Final GwSP is now documented within a single report. See Attachment E.F.03 for the 30% design plans and specifications for the ASR                                                                                                                               |
| ASR Production Well - Pleasant Grove                                                                  | production wells that would be installed as part of the Water Component of the initiative. For a full description of the ASR wells,                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | See response in cell C3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | the following latitude/longitude: 38° 45' 57.279"N, -121° 20' 45.754"E. See                                                                                                                                                                                                                       | description of the Design-Assist method)                                                                                                                                                                                                             | See response in Cell F3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ASR Production Well - Misty Wood                                                                      | Misty Wood is one of six proposed locations for the new ASR production wells that would be installed as part of the Water Component of the initiative. For a full description of the ASR wells, please see the description of the Water Component in Section B, Question 4 of Roseville's WIFIA Letter of Interest.                                                                                                                                                                                                                                                                                                                                                        | See response in cell C3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The Misty Wood well will be located at the following latitude/longitude: 38° 46' 16.939"N, -121° 19' 4.717"E. See Attachment E.D01 for a map of the initiative.                                                                                                                                   | Design-Assist (see cell E3 for a description of the Design-Assist method)                                                                                                                                                                            | See response in Cell F3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ASR Production Well - Maidu                                                                           | Maidu is one of six proposed locations for the new ASR production wells that would be installed as part of the Water Component of the Initiative. For a full description of the ASR wells, please see the description of the Water Component in Section B, Question 4 of Roseville's WIFIA Letter of Interest.                                                                                                                                                                                                                                                                                                                                                             | See response in cell C3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The Maidu well will be located at the following latitude/longitude: 38° 44' 4.671"N, -121° 15' 10.519"E. See Attachment E.D01 for a map of the initiative.                                                                                                                                        | Design-Assist (see cell E3 for a description of the Design-Assist method)                                                                                                                                                                            | See response in Cell F3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ASR Production Well - Galilee                                                                         | Galilee is one of six locations for the new ASR production wells that would be installed as part of the Water Component of the Initiative. For a full description of the ASR wells, please see the description of the Water Component in Section B, Question 4 of Roseville's WIFIA Letter of Interest.                                                                                                                                                                                                                                                                                                                                                                    | See response in cell C3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The Galilee well will be located at the following latitude/longitude: 38° 46' 34.978"N, -121° 18' 22.129"E. See Attachment E.D01 for a map of the initiative.                                                                                                                                     | Design-Assist (see cell E3 for a description of the Design-Assist method)                                                                                                                                                                            | See response in Cell F3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| ASR Production Well - Marlin                                                                          | Marlin is one of six proposed locations for the new ASR production wells that would be installed as part of the Water Component of the Initiative. For a full description of the ASR wells, please see the description of the Water Component in Section B, Question 4 of Roseville's WIFIA Letter of Interest.                                                                                                                                                                                                                                                                                                                                                            | See response in cell C3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | The Marlin well will be located at the following latitude/longitude: 38° 43' 47.056"N, -121° 16' 54.087"E. See Attachment E.D01 for a map of the initiative.                                                                                                                                      | Design-Assist (see cell E4 for a description of the Design-Assist method)                                                                                                                                                                            | See response in Cell F3.                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| Groundwater Monitoring Wells (construction of multiple completion groundwater wells at up to 8 sites) | Multiple completion groundwater monitoring wells will be installed at up to eight (8) location in the city. Six (6) will be installed adjacent to future ASR production wells as described within this section. An additional two (2) will be installed to gather additional hydrogeology data to support the ASR program and may be used to evaluate ASR production wells at these sites. Construction of groundwater monitoring wells through exploratory drilling enables Roseville to evaluate ASR production well site feasibility, limiting risk and costs associated with the uncertainty of unknown suitable of future site geologic and hydrogeologic conditions. | See Attachment E.C.01 for a description of the design criteria for the monitoring wells. The estimated life expectancy for monitoring wells varies largely depending on the material used for the well casing and wells screen. Monitoring wells of poly vinyl chloride (PVC) construction are generally especially long lasting. PVC of the thickness that will be utilized for this project are estimated to last more than 100 years. In addition, unlike groundwater production or ASR production wells, monitoring wells are not under nearly as much physical stress. Monitoring wells are not used for injection and only used very infrequent extraction of relatively small volumes of groundwater for water quality sampling purposes. | The Campus Oaks well will be located at the following latitude/longitude: See Attachment E.D01 for a map of the initiative.                                                                                                                                                                       | Design-Assist (see cell E3 for a description of the Design-Assist method)                                                                                                                                                                            | See Attachment B.08.B for the Final Groundwater Strategic Plan (GwSP). At the time the LOI was submitted to EPA early drafts of GwSP efforts were documented within a series of draft technical memorandums (TMs). The Final GwSP is now documented within a single report. See Attachment E.F.01 for the design plans and specifications for the Groundwater Monitoring Wells. See Attachment E.F.02 for the resolution authorizing the contract for drilling of the monitoring wells. |
| Water Reuse - CBAT Pilot Study                                                                        | Roseville is piloting a 40 gpm Carbon Based Advanced Treatment (CBAT) as an alternative treatment train to Full Advanced Treatment (FAT) for potable reuse. The CBAT train includes ozone (O3), biologically active carbon filters (BAC), membrane filtration (MF), granular active carbon contactors (GAC), and an ultraviolet                                                                                                                                                                                                                                                                                                                                            | See Attachment E.C.04 for a description of the design criteria for the CBAT pilot study. The description was presented at a workshop and documented in                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | The pilot study will be constructed and operated entirely within the existing Pleasant Grove Wastewater Treatment Plant (PGWWTP), which is located on a 110-acre parcel located at 5051 Westmark                                                                                                  | Design-Assist (see cell E4 for a description of the Design-Assist method)                                                                                                                                                                            | See Attachment E.F.04 for the desktop evaluation on CBAT for the pilot facility and Attachment E.F.05 for the design documentation on the CBAT pilot facility. Procurement documents are not typically provided at 30% design and are not within the design contract scope of work                                                                                                                                                                                                      |
| Water Reuse - Tertiary Filters                                                                        | The continuous backwash tertiary filtration system at Pleasant Grove Waster Water Treatment Plant (PGWWTP) has degraded in performance and is at the end of its useful life. The City will replace with deep-bed granular media filters. Construction includes ancillary                                                                                                                                                                                                                                                                                                                                                                                                   | See Attachment E.F.06, Page 3 for a description of the design criteria for the tertiary filtration system provided by the manufacturer. The                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | The tertiary filters will be constructed and operated entirely within the existing PGWWTP, which is located on a 110-acre parcel located at 5051 Westpark Drive, in                                                                                                                               | Design-Assist (see cell E4 for a description of the Design-Assist method)                                                                                                                                                                            | See Attachment E.F.06 for the tertiary filter proposal that is being used as 30% design.                                                                                                                                                                                                                                                                                                                                                                                                |
| Water Reuse - CBAT Facility                                                                           | A proven approach in other states, Roseville believes that the proposed CBAT alternative treatment train represents a new opportunity to adapt, diversify, and establish an alternative regulatory approach for potable reuse in California. The CBAT Demo Pilot is part of a proof-of-concept study, intended to provide data that will help Roseville develop, design, and construct the 3 MGD CBAT facility.                                                                                                                                                                                                                                                            | See Attachment E.F.04 for the desktop evaluation on the full CBAT facility. The evaluation details the possible CBAT facility process trains at full scale. The design criteria for the full CBAT will be established once proof-of-concept study is completed. The useful life for the full CBAT facility is estimated to be                                                                                                                                                                                                                                                                                                                                                                                                                    | The CBAT facility will be constructed and operated entirely within a 1.1-acre parcel, located at the North Zone Pump Station in Quail Glen, east of Woodcreek Oaks Blvd in northwest Roseville, western Placer County, California with approximate coordination of 38°46'50.57"N, 121°19'42.73"W. | Design-Assist (see cell E4 for a description of the Design-Assist method)                                                                                                                                                                            | See Attachment E.F.04 for the desktop evaluation on possible CBAT process trains.                                                                                                                                                                                                                                                                                                                                                                                                       |

[illegible]

| Planning Cost                                                 | Design Cost                                       | Construction Cost                                                                      | Other Cost | Names of Attached Cost Documents                                                                                                                                                                                                                                                                                                                                                                                                   | Previously Incurred Costs | Project Management                                                                                                                                                        | Cost Notes                                                                                                                                                                     |
|---------------------------------------------------------------|---------------------------------------------------|----------------------------------------------------------------------------------------|------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| \$ 425,000.00                                                 | \$ 665,000.00                                     | \$ 5,770,086.00                                                                        | NA         | See <b>Attachment E.R.01</b> for the engineer's cost estimate for the ASR production wells.                                                                                                                                                                                                                                                                                                                                        | Not Included              | See Attachment E.T.01 for a description of the process Roseville will implement for overseeing the cost, schedule, and costs for the ASR                                  |                                                                                                                                                                                |
| \$ 425,000.00                                                 | \$ 665,000.00                                     | \$ 5,221,967.00                                                                        | NA         | See <b>Attachment E.R.01</b> for the engineer's cost estimate for the ASR production wells.                                                                                                                                                                                                                                                                                                                                        | Not Included              | See Attachment E.T.01 for a description of the process Roseville will implement for overseeing the cost, schedule, and costs for the ASR                                  |                                                                                                                                                                                |
| \$ 425,000.00                                                 | \$ 665,000.00                                     | \$ 5,323,423.00                                                                        | NA         | See <b>Attachment E.R.01</b> for the engineer's cost estimate for the ASR production wells.                                                                                                                                                                                                                                                                                                                                        | Not Included              | See Attachment E.T.01 for a description of the process Roseville will implement for overseeing the cost, schedule, and costs for the ASR production and monitoring wells. |                                                                                                                                                                                |
| \$ 425,000.00                                                 | \$ 665,000.00                                     | \$ 5,234,705.00                                                                        | NA         | See <b>Attachment E.R.01</b> for the engineer's cost estimate for the ASR production wells.                                                                                                                                                                                                                                                                                                                                        | Not Included              | See Attachment E.T.01 for a description of the process Roseville will implement for overseeing the cost, schedule, and costs for the ASR production and monitoring wells. |                                                                                                                                                                                |
| \$ 425,000.00                                                 | \$ 665,000.00                                     | \$ 5,578,123.00                                                                        | NA         | See <b>Attachment E.R.02</b> for engineer's costs estimate for the ASR Production Wells.                                                                                                                                                                                                                                                                                                                                           | Not Included              | See Attachment E.T.01 for a description of the process Roseville will implement for overseeing the cost, schedule, and costs for the ASR production and monitoring wells. |                                                                                                                                                                                |
| \$ 425,000.00                                                 | \$ 665,000.00                                     | \$ 5,176,173.00                                                                        | NA         | See <b>Attachment E.R.01</b> for the engineer's cost estimate for the ASR production wells.                                                                                                                                                                                                                                                                                                                                        | Not Included              | See Attachment E.T.01 for a description of the process Roseville will implement for overseeing the cost, schedule, and costs for the ASR production and monitoring wells. |                                                                                                                                                                                |
| \$ 38,362.50                                                  | \$ 38,362.50                                      | \$ 523,275.00                                                                          | NA         | See <b>Attachment E.R.02</b> for the costs for the Groundwater Monitoring Wells. On August 5, 2020, Roseville City Council provided authorization to move forward with hiring a drilling contractor based on the quantities, unit prices, and costs provided in the attached bid. As described in the project schedule, drilling and monitoring well construction at up to 8 locations will proceed fall and early winter of 2020. | Not Included              | See Attachment E.T.01 for a description of the process Roseville will implement for overseeing the cost, schedule, and costs for the ASR production and monitoring wells. |                                                                                                                                                                                |
| Planning costs included in "Other Cost".                      | 1150975                                           | \$8,463,725 for 12-month lease of process skids or \$9,076,725 for purchase of process | 5000000    | See <b>Attachment E.R.03</b> for costs for the CBAT pilot.                                                                                                                                                                                                                                                                                                                                                                         | Included                  | See <b>Attachment E.T.02</b> for the Project Management Plan for the Pilot Study.                                                                                         | Previously incurred costs can be seen in <b>Attachment E.U.01</b> for the Brown and Caldwell Contract for Data Analytics and Pilot Design and <b>Attachment F.U.02</b> for the |
| Work consists of replacement of existing filters, no planning | 1000000                                           | 9000000                                                                                |            | See Attachment <b>E.R.04</b> for the costs for the tertiary treatment filtration system replacement.                                                                                                                                                                                                                                                                                                                               | Not Included              | See Attachment E.T.03 for the Tertiary Filter Management Plan.                                                                                                            | There are no previously incurred costs.                                                                                                                                        |
| Planning costs included in CBAT Pilot Study "Other Costs".    | \$4,158,000 based on 10% of the construction cost | 21700000                                                                               |            | See <b>Attachment E.R.05</b> for the estimated costs for the full CBAT facility.                                                                                                                                                                                                                                                                                                                                                   | Included - \$608,406      | Project management plan will be developed for CBAT Facility once proof-of-concept study is complete.                                                                      | Previously incurred costs can be seen in <b>Attachment E.U.01</b> for the Brown and Caldwell Contract for Data Analytics and Pilot Design.                                     |

| Operations and Maintenance Plan                                                                                                                          | Operations and Maintenance Contracts                                                                                                          | Risk Mitigation Plan                                                 | Agency Reviews                                                                                                                                                                                                                                                                                                                     | Notes                                                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------|
| See <b>Attachment E.V.01</b> for the standard operating procedures for the Roseville's ASR production wells.                                             | The ASR production wells will be operated and maintained by Roseville staff; therefore, this question is not applicable.                      | Risk Mitigation Plan and/or Project Mgmt Plan has been developed     | ASR production wells were responses to Section 07, subsection 2 of this application, Roseville was required to obtain a notice of applicability (NOA) from the Central Valley Regional Water Quality Control Board (CVRWQCB) to operate the city's ASR project. On September 19, 2012, the CVRWQCB adopted General Order 2012-0010 | See <b>Attachment E.X.01</b> for the risk mitigation plan for the ASR production and monitoring wells. |
| operating procedures for the Roseville's ASR production wells.                                                                                           | The ASR production wells will be operated and maintained by Roseville staff; therefore,                                                       | Project Mgmt Plan has been developed                                 | See responses in cell Y3.                                                                                                                                                                                                                                                                                                          | for the risk mitigation plan for the ASR                                                               |
| See <b>Attachment E.V.01</b> for the standard operating procedures for the Roseville's ASR production wells.                                             | The ASR production wells will be operated and maintained by Roseville staff; therefore, this question is not applicable.                      | Risk Mitigation Plan and/or Project Mgmt Plan has been developed     | See responses in cell Y3.                                                                                                                                                                                                                                                                                                          | See <b>Attachment E.X.01</b> for the risk mitigation plan for the ASR production and monitoring wells. |
| See <b>Attachment E.V.01</b> for the standard operating procedures for the Roseville's ASR production wells.                                             | The ASR production wells will be operated and maintained by Roseville staff; therefore, this question is not applicable.                      | Risk Mitigation Plan and/or Project Mgmt Plan has been developed     | See responses in cell Y3.                                                                                                                                                                                                                                                                                                          | See <b>Attachment E.X.01</b> for the risk mitigation plan for the ASR production and monitoring wells. |
| See <b>Attachment E.V.01</b> for the standard operating procedures for the Roseville's ASR production wells.                                             | The ASR production wells will be operated and maintained by Roseville staff; therefore, this question is not applicable.                      | Risk Mitigation Plan and/or Project Mgmt Plan has been developed     | See responses in cell Y3.                                                                                                                                                                                                                                                                                                          | See <b>Attachment E.X.01</b> for the risk mitigation plan for the ASR production and monitoring wells. |
| See <b>Attachment E.V.01</b> for the standard operating procedures for the Roseville's ASR production wells.                                             | The ASR production wells will be operated and maintained by Roseville staff; therefore, this question is not applicable.                      | Risk Mitigation Plan and/or Project Mgmt Plan has been developed     | See responses in cell Y3.                                                                                                                                                                                                                                                                                                          | See <b>Attachment E.X.01</b> for the risk mitigation plan for the ASR production and monitoring wells. |
| See <b>Attachment E.V.01</b> for the standard operating procedures for the Roseville's ASR production wells.                                             | The ASR production wells will be operated and maintained by Roseville staff; therefore, this question is not applicable.                      | Risk Mitigation Plan and/or Project Mgmt Plan has been developed     | See responses in cell Y3.                                                                                                                                                                                                                                                                                                          | See <b>Attachment E.X.01</b> for the risk mitigation plan for the ASR production and monitoring wells. |
| See <b>Attachment E.V.01</b> for the standard operating procedures for the Roseville's ASR production wells.                                             | The ASR production wells will be operated and maintained by Roseville staff; therefore, this question is not applicable.                      | Risk Mitigation Plan and/or Project Mgmt Plan has been developed     | See responses in cell Y3.                                                                                                                                                                                                                                                                                                          | See <b>Attachment E.X.01</b> for the risk mitigation plan for the ASR production and monitoring wells. |
| See <b>Attachment E.V.01</b> for the standard operating procedures for the Roseville's ASR monitoring wells.                                             | The monitoring wells will be operated and maintained by Roseville staff; therefore, this question is not applicable.                          | Risk Mitigation Plan and/or Project Mgmt Plan has been developed     | See responses in cell Y3.                                                                                                                                                                                                                                                                                                          | See <b>Attachment E.X.01</b> for the risk mitigation plan for the ASR production and monitoring wells. |
| See <b>Attachment E.V.02</b> for an O&M Plan based on vendor supplied O&M plans similar to the process skids that are being designed for the Demo Pilot. | The Demo Pilot will be operated and maintained by Roseville staff; therefore, this question is not applicable.                                | Risk Mitigation Plan and/or Project Mgmt Plan has been developed     | California State Water Resources Control Board, Division of                                                                                                                                                                                                                                                                        | See <b>Attachment E.X.02</b> for the Demo Pilot Risk Register.                                         |
| See <b>Attachment E.V.03</b> for an O&M Plan based on the existing tertiary filters which will be similar to the new tertiary filters.                   | The tertiary treatment filtration system will be operated and maintained by Roseville staff; therefore, this question is not applicable.      | Risk Mitigation Plan and/or Project Mgmt Plan has been developed     | None                                                                                                                                                                                                                                                                                                                               | See <b>Attachment E.X.03</b> for the tertiary treatment filtration system Risk Register.               |
| An O&M Plan will be developed for the CBAT Facility once proof-of-concept study is complete.                                                             | It is anticipated that the full CBAT facility will be operated and maintained by Roseville staff; therefore, this question is not applicable. | Risk Mitigation Plan and/or Project Mgmt Plan has not been developed | DDW, Central Valley Regional Water Quality Control Board (RWQCB), North Coast Air Quality Management District (NCUAQMD), California Division of Occupational Safety and Health (CAL/OSHA), Roseville Fire Department, and Pacific Gas and Electric (PG&E)                                                                          | A risk register will be developed for CBAT Facility once proof-of-concept study is complete.           |

| Federal Requirements | Federal Requirement Compliance Awareness                                                                              |
|----------------------|-----------------------------------------------------------------------------------------------------------------------|
|                      | Yes. The applicant has previously incorporated federal requirement language in bid specifications for other projects. |
|                      | Yes. the applicant has previously incorporated federal requirement language in                                        |
|                      | Yes. the applicant has previously incorporated federal requirement language in                                        |
|                      | Yes. the applicant has previously incorporated federal requirement language in                                        |
|                      | Yes. the applicant has previously incorporated federal requirement language in                                        |
|                      | Yes. the applicant has previously incorporated federal requirement language in                                        |
|                      | Yes. the applicant has previously incorporated federal requirement language in                                        |
|                      | Yes. the applicant has previously incorporated federal requirement language in                                        |
|                      | Yes. the applicant has previously incorporated federal requirement language in                                        |
|                      | Yes. the applicant has previously incorporated federal requirement language in bid specifications for other projects  |
|                      | Yes. the applicant has previously incorporated federal requirement language in bid specifications for other projects  |
|                      | Yes. the applicant has previously incorporated federal requirement language in bid specifications for other projects  |



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## CERTIFICATIONS

1. *National Environmental Policy Act:* The applicant acknowledges that any project receiving credit assistance under this program must comply with all provisions of the National Environmental Policy Act of 1969 (42 U.S.C. 4321 et seq.)
2. *American Iron and Steel:* The applicant acknowledges that any project receiving credit assistance under this program for the construction, alteration, maintenance, or repair of a project may only use iron and steel products produced in the United States and must comply with all applicable guidance.
3. *Prevailing Wages:* The applicant acknowledges that all laborers and mechanics employed by contractors or subcontractors on projects receiving credit assistance under this program shall be paid wages at rates not less than those prevailing for the same type of work on similar construction in the immediate locality, as determined by the Secretary of Labor, in accordance with sections 3141-3144, 3146, and 3147 of Title 40 (Davis-Bacon wage rules).
4. *Credit Ratings:* This applicant has received a preliminary rating opinion letter(s) on the project's senior debt instrument, from one or more rating agencies. These letters or ratings are attached.
5. *Credit Processing Fees:* The undersigned certifies that it will reimburse EPA for its costs incurred in negotiating the credit agreement, irrespective of whether the credit agreement is executed.
6. *Lobbying:* Section 1352 of Title 31, United States Code provides that none of the funds appropriated by any Act of Congress may be expended by a recipient of a contract, grant, loan, or cooperative agreement to pay any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, or an employee of a Member of Congress in connection with the award or making of a Federal contract, grant, loan, or cooperative agreement or the modification thereof. EPA interprets this provision to include the use of appropriated funds to influence or attempt to influence the selection for assistance under the WIFIA program.

WIFIA applicants must file a declaration: (a) with the submission of an application for WIFIA credit assistance; (b) upon receipt of WIFIA credit assistance (unless the information contained in the declaration accompanying the WIFIA application has not materially changed); and (c) at the end of each calendar quarter in which there occurs any event that materially affects the accuracy of the information contained in any declaration previously filed in connection with the WIFIA credit assistance.

The undersigned certifies, to the best of his or her knowledge and belief, that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of an agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan, or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement,





**US Environmental Protection Agency**  
**WIFIA Program**  
**Application**

OMB Control No. 2040-0292  
EPA Form No. 6100-032  
Approval expires XX/XX/XXXX

the undersigned shall complete and submit Standard Form-LLL, "Disclosure Form to Report Lobbying," in accordance with its instructions.

3. The undersigned shall require that the language of this certification be included in the award documents for all subawards at all tiers (including subcontracts, subgrants, and contracts under grants, loans, and cooperative agreements) and that all subrecipients shall certify and disclose accordingly.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by section 1352, title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000 and not more than \$100,000 for each such failure.

7. *Debarment:* The undersigned further certifies that it is not currently: 1) debarred or suspended from participating in any Federal programs; 2) formally proposed for debarment, with a final determination still pending; or 3) indicted, convicted, or had a civil judgment rendered against it for any of the offenses listed in the Regulations Governing Debarment and Suspension (Governmentwide Nonprocurement Debarment and Suspension Regulations: 2 C.F.R. Part 180 and Part 1532).
8. *Default/Delinquency:* The undersigned further certifies that neither it nor any of its subsidiaries or affiliates are currently in default or delinquent on any debt or loans provided or guaranteed by the Federal Government.
9. *Other Federal Requirements:* The applicant acknowledges that it must comply with all other federal statutes and regulations, as applicable. A non-exhaustive list of federal cross-cutting statutes and regulations can be found at: <https://www.epa.gov/wifia/wifia-resources#complianceanchor>.
10. *Signature:* By submitting this application, the undersigned certifies that the facts stated and the certifications and representations made in this application are true, to the best of the applicant's knowledge and belief after due inquiry, and that the applicant has not omitted any material facts. The undersigned is an authorized representative of the applicant.

Name:  
Title:  
Organization:  
Street Address:  
City/State/Zip:  
Phone:  
E-mail:

Signature: \_\_See attached\_\_

Date Signed: \_\_\_\_See Attachment

**Attachment (s):**

- E.01.A.Certifications\_FINAL.pdf



**US Environmental Protection Agency**  
**WIFIA Program**  
**Application**

OMB Control No. 2040-0292  
EPA Form No. 6100-032  
Approval expires XX/XX/XXXX

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## KEY DEFINITIONS

- (a) *Administrator* means the Administrator of EPA.
- (b) *Applicant* means the entity submitting the application for WIFIA credit assistance. Only prospective borrowers that are invited to submit a WIFIA application become applicants. The following entities are eligible to receive credit assistance: a corporation, a partnership, a joint venture, a trust, a Federal, State, or local government, a tribal government or consortium of tribal governments, and a State infrastructure financing authority.
- (c) *Community water system* has the meaning given the term in section 1401 of the Safe Drinking Water Act (42 U.S.C. 300f).
- (d) *Credit assistance* means a secured loan or loan guarantee under WIFIA.
- (e) *Credit agreement* means a contractual agreement between EPA and the project sponsor (and the lender, if applicable) that formalizes the terms and conditions established in the term sheet (or conditional term sheet) and authorizes the execution of a secured loan or loan guarantee.
- (f) *Eligible project costs* mean amounts, substantially all of which are paid by, or for the account of, a applicant in connection with a project, including the cost of:
  - (1) Development-phase activities, including planning, feasibility analysis (including any related analysis necessary to carry out an eligible project), revenue forecasting, environmental review, permitting, preliminary engineering and design work, and other preconstruction activities;
  - (2) Construction, reconstruction, rehabilitation, and replacement activities;
  - (3) The acquisition of real property or an interest in real property (including water rights, land relating to the project, and improvements to land), environmental mitigation (including acquisitions pursuant to section 33 U.S.C. §3905(7)), construction contingencies, and acquisition of equipment; and
  - (4) Capitalized interest necessary to meet market requirements, reasonably required reserve funds, capital issuance expenses, and other carrying costs during construction.
- (g) *Investment-grade rating* means a rating category of BBB minus, Baa3, bbb minus, BBB (low), or higher assigned by a nationally recognized statistical rating organization (NRSRO) to project obligations offered into the capital markets.
- (h) *Iron and steel products* means the following products made primarily of iron or steel: lined or unlined pipes and fittings, manhole covers and other municipal castings, hydrants, tanks, flanges, pipe clamps and restraints, valves, structural steel, reinforced precast concrete, and construction materials.
- (i) *Nationally Recognized Statistical Rating Organization (NRSRO)* means a credit rating agency identified and registered by the Office of Credit Ratings in the Securities and Exchange Commission.



(j) *Project* means:

- (1) 1 or more activities that are [eligible](#) for assistance under section 603(c) of the Federal Water Pollution Control Act (33 U.S.C. 1383(c)), notwithstanding the public ownership requirement under paragraph (1) of that subsection.
- (2) 1 or more [activities](#) described in section 1452(a)(2) of the Safe Drinking Water Act (42 U.S.C. 300j-12(a)(2)).
- (3) A project for enhanced energy efficiency in the operation of a public water system or a publicly owned treatment works.
- (4) A project for repair, rehabilitation, or replacement of a treatment works, community water system, or aging water distribution or waste collection facility (including a facility that serves a population or community of an Indian reservation).
- (5) A brackish or sea water desalination project including chloride control.
- (6) A managed aquifer recharge project, a water recycling project, or projects to provide alternative water supplies to reduce aquifer depletion.
- (7) Acquisition of real property or an interest in real property—
  - (A) If the acquisition is integral to a project described in paragraphs (1) through (5); or
  - (B) Pursuant to an existing plan that, in the judgment of the Administrator or the Secretary, as applicable, would mitigate the environmental impacts of water resources infrastructure projects otherwise eligible for assistance under this section.
- (8) A project to prevent, reduce, or mitigate the effects of drought, including projects that enhance the resilience of drought-stricken watersheds.
- (9) A combination of projects, each of which is eligible under paragraph (1) or (2), for which a State infrastructure financing authority submits to the Administrator a single application.
- (10) A combination of projects secured by a common security pledge, each of which is eligible under paragraph (1), (2), (3), (4), (5), (6), or (7), for which an eligible entity, or a combination of eligible entities, submits a single application.

(k) *Public entity* means:

- (1) a Federal, State, or local Governmental entity, agency, or instrumentality; or
- (2) a Tribal Government or consortium of Tribal Governments.

(l) *Publicly sponsored* means the applicant can demonstrate, to the satisfaction of the Administrator that it has consulted with the affected State, local or Tribal Government in which the project is located, or is otherwise affected by the project, and that such government supports the proposed project. Support can be shown by a certified letter signed by the approving municipal department or similar agency, mayor or other similar designated authority, local ordinance, or any other means by which local government approval can be evidenced.

(m) *Small Community* means a community with a population of no more than 25,000 individuals.

(n) *State* means any one of the fifty states, the District of Columbia, Puerto Rico, or any other territory or possession of the United States.



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- (o) *State infrastructure financing authority* means the State entity established or designated by the Governor of a State to receive a capitalization grant provided by, or otherwise carry out the requirements of, title VI of the Federal Water Pollution Control Act (33 U.S.C. 1381 et. seq.) or section 1452 of the Safe Drinking Water Act (42 U.S.C. 300j-12).
- (p) *Term sheet* means a contractual agreement between EPA and the project sponsor (and the lender, if applicable) that sets forth the key business terms and conditions of a Federal credit instrument. Execution of this document represents a legal obligation of budget authority.
- (q) *Treatment works* has the meaning given the term in section 212 of the Federal Water Pollution Control Act (33 U.S.C. 1292).
- (r) *WIFIA* means the Water Infrastructure Finance and Innovation Act of 2014, Pub. L. 113-121, 128 Stat, 1332, codified at 33 U.S.C. §§ 3901-3914.

City of Roseville's Water Future Initiative WIFIA Application

## Attachments – Section A

## USEPA Water Infrastructure Finance and Innovation Act Program City of Roseville Water Future Initiative: Water Reuse Component

### *Two Part Loan Strategy*

*This document has been amended, by EPA suggestion to address the timeline of the CBAT facility and the proposed loan strategy for Roseville's Water Future Initiative to be closed in two parts.*

### **Loan Strategy Part 1**

#### **City of Roseville Water Future Initiative**

The City of Roseville (Roseville) is the largest city in Placer County, California and is home to 135,000 people. By 2050, Roseville's population is projected to grow to nearly 300,000 residents. In the face of water supply challenges related to changing weather conditions and increasingly stringent California regulations, Roseville's **Water Future Initiative** is a proactive, comprehensive planning effort to diversify water supplies and maintain a high level of reliability for years to come.

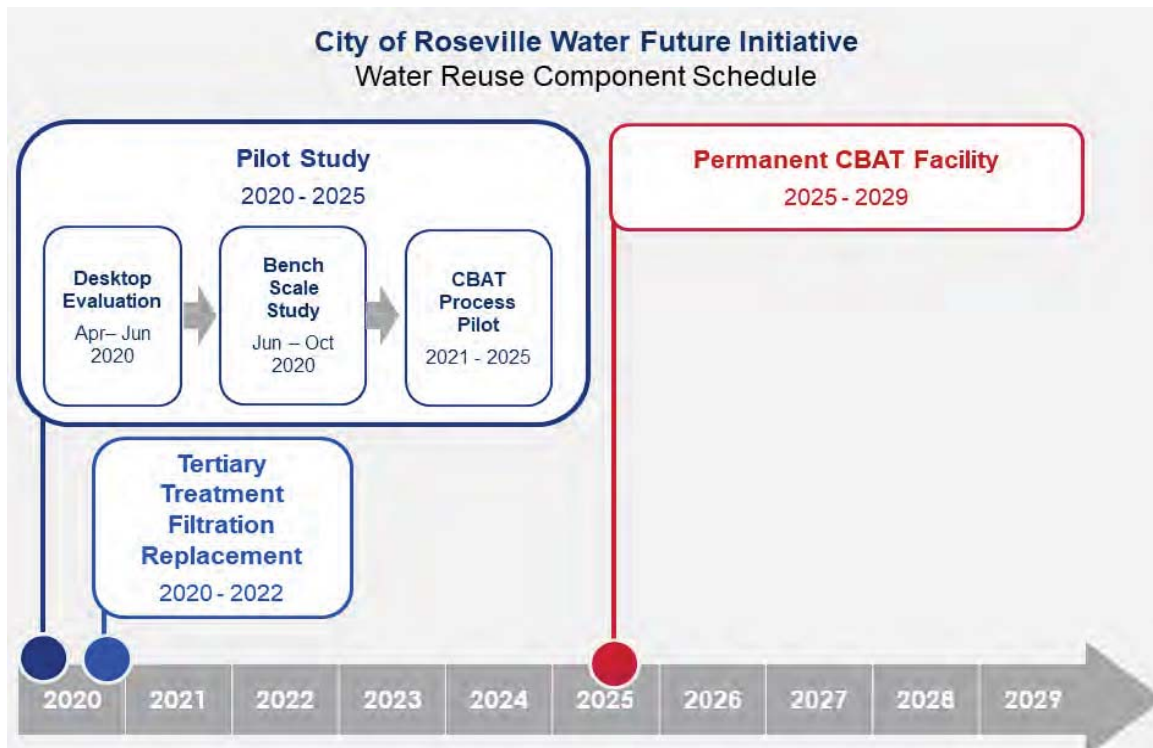
As submitted to the WIFIA Program, the Water Future Initiative includes both a Water Component and a Water Reuse Component. The **Water Component** expands Roseville's existing Aquifer Storage and Recover (ASR) Program by six new well sites. These wells will use treated surface water to recharge the groundwater basin, where it will be stored and then recovered for Roseville's municipal supply. Each ASR production well includes a well pump, injection flow control valve, chemical metering system, wet utility pipelines, and ancillary facilities in a concrete masonry building. The **Water Reuse Component**, further described below, includes a new 12 million gallon per day (MGD) tertiary filtration system, a pilot study of a **carbon-based advanced treatment (CBAT)** train to demonstrate the technology, and a permanent 3 MGD CBAT facility based on the pilot-scale system. Both the Water and Water Reuse Components help fulfill the goal of the Water Future Initiative and directly contribute to Roseville's long-term water strategy, which serves its community through 2050.

### **Loan Strategy Part 2**

#### **Water Reuse Component – Description and Schedule**

Currently, California requires the use of full advanced treatment (FAT) with reverse osmosis (RO) as the treatment train for potable reuse applications. Waste brine disposal required with RO makes it infeasible for Roseville's inland location. Roseville is piloting CBAT as an alternative to RO—a proven approach in other states which has proven to be as safe and

protective to public health. The CBAT train includes ozone, biologically active carbon, granular active carbon, membrane filtration, and an ultraviolet/advanced oxidation process. Roseville believes that the proposed CBAT train represents an opportunity to establish an alternative treatment technology for potable reuse in California that could be used by other inland communities. Completion of the Water Reuse Component will be developed in three phases, designed to demonstrate CBAT for future potable reuse as part of a diversified water supply portfolio. The schedule to complete these phases is shown below.



The first phase is the **pilot study**, which includes a desktop evaluation, bench scale study, and CBAT process pilot. Roseville has initiated the desktop evaluation which includes treatment process modeling to identify feasible and cost-effective options for total organic carbon removal. Once the desktop evaluation is complete, Roseville will conduct a bench scale study to test the CBAT process. The results of the desktop evaluation and bench scale study will inform design and construction of the CBAT process pilot which will be located at Roseville's Pleasant Grove Wastewater Treatment Plant.

Through this pilot study process, Roseville will confirm that the CBAT alternative advanced treatment technologies will purify recycled water and bring it to safe, California-approved drinking water quality standards. Roseville will also work directly with California regulatory agencies during the pilot study to secure their approval which will further assure that health and safety standards are met. Only after completing these steps will Roseville be in position to propose a full-scale advanced water purification project. The outcomes of the pilot study will help Roseville develop, design, and construct the **permanent, 3 MGD CBAT facility**.

In addition, operation of the Water Reuse Component requires **replacement of the tertiary filtration system** at the Pleasant Grove Wastewater Treatment Plant. The continuous backwash tertiary filtration system at the plant is aging and doesn't provide the necessary performance that would support CBAT. It will be replaced with deep-bed granular media filters that will help Roseville continue to be in compliance with California's Title 22 recycled water requirements and produce the high-quality disinfected tertiary effluent needed as the water source for the pilot and CBAT facilities.



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## Water Reuse Component – Loan Strategy

The estimated costs for the Water Reuse Component are provided below in **Table 1**. Roseville's intent is to have two WIFIA loans but one application. Two individual loans will allow Roseville to conduct CBAT pilot testing and confirm the process operates as expected prior to committing to the cost of the full scale CBAT process. This loan structure will also provide information necessary for Roseville to complete CEQA and NEPA environmental studies necessary for the permanent CBAT facility. Please note that these costs are based on current best-available information for the type of technology Roseville believes will be used in the pilot study and permanent CBAT facility. Changes to the pilot study and CBAT facility design may result in revisions to total project costs.

Since development and submission of the LOI, Roseville has updated the costs for the CBAT process pilot. Roseville has obtained quotes for the equipment that will be used in the process pilot based on the preliminary results from the desktop evaluation and benchtop study. These quotes are within the expected cost range. Using these quotes, Roseville then updated the estimated project costs using construction and estimating escalators based on a potable reuse pilot facility recently bid in another city in California. This resulted in a significant cost increase from what was originally identified in the LOI mainly due to cost escalators for installation, electrical, and instrumentation, which were each about 80% of the total equipment costs for the other potable reuse pilot facility.

**Table 1. Estimated Costs of Water Reuse Component**

|                                                    | FY 2020            | FY 2021            | FY 2022             | FY 2023          | FY 2024          | FY 2025 - 2029      | TOTAL COSTS         |
|----------------------------------------------------|--------------------|--------------------|---------------------|------------------|------------------|---------------------|---------------------|
| Pilot Study (Loan 1)                               | \$2,102,700        | \$3,883,333        | \$6,541,667         | \$900,000        | \$900,000        | \$900,000           | <b>\$15,227,700</b> |
| Tertiary Treatment Filtration Replacement (Loan 1) | \$263,462          | \$3,575,000        | \$6,161,538         | -                | -                | -                   | <b>\$10,000,000</b> |
| Permanent CBAT Facility (Loan 2)                   | -                  | -                  | -                   | -                | -                | \$21,700,000        | <b>\$21,700,000</b> |
| <b>TOTAL</b>                                       | <b>\$2,366,162</b> | <b>\$7,458,333</b> | <b>\$12,703,205</b> | <b>\$900,000</b> | <b>\$900,000</b> | <b>\$22,600,000</b> | <b>\$46,927,700</b> |

## Summary

Parts of the Water Reuse Component (pilot study and tertiary treatment filtration replacement) are anticipated to proceed on the schedule identified in the LOI. The desktop evaluation and bench scale study are currently underway, and the design work for the tertiary treatment filtration replacement will begin in Fall 2020. Roseville will engage California regulators later this year. Roseville anticipates that all parts of the pilot study will be completed by 2025 and the tertiary treatment filtration replacement will be completed by Fall 2022. [Note that the Water Component, not discussed in detail herein, is also anticipated to proceed on schedule.]

At the time of LOI development and submittal, Roseville anticipated that design of the permanent CBAT facility would be initiated within five years of execution of the WIFIA loan.

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Since that time, Roseville has continued to develop the Water Reuse Component, and both the technology and approval processes have continued to evolve. Design of the permanent CBAT facility is now anticipated to begin in 2025 to accommodate a more thorough pilot demonstration of the CBAT technology, and Roseville estimates that CBAT facility construction will be completed in 2029.

In addition, Roseville feels that completing the state and federal (e.g., NEPA and CEQA) environmental compliance activities for the permanent CBAT facility now would be premature as documentation could be outdated by the time the permanent facility moves toward construction. The technology, associated processes/protocols, and/or design could also be refined based on information from the pilot study.

Therefore, Roseville requests to proceed with this WIFIA application leading to two separate loans. The first loan will fund the Water Future Initiative's components including the entire Water Component, and portions of the Water Reuse Component including the CBAT pilot study and tertiary treatment filtration replacement. The second loan will fund the Water Reuse Component's permanent CBAT facility contingent upon the successful outcome of the CBAT pilot study. The Water and Water Reuse Components should move forward together because they both contribute directly to the Water Future Initiative by augmenting available groundwater supplies to prepare for recurring and worsening drought conditions resulting from climate change.

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## SOURCES AND USES OF FUNDS

City of Roseville, CA  
Water Utility Revenue Bonds, Series 2020  
\$32mm Project Fund For Debt Service Comparison to WIFIA Loan  
Assumes Aa2/AA- Tax-Exempt Rates as of August 4, 2020  
\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\*

Dated Date 12/01/2020  
Delivery Date 12/01/2020

### Sources:

|                       |                      |
|-----------------------|----------------------|
| <b>Bond Proceeds:</b> |                      |
| Par Amount            | 26,550,000.00        |
| Premium               | 7,517,813.55         |
|                       | <b>34,067,813.55</b> |

### Uses:

|                                |                      |
|--------------------------------|----------------------|
| <b>Project Fund Deposits:</b>  |                      |
| Project Fund                   | 32,000,000.00        |
| <b>Other Fund Deposits:</b>    |                      |
| Debt Service Reserve Fund      | 1,711,250.00         |
| <b>Delivery Date Expenses:</b> |                      |
| Cost of Issuance               | 250,363.55           |
| Underwriter's Discount         | 106,200.00           |
|                                | <b>356,563.55</b>    |
|                                | <b>34,067,813.55</b> |

## BOND SUMMARY STATISTICS

**City of Roseville, CA**  
**Water Utility Revenue Bonds, Series 2020**  
**\$32mm Project Fund For Debt Service Comparison to WIFIA Loan**  
**Assumes Aa2/AA- Tax-Exempt Rates as of August 4, 2020**  
**\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\***

|                                   |                |
|-----------------------------------|----------------|
| Dated Date                        | 12/01/2020     |
| Delivery Date                     | 12/01/2020     |
| First Coupon                      | 06/01/2021     |
| Last Maturity                     | 12/01/2050     |
| Arbitrage Yield                   | 1.668749%      |
| True Interest Cost (TIC)          | 2.990088%      |
| Net Interest Cost (NIC)           | 3.539555%      |
| All-In TIC                        | 3.047080%      |
| Average Coupon                    | 5.000000%      |
| Average Life (years)              | 19.115         |
| Weighted Average Maturity (years) | 19.168         |
| Duration of Issue (years)         | 13.200         |
| Par Amount                        | 26,550,000.00  |
| Bond Proceeds                     | 34,067,813.55  |
| Total Interest                    | 25,374,500.00  |
| Net Interest                      | 17,962,886.45  |
| Bond Years from Dated Date        | 507,490,000.00 |
| Bond Years from Delivery Date     | 507,490,000.00 |
| Total Debt Service                | 51,924,500.00  |
| Maximum Annual Debt Service       | 1,711,250.00   |
| Average Annual Debt Service       | 1,730,816.67   |
| Underwriter's Fees (per \$1000)   |                |
| Average Takedown                  |                |
| Other Fee                         | 4.000000       |
| Total Underwriter's Discount      | 4.000000       |
| Bid Price                         | 127.915682     |

| Bond Component     | Par Value     | Price   | Average Coupon | Average Life | Average Maturity Date | PV of 1 bp change |
|--------------------|---------------|---------|----------------|--------------|-----------------------|-------------------|
| Serial Bonds       | 13,100,000.00 | 129.149 | 5.000%         | 12.137       | 01/20/2033            | 12,143.10         |
| Term Bond due 2045 | 5,890,000.00  | 127.797 | 5.000%         | 23.100       | 01/07/2044            | 6,125.60          |
| Term Bond due 2050 | 7,560,000.00  | 127.276 | 5.000%         | 28.099       | 01/06/2049            | 7,862.40          |
|                    | 26,550,000.00 |         |                | 19.115       |                       | 26,131.10         |

|                            | TIC           | All-In TIC    | Arbitrage Yield |
|----------------------------|---------------|---------------|-----------------|
| Par Value                  | 26,550,000.00 | 26,550,000.00 | 26,550,000.00   |
| + Accrued Interest         |               |               |                 |
| + Premium (Discount)       | 7,517,813.55  | 7,517,813.55  | 7,517,813.55    |
| - Underwriter's Discount   | -106,200.00   | -106,200.00   |                 |
| - Cost of Issuance Expense |               | -250,363.55   |                 |
| - Other Amounts            |               |               |                 |
| Target Value               | 33,961,613.55 | 33,711,250.00 | 34,067,813.55   |
| Target Date                | 12/01/2020    | 12/01/2020    | 12/01/2020      |
| Yield                      | 2.990088%     | 3.047080%     | 1.668749%       |

## BOND PRICING

City of Roseville, CA  
Water Utility Revenue Bonds, Series 2020  
\$32mm Project Fund For Debt Service Comparison to WIFA Loan  
Assumes Aa2/AA- Tax-Exempt Rates as of August 4, 2020  
\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\*

| Bond Component      | Maturity Date | Amount     | Rate   | Yield  | Price     | Yield to Maturity | Call Date  | Call Price | Premium (-Discount) |
|---------------------|---------------|------------|--------|--------|-----------|-------------------|------------|------------|---------------------|
| Serial Bonds:       |               |            |        |        |           |                   |            |            |                     |
|                     | 12/01/2021    | 390,000    | 5.000% | 0.230% | 104.761   |                   |            |            | 18,567.90           |
|                     | 12/01/2022    | 410,000    | 5.000% | 0.270% | 109.428   |                   |            |            | 38,654.80           |
|                     | 12/01/2023    | 430,000    | 5.000% | 0.320% | 113.961   |                   |            |            | 60,032.30           |
|                     | 12/01/2024    | 455,000    | 5.000% | 0.380% | 118.322   |                   |            |            | 83,365.10           |
|                     | 12/01/2025    | 475,000    | 5.000% | 0.480% | 122.304   |                   |            |            | 105,944.00          |
|                     | 12/01/2026    | 500,000    | 5.000% | 0.590% | 125.959   |                   |            |            | 129,795.00          |
|                     | 12/01/2027    | 530,000    | 5.000% | 0.740% | 129.008   |                   |            |            | 153,742.40          |
|                     | 12/01/2028    | 555,000    | 5.000% | 0.840% | 132.121   |                   |            |            | 178,271.55          |
|                     | 12/01/2029    | 585,000    | 5.000% | 0.950% | 134.856   |                   |            |            | 203,907.60          |
|                     | 12/01/2030    | 615,000    | 5.000% | 1.010% | 137.860   |                   |            |            | 232,839.00          |
|                     | 12/01/2031    | 645,000    | 5.000% | 1.160% | 136.157 C | 1.435%            | 12/01/2030 | 100.000    | 233,212.65          |
|                     | 12/01/2032    | 680,000    | 5.000% | 1.280% | 134.813 C | 1.768%            | 12/01/2030 | 100.000    | 236,728.40          |
|                     | 12/01/2033    | 710,000    | 5.000% | 1.380% | 133.704 C | 2.036%            | 12/01/2030 | 100.000    | 239,298.40          |
|                     | 12/01/2034    | 750,000    | 5.000% | 1.490% | 132.498 C | 2.276%            | 12/01/2030 | 100.000    | 243,735.00          |
|                     | 12/01/2035    | 785,000    | 5.000% | 1.530% | 132.062 C | 2.436%            | 12/01/2030 | 100.000    | 251,686.70          |
|                     | 12/01/2036    | 830,000    | 5.000% | 1.570% | 131.628 C | 2.576%            | 12/01/2030 | 100.000    | 262,512.40          |
|                     | 12/01/2037    | 870,000    | 5.000% | 1.610% | 131.196 C | 2.700%            | 12/01/2030 | 100.000    | 271,405.20          |
|                     | 12/01/2038    | 915,000    | 5.000% | 1.650% | 130.765 C | 2.810%            | 12/01/2030 | 100.000    | 281,499.75          |
|                     | 12/01/2039    | 960,000    | 5.000% | 1.690% | 130.336 C | 2.910%            | 12/01/2030 | 100.000    | 291,225.60          |
|                     | 12/01/2040    | 1,010,000  | 5.000% | 1.730% | 129.909 C | 3.000%            | 12/01/2030 | 100.000    | 302,080.90          |
|                     |               | 13,100,000 |        |        |           |                   |            |            | 3,818,504.65        |
| Term Bond due 2045: |               |            |        |        |           |                   |            |            |                     |
|                     | 12/01/2041    | 1,065,000  | 5.000% | 1.930% | 127.797 C | 3.350%            | 12/01/2030 | 100.000    | 296,038.05          |
|                     | 12/01/2042    | 1,115,000  | 5.000% | 1.930% | 127.797 C | 3.350%            | 12/01/2030 | 100.000    | 309,936.55          |
|                     | 12/01/2043    | 1,175,000  | 5.000% | 1.930% | 127.797 C | 3.350%            | 12/01/2030 | 100.000    | 326,614.75          |
|                     | 12/01/2044    | 1,235,000  | 5.000% | 1.930% | 127.797 C | 3.350%            | 12/01/2030 | 100.000    | 343,292.95          |
|                     | 12/01/2045    | 1,300,000  | 5.000% | 1.930% | 127.797 C | 3.350%            | 12/01/2030 | 100.000    | 361,361.00          |
|                     |               | 5,890,000  |        |        |           |                   |            |            | 1,637,243.30        |
| Term Bond due 2050: |               |            |        |        |           |                   |            |            |                     |
|                     | 12/01/2046    | 1,365,000  | 5.000% | 1.980% | 127.276 C | 3.520%            | 12/01/2030 | 100.000    | 372,317.40          |
|                     | 12/01/2047    | 1,435,000  | 5.000% | 1.980% | 127.276 C | 3.520%            | 12/01/2030 | 100.000    | 391,410.60          |
|                     | 12/01/2048    | 1,510,000  | 5.000% | 1.980% | 127.276 C | 3.520%            | 12/01/2030 | 100.000    | 411,867.60          |
|                     | 12/01/2049    | 1,585,000  | 5.000% | 1.980% | 127.276 C | 3.520%            | 12/01/2030 | 100.000    | 432,324.60          |
|                     | 12/01/2050    | 1,665,000  | 5.000% | 1.980% | 127.276 C | 3.520%            | 12/01/2030 | 100.000    | 454,145.40          |
|                     |               | 7,560,000  |        |        |           |                   |            |            | 2,062,065.60        |
|                     |               | 26,550,000 |        |        |           |                   |            |            | 7,517,813.55        |

|                        |               |             |
|------------------------|---------------|-------------|
| Dated Date             | 12/01/2020    |             |
| Delivery Date          | 12/01/2020    |             |
| First Coupon           | 06/01/2021    |             |
| Par Amount             | 26,550,000.00 |             |
| Premium                | 7,517,813.55  |             |
| Production             | 34,067,813.55 | 128.315682% |
| Underwriter's Discount | -106,200.00   | -0.400000%  |
| Purchase Price         | 33,961,613.55 | 127.915682% |
| Accrued Interest       |               |             |
| Net Proceeds           | 33,961,613.55 |             |

# BOND DEBT SERVICE

City of Roseville, CA  
Water Utility Revenue Bonds, Series 2020  
\$32mm Project Fund For Debt Service Comparison to WIFIA Loan  
Assumes Aa2/AA- Tax-Exempt Rates as of August 4, 2020  
\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\*

| Period<br>Ending | Principal  | Interest   | Debt<br>Service |
|------------------|------------|------------|-----------------|
| 06/30/2021       |            | 663,750    | 663,750         |
| 06/30/2022       | 390,000    | 1,317,750  | 1,707,750       |
| 06/30/2023       | 410,000    | 1,297,750  | 1,707,750       |
| 06/30/2024       | 430,000    | 1,276,750  | 1,706,750       |
| 06/30/2025       | 455,000    | 1,254,625  | 1,709,625       |
| 06/30/2026       | 475,000    | 1,231,375  | 1,706,375       |
| 06/30/2027       | 500,000    | 1,207,000  | 1,707,000       |
| 06/30/2028       | 530,000    | 1,181,250  | 1,711,250       |
| 06/30/2029       | 555,000    | 1,154,125  | 1,709,125       |
| 06/30/2030       | 585,000    | 1,125,625  | 1,710,625       |
| 06/30/2031       | 615,000    | 1,095,625  | 1,710,625       |
| 06/30/2032       | 645,000    | 1,064,125  | 1,709,125       |
| 06/30/2033       | 680,000    | 1,031,000  | 1,711,000       |
| 06/30/2034       | 710,000    | 996,250    | 1,706,250       |
| 06/30/2035       | 750,000    | 959,750    | 1,709,750       |
| 06/30/2036       | 785,000    | 921,375    | 1,706,375       |
| 06/30/2037       | 830,000    | 881,000    | 1,711,000       |
| 06/30/2038       | 870,000    | 838,500    | 1,708,500       |
| 06/30/2039       | 915,000    | 793,875    | 1,708,875       |
| 06/30/2040       | 960,000    | 747,000    | 1,707,000       |
| 06/30/2041       | 1,010,000  | 697,750    | 1,707,750       |
| 06/30/2042       | 1,065,000  | 645,875    | 1,710,875       |
| 06/30/2043       | 1,115,000  | 591,375    | 1,706,375       |
| 06/30/2044       | 1,175,000  | 534,125    | 1,709,125       |
| 06/30/2045       | 1,235,000  | 473,875    | 1,708,875       |
| 06/30/2046       | 1,300,000  | 410,500    | 1,710,500       |
| 06/30/2047       | 1,365,000  | 343,875    | 1,708,875       |
| 06/30/2048       | 1,435,000  | 273,875    | 1,708,875       |
| 06/30/2049       | 1,510,000  | 200,250    | 1,710,250       |
| 06/30/2050       | 1,585,000  | 122,875    | 1,707,875       |
| 06/30/2051       | 1,665,000  | 41,625     | 1,706,625       |
|                  | 26,550,000 | 25,374,500 | 51,924,500      |

**BOND DEBT SERVICE**

**City of Roseville, CA  
Water Utility Revenue Bonds, Series 2020  
\$32mm Project Fund For Debt Service Comparison to WIFIA Loan  
Assumes Aa2/AA- Tax-Exempt Rates as of August 4, 2020  
\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\***

| Period<br>Ending | Principal | Interest | Debt<br>Service | Annual<br>Debt<br>Service |
|------------------|-----------|----------|-----------------|---------------------------|
| 06/01/2021       |           | 663,750  | 663,750         |                           |
| 06/30/2021       |           |          |                 | 663,750                   |
| 12/01/2021       | 390,000   | 663,750  | 1,053,750       |                           |
| 06/01/2022       |           | 654,000  | 654,000         |                           |
| 06/30/2022       |           |          |                 | 1,707,750                 |
| 12/01/2022       | 410,000   | 654,000  | 1,064,000       |                           |
| 06/01/2023       |           | 643,750  | 643,750         |                           |
| 06/30/2023       |           |          |                 | 1,707,750                 |
| 12/01/2023       | 430,000   | 643,750  | 1,073,750       |                           |
| 06/01/2024       |           | 633,000  | 633,000         |                           |
| 06/30/2024       |           |          |                 | 1,706,750                 |
| 12/01/2024       | 455,000   | 633,000  | 1,088,000       |                           |
| 06/01/2025       |           | 621,625  | 621,625         |                           |
| 06/30/2025       |           |          |                 | 1,709,625                 |
| 12/01/2025       | 475,000   | 621,625  | 1,096,625       |                           |
| 06/01/2026       |           | 609,750  | 609,750         |                           |
| 06/30/2026       |           |          |                 | 1,706,375                 |
| 12/01/2026       | 500,000   | 609,750  | 1,109,750       |                           |
| 06/01/2027       |           | 597,250  | 597,250         |                           |
| 06/30/2027       |           |          |                 | 1,707,000                 |
| 12/01/2027       | 530,000   | 597,250  | 1,127,250       |                           |
| 06/01/2028       |           | 584,000  | 584,000         |                           |
| 06/30/2028       |           |          |                 | 1,711,250                 |
| 12/01/2028       | 555,000   | 584,000  | 1,139,000       |                           |
| 06/01/2029       |           | 570,125  | 570,125         |                           |
| 06/30/2029       |           |          |                 | 1,709,125                 |
| 12/01/2029       | 585,000   | 570,125  | 1,155,125       |                           |
| 06/01/2030       |           | 555,500  | 555,500         |                           |
| 06/30/2030       |           |          |                 | 1,710,625                 |
| 12/01/2030       | 615,000   | 555,500  | 1,170,500       |                           |
| 06/01/2031       |           | 540,125  | 540,125         |                           |
| 06/30/2031       |           |          |                 | 1,710,625                 |
| 12/01/2031       | 645,000   | 540,125  | 1,185,125       |                           |
| 06/01/2032       |           | 524,000  | 524,000         |                           |
| 06/30/2032       |           |          |                 | 1,709,125                 |
| 12/01/2032       | 680,000   | 524,000  | 1,204,000       |                           |
| 06/01/2033       |           | 507,000  | 507,000         |                           |
| 06/30/2033       |           |          |                 | 1,711,000                 |
| 12/01/2033       | 710,000   | 507,000  | 1,217,000       |                           |
| 06/01/2034       |           | 489,250  | 489,250         |                           |
| 06/30/2034       |           |          |                 | 1,706,250                 |
| 12/01/2034       | 750,000   | 489,250  | 1,239,250       |                           |
| 06/01/2035       |           | 470,500  | 470,500         |                           |
| 06/30/2035       |           |          |                 | 1,709,750                 |
| 12/01/2035       | 785,000   | 470,500  | 1,255,500       |                           |
| 06/01/2036       |           | 450,875  | 450,875         |                           |
| 06/30/2036       |           |          |                 | 1,706,375                 |
| 12/01/2036       | 830,000   | 450,875  | 1,280,875       |                           |
| 06/01/2037       |           | 430,125  | 430,125         |                           |
| 06/30/2037       |           |          |                 | 1,711,000                 |
| 12/01/2037       | 870,000   | 430,125  | 1,300,125       |                           |
| 06/01/2038       |           | 408,375  | 408,375         |                           |
| 06/30/2038       |           |          |                 | 1,708,500                 |
| 12/01/2038       | 915,000   | 408,375  | 1,323,375       |                           |
| 06/01/2039       |           | 385,500  | 385,500         |                           |
| 06/30/2039       |           |          |                 | 1,708,875                 |
| 12/01/2039       | 960,000   | 385,500  | 1,345,500       |                           |
| 06/01/2040       |           | 361,500  | 361,500         |                           |
| 06/30/2040       |           |          |                 | 1,707,000                 |
| 12/01/2040       | 1,010,000 | 361,500  | 1,371,500       |                           |
| 06/01/2041       |           | 336,250  | 336,250         |                           |
| 06/30/2041       |           |          |                 | 1,707,750                 |
| 12/01/2041       | 1,065,000 | 336,250  | 1,401,250       |                           |
| 06/01/2042       |           | 309,625  | 309,625         |                           |
| 06/30/2042       |           |          |                 | 1,710,875                 |



**BOND DEBT SERVICE**

**City of Roseville, CA  
Water Utility Revenue Bonds, Series 2020  
\$32mm Project Fund For Debt Service Comparison to WIFIA Loan  
Assumes Aa2/AA- Tax-Exempt Rates as of August 4, 2020  
\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\***

| Period<br>Ending | Principal  | Interest   | Debt<br>Service | Annual<br>Debt<br>Service |
|------------------|------------|------------|-----------------|---------------------------|
| 12/01/2042       | 1,115,000  | 309,625    | 1,424,625       |                           |
| 06/01/2043       |            | 281,750    | 281,750         |                           |
| 06/30/2043       |            |            |                 | 1,706,375                 |
| 12/01/2043       | 1,175,000  | 281,750    | 1,456,750       |                           |
| 06/01/2044       |            | 252,375    | 252,375         |                           |
| 06/30/2044       |            |            |                 | 1,709,125                 |
| 12/01/2044       | 1,235,000  | 252,375    | 1,487,375       |                           |
| 06/01/2045       |            | 221,500    | 221,500         |                           |
| 06/30/2045       |            |            |                 | 1,708,875                 |
| 12/01/2045       | 1,300,000  | 221,500    | 1,521,500       |                           |
| 06/01/2046       |            | 189,000    | 189,000         |                           |
| 06/30/2046       |            |            |                 | 1,710,500                 |
| 12/01/2046       | 1,365,000  | 189,000    | 1,554,000       |                           |
| 06/01/2047       |            | 154,875    | 154,875         |                           |
| 06/30/2047       |            |            |                 | 1,708,875                 |
| 12/01/2047       | 1,435,000  | 154,875    | 1,589,875       |                           |
| 06/01/2048       |            | 119,000    | 119,000         |                           |
| 06/30/2048       |            |            |                 | 1,708,875                 |
| 12/01/2048       | 1,510,000  | 119,000    | 1,629,000       |                           |
| 06/01/2049       |            | 81,250     | 81,250          |                           |
| 06/30/2049       |            |            |                 | 1,710,250                 |
| 12/01/2049       | 1,585,000  | 81,250     | 1,666,250       |                           |
| 06/01/2050       |            | 41,625     | 41,625          |                           |
| 06/30/2050       |            |            |                 | 1,707,875                 |
| 12/01/2050       | 1,665,000  | 41,625     | 1,706,625       |                           |
| 06/30/2051       |            |            |                 | 1,706,625                 |
|                  | 26,550,000 | 25,374,500 | 51,924,500      | 51,924,500                |

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City of Roseville, CA  
WIFIA Loan

Assumes Interest Rate of 1.20% Derived from  
The Daily Rate Tables Published by the Bureau of the Public Debt for SLGS as of 8/4/20 +1bp  
\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\*

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**SOURCES AND USES OF FUNDS**

**City of Roseville, CA**

**WIFIA Loan**

**Assumes Interest Rate of 1.20% Derived from**

**The Daily Rate Tables Published by the Bureau of the Public Debt for SLGS as of 8/4/20 +1bp**

**\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\***

**Dated Date                      12/01/2020**

**Delivery Date                12/01/2020**

**Sources:**

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**Bond Proceeds:**

|                   |                      |
|-------------------|----------------------|
| <b>Par Amount</b> | <b>32,000,000.00</b> |
|-------------------|----------------------|

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|  |                      |
|--|----------------------|
|  | <b>32,000,000.00</b> |
|--|----------------------|

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**Uses:**

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**Project Fund Deposits:**

|                     |                      |
|---------------------|----------------------|
| <b>Project Fund</b> | <b>32,000,000.00</b> |
|---------------------|----------------------|

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|  |                      |
|--|----------------------|
|  | <b>32,000,000.00</b> |
|--|----------------------|

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## BOND SUMMARY STATISTICS

City of Roseville, CA

WIFIA Loan

Assumes Interest Rate of 1.20% Derived from

The Daily Rate Tables Published by the Bureau of the Public Debt for SLGS as of 8/4/20 +1bp

\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\*

|               |            |
|---------------|------------|
| Dated Date    | 12/01/2020 |
| Delivery Date | 12/01/2020 |
| First Coupon  | 06/01/2021 |
| Last Maturity | 12/01/2050 |

|                          |           |
|--------------------------|-----------|
| Arbitrage Yield          | 1.200000% |
| True Interest Cost (TIC) | 1.200000% |
| Net Interest Cost (NIC)  | 1.200000% |
| All-In TIC               | 1.200000% |
| Average Coupon           | 1.200000% |

|                                   |        |
|-----------------------------------|--------|
| Average Life (years)              | 16.367 |
| Weighted Average Maturity (years) | 16.367 |
| Duration of Issue (years)         | 14.525 |

|                               |                |
|-------------------------------|----------------|
| Par Amount                    | 32,000,000.00  |
| Bond Proceeds                 | 32,000,000.00  |
| Total Interest                | 6,284,760.00   |
| Net Interest                  | 6,284,760.00   |
| Bond Years from Dated Date    | 523,730,000.00 |
| Bond Years from Delivery Date | 523,730,000.00 |
| Total Debt Service            | 38,284,760.00  |
| Maximum Annual Debt Service   | 1,254,470.00   |
| Average Annual Debt Service   | 1,276,158.67   |

|                                 |
|---------------------------------|
| Underwriter's Fees (per \$1000) |
| Average Takedown                |
| Other Fee                       |

Total Underwriter's Discount

|           |            |
|-----------|------------|
| Bid Price | 100.000000 |
|-----------|------------|

| Bond Component | Par Value     | Price   | Average Coupon | Average Life | Average Maturity Date | PV of 1 bp change |
|----------------|---------------|---------|----------------|--------------|-----------------------|-------------------|
| Serial Bonds   | 32,000,000.00 | 100.000 | 1.200%         | 16.367       | 04/13/2037            | 46,312.00         |
|                | 32,000,000.00 |         |                | 16.367       |                       | 46,312.00         |

|                            | TIC           | All-In TIC    | Arbitrage Yield |
|----------------------------|---------------|---------------|-----------------|
| Par Value                  | 32,000,000.00 | 32,000,000.00 | 32,000,000.00   |
| + Accrued Interest         |               |               |                 |
| + Premium (Discount)       |               |               |                 |
| - Underwriter's Discount   |               |               |                 |
| - Cost of Issuance Expense |               |               |                 |
| - Other Amounts            |               |               |                 |
| Target Value               | 32,000,000.00 | 32,000,000.00 | 32,000,000.00   |
| Target Date                | 12/01/2020    | 12/01/2020    | 12/01/2020      |
| Yield                      | 1.200000%     | 1.200000%     | 1.200000%       |

## BOND PRICING

City of Roseville, CA

WIFIA Loan

Assumes Interest Rate of 1.20% Derived from

The Daily Rate Tables Published by the Bureau of the Public Debt for SLGS as of 8/4/20 +1bp

\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\*

| Bond Component | Maturity Date | Amount     | Rate   | Yield  | Price   |
|----------------|---------------|------------|--------|--------|---------|
| Serial Bonds:  |               |            |        |        |         |
|                | 06/01/2021    | 535,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2021    | 435,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2022    | 440,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2022    | 445,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2023    | 445,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2023    | 450,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2024    | 450,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2024    | 455,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2025    | 455,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2025    | 455,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2026    | 465,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2026    | 465,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2027    | 465,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2027    | 470,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2028    | 470,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2028    | 480,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2029    | 475,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2029    | 480,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2030    | 485,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2030    | 485,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2031    | 490,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2031    | 495,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2032    | 495,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2032    | 500,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2033    | 500,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2033    | 505,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2034    | 505,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2034    | 510,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2035    | 515,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2035    | 515,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2036    | 520,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2036    | 525,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2037    | 525,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2037    | 530,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2038    | 530,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2038    | 535,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2039    | 540,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2039    | 545,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2040    | 545,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2040    | 550,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2041    | 550,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2041    | 560,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2042    | 555,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2042    | 565,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2043    | 565,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2043    | 570,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2044    | 570,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2044    | 580,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2045    | 575,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2045    | 585,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2046    | 585,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2046    | 595,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2047    | 590,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2047    | 595,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2048    | 600,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2048    | 605,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2049    | 605,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2049    | 610,000    | 1.200% | 1.200% | 100.000 |
|                | 06/01/2050    | 615,000    | 1.200% | 1.200% | 100.000 |
|                | 12/01/2050    | 1,245,000  | 1.200% | 1.200% | 100.000 |
|                |               | 32,000,000 |        |        |         |

**BOND PRICING**

**City of Roseville, CA**

**WIFIA Loan**

**Assumes Interest Rate of 1.20% Derived from**

**The Daily Rate Tables Published by the Bureau of the Public Debt for SLGS as of 8/4/20 +1bp**

**\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\***

|                         |               |             |
|-------------------------|---------------|-------------|
| Dated Date              | 12/01/2020    |             |
| Delivery Date           | 12/01/2020    |             |
| First Coupon            | 06/01/2021    |             |
| Par Amount              | 32,000,000.00 |             |
| Original Issue Discount |               |             |
| Production              | 32,000,000.00 | 100.000000% |
| Underwriter's Discount  |               |             |
| Purchase Price          | 32,000,000.00 | 100.000000% |
| Accrued Interest        |               |             |
| Net Proceeds            | 32,000,000.00 |             |

**BOND DEBT SERVICE**

**City of Roseville, CA  
WIFIA Loan**

**Assumes Interest Rate of 1.20% Derived from  
The Daily Rate Tables Published by the Bureau of the Public Debt for SLGS as of 8/4/20 +1bp  
\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\***

| Period<br>Ending | Principal  | Interest  | Debt<br>Service |
|------------------|------------|-----------|-----------------|
| 06/30/2021       | 535,000    | 192,000   | 727,000         |
| 06/30/2022       | 875,000    | 374,970   | 1,249,970       |
| 06/30/2023       | 890,000    | 364,410   | 1,254,410       |
| 06/30/2024       | 900,000    | 353,700   | 1,253,700       |
| 06/30/2025       | 910,000    | 342,870   | 1,252,870       |
| 06/30/2026       | 920,000    | 331,950   | 1,251,950       |
| 06/30/2027       | 930,000    | 320,850   | 1,250,850       |
| 06/30/2028       | 940,000    | 309,660   | 1,249,660       |
| 06/30/2029       | 955,000    | 298,320   | 1,253,320       |
| 06/30/2030       | 965,000    | 286,860   | 1,251,860       |
| 06/30/2031       | 975,000    | 275,250   | 1,250,250       |
| 06/30/2032       | 990,000    | 263,490   | 1,253,490       |
| 06/30/2033       | 1,000,000  | 251,580   | 1,251,580       |
| 06/30/2034       | 1,010,000  | 239,550   | 1,249,550       |
| 06/30/2035       | 1,025,000  | 227,400   | 1,252,400       |
| 06/30/2036       | 1,035,000  | 215,070   | 1,250,070       |
| 06/30/2037       | 1,050,000  | 202,590   | 1,252,590       |
| 06/30/2038       | 1,060,000  | 189,960   | 1,249,960       |
| 06/30/2039       | 1,075,000  | 177,210   | 1,252,210       |
| 06/30/2040       | 1,090,000  | 164,250   | 1,254,250       |
| 06/30/2041       | 1,100,000  | 151,140   | 1,251,140       |
| 06/30/2042       | 1,115,000  | 137,880   | 1,252,880       |
| 06/30/2043       | 1,130,000  | 124,470   | 1,254,470       |
| 06/30/2044       | 1,140,000  | 110,880   | 1,250,880       |
| 06/30/2045       | 1,155,000  | 97,140    | 1,252,140       |
| 06/30/2046       | 1,170,000  | 83,250    | 1,253,250       |
| 06/30/2047       | 1,185,000  | 69,150    | 1,254,150       |
| 06/30/2048       | 1,195,000  | 54,930    | 1,249,930       |
| 06/30/2049       | 1,210,000  | 40,530    | 1,250,530       |
| 06/30/2050       | 1,225,000  | 25,980    | 1,250,980       |
| 06/30/2051       | 1,245,000  | 7,470     | 1,252,470       |
|                  | 32,000,000 | 6,284,760 | 38,284,760      |

BOND DEBT SERVICE

City of Roseville, CA

WIFIA Loan

Assumes Interest Rate of 1.20% Derived from

The Daily Rate Tables Published by the Bureau of the Public Debt for SLGS as of 8/4/20 +1bp

\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\*

| Period<br>Ending | Principal | Interest | Debt<br>Service | Annual<br>Debt<br>Service |
|------------------|-----------|----------|-----------------|---------------------------|
| 06/01/2021       | 535,000   | 192,000  | 727,000         |                           |
| 06/30/2021       |           |          |                 | 727,000                   |
| 12/01/2021       | 435,000   | 188,790  | 623,790         |                           |
| 06/01/2022       | 440,000   | 186,180  | 626,180         |                           |
| 06/30/2022       |           |          |                 | 1,249,970                 |
| 12/01/2022       | 445,000   | 183,540  | 628,540         |                           |
| 06/01/2023       | 445,000   | 180,870  | 625,870         |                           |
| 06/30/2023       |           |          |                 | 1,254,410                 |
| 12/01/2023       | 450,000   | 178,200  | 628,200         |                           |
| 06/01/2024       | 450,000   | 175,500  | 625,500         |                           |
| 06/30/2024       |           |          |                 | 1,253,700                 |
| 12/01/2024       | 455,000   | 172,800  | 627,800         |                           |
| 06/01/2025       | 455,000   | 170,070  | 625,070         |                           |
| 06/30/2025       |           |          |                 | 1,252,870                 |
| 12/01/2025       | 455,000   | 167,340  | 622,340         |                           |
| 06/01/2026       | 465,000   | 164,610  | 629,610         |                           |
| 06/30/2026       |           |          |                 | 1,251,950                 |
| 12/01/2026       | 465,000   | 161,820  | 626,820         |                           |
| 06/01/2027       | 465,000   | 159,030  | 624,030         |                           |
| 06/30/2027       |           |          |                 | 1,250,850                 |
| 12/01/2027       | 470,000   | 156,240  | 626,240         |                           |
| 06/01/2028       | 470,000   | 153,420  | 623,420         |                           |
| 06/30/2028       |           |          |                 | 1,249,660                 |
| 12/01/2028       | 480,000   | 150,600  | 630,600         |                           |
| 06/01/2029       | 475,000   | 147,720  | 622,720         |                           |
| 06/30/2029       |           |          |                 | 1,253,320                 |
| 12/01/2029       | 480,000   | 144,870  | 624,870         |                           |
| 06/01/2030       | 485,000   | 141,990  | 626,990         |                           |
| 06/30/2030       |           |          |                 | 1,251,860                 |
| 12/01/2030       | 485,000   | 139,080  | 624,080         |                           |
| 06/01/2031       | 490,000   | 136,170  | 626,170         |                           |
| 06/30/2031       |           |          |                 | 1,250,250                 |
| 12/01/2031       | 495,000   | 133,230  | 628,230         |                           |
| 06/01/2032       | 495,000   | 130,260  | 625,260         |                           |
| 06/30/2032       |           |          |                 | 1,253,490                 |
| 12/01/2032       | 500,000   | 127,290  | 627,290         |                           |
| 06/01/2033       | 500,000   | 124,290  | 624,290         |                           |
| 06/30/2033       |           |          |                 | 1,251,580                 |
| 12/01/2033       | 505,000   | 121,290  | 626,290         |                           |
| 06/01/2034       | 505,000   | 118,260  | 623,260         |                           |
| 06/30/2034       |           |          |                 | 1,249,550                 |
| 12/01/2034       | 510,000   | 115,230  | 625,230         |                           |
| 06/01/2035       | 515,000   | 112,170  | 627,170         |                           |
| 06/30/2035       |           |          |                 | 1,252,400                 |
| 12/01/2035       | 515,000   | 109,080  | 624,080         |                           |
| 06/01/2036       | 520,000   | 105,990  | 625,990         |                           |
| 06/30/2036       |           |          |                 | 1,250,070                 |
| 12/01/2036       | 525,000   | 102,870  | 627,870         |                           |
| 06/01/2037       | 525,000   | 99,720   | 624,720         |                           |
| 06/30/2037       |           |          |                 | 1,252,590                 |
| 12/01/2037       | 530,000   | 96,570   | 626,570         |                           |
| 06/01/2038       | 530,000   | 93,390   | 623,390         |                           |
| 06/30/2038       |           |          |                 | 1,249,960                 |
| 12/01/2038       | 535,000   | 90,210   | 625,210         |                           |
| 06/01/2039       | 540,000   | 87,000   | 627,000         |                           |
| 06/30/2039       |           |          |                 | 1,252,210                 |
| 12/01/2039       | 545,000   | 83,760   | 628,760         |                           |
| 06/01/2040       | 545,000   | 80,490   | 625,490         |                           |
| 06/30/2040       |           |          |                 | 1,254,250                 |
| 12/01/2040       | 550,000   | 77,220   | 627,220         |                           |
| 06/01/2041       | 550,000   | 73,920   | 623,920         |                           |
| 06/30/2041       |           |          |                 | 1,251,140                 |
| 12/01/2041       | 560,000   | 70,620   | 630,620         |                           |
| 06/01/2042       | 555,000   | 67,260   | 622,260         |                           |
| 06/30/2042       |           |          |                 | 1,252,880                 |



**BOND DEBT SERVICE**

**City of Roseville, CA**

**WIFIA Loan**

**Assumes Interest Rate of 1.20% Derived from**

**The Daily Rate Tables Published by the Bureau of the Public Debt for SLGS as of 8/4/20 +1bp**

**\*\*\*\* Preliminary - For Discussion Purpose Only \*\*\*\***

| Period<br>Ending | Principal  | Interest  | Debt<br>Service | Annual<br>Debt<br>Service |
|------------------|------------|-----------|-----------------|---------------------------|
| 12/01/2042       | 565,000    | 63,930    | 628,930         |                           |
| 06/01/2043       | 565,000    | 60,540    | 625,540         |                           |
| 06/30/2043       |            |           |                 | 1,254,470                 |
| 12/01/2043       | 570,000    | 57,150    | 627,150         |                           |
| 06/01/2044       | 570,000    | 53,730    | 623,730         |                           |
| 06/30/2044       |            |           |                 | 1,250,880                 |
| 12/01/2044       | 580,000    | 50,310    | 630,310         |                           |
| 06/01/2045       | 575,000    | 46,830    | 621,830         |                           |
| 06/30/2045       |            |           |                 | 1,252,140                 |
| 12/01/2045       | 585,000    | 43,380    | 628,380         |                           |
| 06/01/2046       | 585,000    | 39,870    | 624,870         |                           |
| 06/30/2046       |            |           |                 | 1,253,250                 |
| 12/01/2046       | 595,000    | 36,360    | 631,360         |                           |
| 06/01/2047       | 590,000    | 32,790    | 622,790         |                           |
| 06/30/2047       |            |           |                 | 1,254,150                 |
| 12/01/2047       | 595,000    | 29,250    | 624,250         |                           |
| 06/01/2048       | 600,000    | 25,680    | 625,680         |                           |
| 06/30/2048       |            |           |                 | 1,249,930                 |
| 12/01/2048       | 605,000    | 22,080    | 627,080         |                           |
| 06/01/2049       | 605,000    | 18,450    | 623,450         |                           |
| 06/30/2049       |            |           |                 | 1,250,530                 |
| 12/01/2049       | 610,000    | 14,820    | 624,820         |                           |
| 06/01/2050       | 615,000    | 11,160    | 626,160         |                           |
| 06/30/2050       |            |           |                 | 1,250,980                 |
| 12/01/2050       | 1,245,000  | 7,470     | 1,252,470       |                           |
| 06/30/2051       |            |           |                 | 1,252,470                 |
|                  | 32,000,000 | 6,284,760 | 38,284,760      | 38,284,760                |

| FYE<br>(6/30) | Tax-Exempt Bond Issuance Yielding \$32mm in Expendable Proceeds |                      |                      | WIFIA Loan Yielding \$32mm in Expendable Proceeds |                     |                      | Cash Flow Savings    |
|---------------|-----------------------------------------------------------------|----------------------|----------------------|---------------------------------------------------|---------------------|----------------------|----------------------|
|               | Principal                                                       | Interest             | Total Debt Service   | Principal                                         | Interest            | Total Debt Service   | Using WIFIA          |
| 2021          | \$ -                                                            | \$ 663,750           | \$ 663,750           | \$ 535,000                                        | \$ 192,000          | \$ 727,000           | \$ (63,250)          |
| 2022          | 390,000                                                         | 1,317,750            | 1,707,750            | 875,000                                           | 374,970             | 1,249,970            | 457,780              |
| 2023          | 410,000                                                         | 1,297,750            | 1,707,750            | 890,000                                           | 364,410             | 1,254,410            | 453,340              |
| 2024          | 430,000                                                         | 1,276,750            | 1,706,750            | 900,000                                           | 353,700             | 1,253,700            | 453,050              |
| 2025          | 455,000                                                         | 1,254,625            | 1,709,625            | 910,000                                           | 342,870             | 1,252,870            | 456,755              |
| 2026          | 475,000                                                         | 1,231,375            | 1,706,375            | 920,000                                           | 331,950             | 1,251,950            | 454,425              |
| 2027          | 500,000                                                         | 1,207,000            | 1,707,000            | 930,000                                           | 320,850             | 1,250,850            | 456,150              |
| 2028          | 530,000                                                         | 1,181,250            | 1,711,250            | 940,000                                           | 309,660             | 1,249,660            | 461,590              |
| 2029          | 555,000                                                         | 1,154,125            | 1,709,125            | 955,000                                           | 298,320             | 1,253,320            | 455,805              |
| 2030          | 585,000                                                         | 1,125,625            | 1,710,625            | 965,000                                           | 286,860             | 1,251,860            | 458,765              |
| 2031          | 615,000                                                         | 1,095,625            | 1,710,625            | 975,000                                           | 275,250             | 1,250,250            | 460,375              |
| 2032          | 645,000                                                         | 1,064,125            | 1,709,125            | 990,000                                           | 263,490             | 1,253,490            | 455,635              |
| 2033          | 680,000                                                         | 1,031,000            | 1,711,000            | 1,000,000                                         | 251,580             | 1,251,580            | 459,420              |
| 2034          | 710,000                                                         | 996,250              | 1,706,250            | 1,010,000                                         | 239,550             | 1,249,550            | 456,700              |
| 2035          | 750,000                                                         | 959,750              | 1,709,750            | 1,025,000                                         | 227,400             | 1,252,400            | 457,350              |
| 2036          | 785,000                                                         | 921,375              | 1,706,375            | 1,035,000                                         | 215,070             | 1,250,070            | 456,305              |
| 2037          | 830,000                                                         | 881,000              | 1,711,000            | 1,050,000                                         | 202,590             | 1,252,590            | 458,410              |
| 2038          | 870,000                                                         | 838,500              | 1,708,500            | 1,060,000                                         | 189,960             | 1,249,960            | 458,540              |
| 2039          | 915,000                                                         | 793,875              | 1,708,875            | 1,075,000                                         | 177,210             | 1,252,210            | 456,665              |
| 2040          | 960,000                                                         | 747,000              | 1,707,000            | 1,090,000                                         | 164,250             | 1,254,250            | 452,750              |
| 2041          | 1,010,000                                                       | 697,750              | 1,707,750            | 1,100,000                                         | 151,140             | 1,251,140            | 456,610              |
| 2042          | 1,065,000                                                       | 645,875              | 1,710,875            | 1,115,000                                         | 137,880             | 1,252,880            | 457,995              |
| 2043          | 1,115,000                                                       | 591,375              | 1,706,375            | 1,130,000                                         | 124,470             | 1,254,470            | 451,905              |
| 2044          | 1,175,000                                                       | 534,125              | 1,709,125            | 1,140,000                                         | 110,880             | 1,250,880            | 458,245              |
| 2045          | 1,235,000                                                       | 473,875              | 1,708,875            | 1,155,000                                         | 97,140              | 1,252,140            | 456,735              |
| 2046          | 1,300,000                                                       | 410,500              | 1,710,500            | 1,170,000                                         | 83,250              | 1,253,250            | 457,250              |
| 2047          | 1,365,000                                                       | 343,875              | 1,708,875            | 1,185,000                                         | 69,150              | 1,254,150            | 454,725              |
| 2048          | 1,435,000                                                       | 273,875              | 1,708,875            | 1,195,000                                         | 54,930              | 1,249,930            | 458,945              |
| 2049          | 1,510,000                                                       | 200,250              | 1,710,250            | 1,210,000                                         | 40,530              | 1,250,530            | 459,720              |
| 2050          | 1,585,000                                                       | 122,875              | 1,707,875            | 1,225,000                                         | 25,980              | 1,250,980            | 456,895              |
| 2051          | 1,665,000                                                       | 41,625               | 1,706,625            | 1,245,000                                         | 7,470               | 1,252,470            | 454,155              |
| <b>Total</b>  | <b>\$ 26,550,000</b>                                            | <b>\$ 25,374,500</b> | <b>\$ 51,924,500</b> | <b>\$ 32,000,000</b>                              | <b>\$ 6,284,760</b> | <b>\$ 38,284,760</b> | <b>\$ 13,639,740</b> |

City of Roseville's Water Future Initiative

WIFIA Application

## **Attachments – Section B**

# WATER

| PROJECT TITLE                                | PAGE  | FUND<br>IFAS/ERP | PROJECT No.<br>IFAS/ERP | PRIOR YEARS<br>ACTUALS | FY2018-19<br>AMENDED BUDGET<br>& CARRYOVER |                      |                      |                   |                   | FY2021-22         | FY2022-23         | FY2023-24         | TOTAL<br>PROJECT     |
|----------------------------------------------|-------|------------------|-------------------------|------------------------|--------------------------------------------|----------------------|----------------------|-------------------|-------------------|-------------------|-------------------|-------------------|----------------------|
|                                              |       |                  |                         |                        |                                            |                      |                      |                   |                   |                   |                   |                   |                      |
| Groundwater Management Plan                  | C-139 | 481/6120         | 053005 / 400012         | \$ 1,975,560           | \$ 847,346                                 | \$ 225,000           | \$ 225,000           | \$ 225,000        | \$ 225,000        | \$ 225,000        | \$ 225,000        | \$ 225,000        | \$ 3,947,906         |
| West Side Tank and Pump Station Project      | C-140 | 481/6120         | 063001 / 400014         | 1,857,951              | 12,638,372                                 | 11,800,000           | 2,075,000            | 0                 | 0                 | 0                 | 0                 | 0                 | 28,371,323           |
| Regional Water Reliability Study             | C-141 | 481/6120         | 153003 / 400063         | 277,633                | 492,057                                    | 150,000              | 0                    | 0                 | 0                 | 0                 | 0                 | 0                 | 919,690              |
| Water Facilities Condition Assessment        | C-142 | 482/6130         | 163002 / 400077         | 0                      | 360,000                                    | 360,000              | 125,000              | 125,000           | 125,000           | 125,000           | 0                 | 0                 | 1,095,000            |
| Advanced Metering Infrastructure Project     | C-143 | 480/6101         | 173001 / 400099         | 302,889                | 6,697,111                                  | 1,336,115            | 463,885              | 0                 | 0                 | 0                 | 0                 | 0                 | 8,800,000            |
| State Water Efficiency Framework             | C-144 | 480/6101         | 500012 / 500012         | 0                      | 100,000                                    | 50,000               | 50,000               | 50,000            | 50,000            | 50,000            | 0                 | 0                 | 300,000              |
| SMUD Water Reassignment                      | C-145 | 481/6120         | 500015 / 500015         | 0                      | 300,000                                    | 350,000              | 0                    | 0                 | 0                 | 0                 | 0                 | 0                 | 650,000              |
| Sites Reservoir Project                      | C-146 | 481/6120         | 500016 / 500016         | 0                      | 100,000                                    | 100,000              | 50,000               | 25,000            | 25,000            | 25,000            | 0                 | 0                 | 300,000              |
| Integrated Resources Plan                    | C-147 | 481/6120         | 500018 / 500018         | 0                      | 200,000                                    | 140,000              | 0                    | 0                 | 0                 | 0                 | 0                 | 0                 | 340,000              |
| Courtyard Garden Educational Makeover        | C-148 | 480/6101         | 500052 / 500052         | 0                      | 0                                          | 120,000              | 0                    | 0                 | 0                 | 0                 | 0                 | 0                 | 120,000              |
| Aquifer Storage and Recovery Well 1          | C-149 | 481/6120         | 500053 / 500053         | 0                      | 0                                          | 400,000              | 3,600,000            | 0                 | 0                 | 0                 | 0                 | 0                 | 4,000,000            |
| Aquifer Storage and Recovery Well 2          | C-150 | 481/6120         | 500054 / 500054         | 0                      | 0                                          | 400,000              | 3,600,000            | 0                 | 0                 | 0                 | 0                 | 0                 | 4,000,000            |
| Diamond Oaks Fire Hydrant Relocation Project | C-151 | 482/6130         | 500055 / 500055         | 0                      | 0                                          | 50,000               | 50,000               | 50,000            | 50,000            | 50,000            | 60,000            | 0                 | 260,000              |
| Access Control System Rehabilitation         | C-152 | 482/6130         | 500056 / 500056         | 0                      | 0                                          | 590,000              | 110,000              | 0                 | 0                 | 0                 | 0                 | 0                 | 700,000              |
| Corrosion Protection Program Update          | C-153 | 482/6130         | 500057 / 500057         | 0                      | 0                                          | 600,000              | 1,100,000            | 0                 | 0                 | 0                 | 0                 | 0                 | 1,700,000            |
| Water System Vulnerability Assessment        | C-154 | 482/6130         | 500058 / 500058         | 0                      | 0                                          | 700,000              | 0                    | 0                 | 0                 | 0                 | 0                 | 0                 | 700,000              |
| Groundwater Well Property                    | C-155 | 481/6120         | 500059 / 500059         | 0                      | 0                                          | 500,000              | 400,000              | 400,000           | 400,000           | 400,000           | 400,000           | 0                 | 2,100,000            |
| <b>TOTAL</b>                                 |       |                  |                         | <b>\$ 4,414,033</b>    | <b>\$ 21,734,886</b>                       | <b>\$ 17,871,115</b> | <b>\$ 11,848,885</b> | <b>\$ 875,000</b> | <b>\$ 875,000</b> | <b>\$ 875,000</b> | <b>\$ 685,000</b> | <b>\$ 685,000</b> | <b>\$ 58,303,919</b> |

# WATER

| <u>CARRYOVER PROJECTS</u><br><u>PROJECT TITLE</u>             | <u>FUND</u><br><u>IFAS/IRP</u> | <u>PROJECT No.</u><br><u>IFAS/IRP</u> | <u>PRIOR YEARS</u><br><u>ACTUALS</u> | <u>FY2018-19</u><br><u>AMENDED BUDGET</u><br><u>&amp; CARRYOVER</u> |                   | <u>FY2019-20</u>     | <u>FY2020-21</u>     | <u>FY2021-22</u>  | <u>FY2022-23</u>  | <u>FY2023-24</u>  | <u>TOTAL</u><br><u>PROJECT</u> |
|---------------------------------------------------------------|--------------------------------|---------------------------------------|--------------------------------------|---------------------------------------------------------------------|-------------------|----------------------|----------------------|-------------------|-------------------|-------------------|--------------------------------|
|                                                               |                                |                                       |                                      |                                                                     |                   |                      |                      |                   |                   |                   |                                |
| Woodcreek North Well                                          | 481/6120                       | 043002 / 400009                       | \$ 2,967,192                         | \$                                                                  | 682,809           | \$ 0                 | \$ 0                 | \$ 0              | \$ 0              | \$ 0              | \$ 3,650,001                   |
| Enterprise Asset Management                                   | 100/1001                       | 079005 / 400016                       | 12,888,067                           |                                                                     | 245,269           | 0                    | 0                    | 0                 | 0                 | 0                 | 13,133,336                     |
| Proposition 84 Well Grant Project                             | 481/6120                       | 113002 / 400032                       | 5,470,316                            |                                                                     | 290,587           | 0                    | 0                    | 0                 | 0                 | 0                 | 5,760,903                      |
| Zone 4 Pump Back Station                                      | 481/6120                       | 143001 / 400045                       | 4,090,133                            |                                                                     | 38,950            | 0                    | 0                    | 0                 | 0                 | 0                 | 4,129,083                      |
| Sunrise Avenue Water Condition Assessment                     | 482/6130                       | 153001 / 400061                       | 0                                    |                                                                     | 150,000           | 0                    | 0                    | 0                 | 0                 | 0                 | 150,000                        |
| Arc Flash Mitigation Project                                  | 482/6130                       | 153002 / 400062                       | 225,454                              |                                                                     | 244,546           | 0                    | 0                    | 0                 | 0                 | 0                 | 470,000                        |
| Atlantic Street Rehabilitation Project near Railroad Crossing | 482/6130                       | 163001 / 400076                       | 14,198                               |                                                                     | 1,585,802         | 0                    | 0                    | 0                 | 0                 | 0                 | 1,600,000                      |
| Water Treatment Plant 2 Million Gallon Tank Rehabilitation    | 482/6130                       | 173004 / 400102                       | 11,215                               |                                                                     | 1,513,785         | 0                    | 0                    | 0                 | 0                 | 0                 | 1,525,000                      |
| Water Treatment Plant Program Logic Controller Update         | 482/6130                       | 183004 / 400202                       | 3,601                                |                                                                     | 2,571,399         | 0                    | 0                    | 0                 | 0                 | 0                 | 2,575,000                      |
| Hanson Asset Data Conversion                                  | 480/6101                       | 500011 / 500011                       | 0                                    |                                                                     | 200,000           | 0                    | 0                    | 0                 | 0                 | 0                 | 200,000                        |
| Long Term Water Contract                                      | 481/6120                       | 500019 / 500019                       | 0                                    |                                                                     | 1,950,000         | 0                    | 0                    | 0                 | 0                 | 0                 | 1,950,000                      |
| Water System Model                                            | 482/6130                       | 500020 / 500020                       | 0                                    |                                                                     | 400,000           | 0                    | 0                    | 0                 | 0                 | 0                 | 400,000                        |
| Wells 67 Chemical Retrofit                                    | 482/6130                       | 500021 / 500021                       | 0                                    |                                                                     | 345,000           | 0                    | 0                    | 0                 | 0                 | 0                 | 345,000                        |
| Stoneridge Tank Site Improvements                             | 482/6130                       | 500022 / 500022                       | 0                                    |                                                                     | 320,000           | 0                    | 0                    | 0                 | 0                 | 0                 | 320,000                        |
| Industrial Avenue 12 inch Water Main Rehabilitation           | 482/6130                       | 500023 / 500023                       | 0                                    |                                                                     | 230,000           | 0                    | 0                    | 0                 | 0                 | 0                 | 230,000                        |
| Water Meter Retrofit                                          | 483/6140                       | 500024 / 500024                       | 0                                    |                                                                     | 100,000           | 0                    | 0                    | 0                 | 0                 | 0                 | 100,000                        |
| Water Front Counter Remodel                                   | 480/6101                       | 500029 / 500029                       | 0                                    |                                                                     | 345,000           | 0                    | 0                    | 0                 | 0                 | 0                 | 345,000                        |
| <b>TOTAL CARRYOVER</b>                                        |                                |                                       | <b>\$ 25,670,176</b>                 | <b>\$</b>                                                           | <b>11,213,147</b> | <b>\$ 0</b>          | <b>\$ 0</b>          | <b>\$ 0</b>       | <b>\$ 0</b>       | <b>\$ 0</b>       | <b>\$ 36,883,323</b>           |
| <b>TOTAL WATER PROJECTS</b>                                   |                                |                                       |                                      |                                                                     |                   |                      |                      |                   |                   |                   |                                |
|                                                               |                                |                                       | <b>\$ 30,084,209</b>                 | <b>\$</b>                                                           | <b>32,948,033</b> | <b>\$ 17,871,115</b> | <b>\$ 11,848,885</b> | <b>\$ 875,000</b> | <b>\$ 875,000</b> | <b>\$ 685,000</b> | <b>\$ 95,187,242</b>           |

## WATER PROJECTS

| <u>PROJECT TITLE</u>                                     | <u>Page</u> | <u>PROJECT<br/>NUMBER</u> | <u>PRIOR<br/>YEARS</u> | <u>FY 2018-19</u>    | <u>FY 2019-20</u>   | <u>FY 2020-21</u>   | <u>FY 2021-22</u>   | <u>FY 2022-23</u>   | <u>TOTAL<br/>PROJECT</u> |
|----------------------------------------------------------|-------------|---------------------------|------------------------|----------------------|---------------------|---------------------|---------------------|---------------------|--------------------------|
| WATER METER PURCHASE AND REPLACEMENT                     | C-98        | 31002 - 31003             | \$ 450,000             | \$ 450,000           | \$ 450,000          | \$ 450,000          | \$ 450,000          | \$ 450,000          | \$ 2,700,000             |
| WATER METER RETROFIT - MULTI FAMILY DWELLING             | C-99        | 31011                     | 180,000                | 240,000              | 240,000             | 240,000             | 240,000             | 240,000             | 1,380,000                |
| WATER-OUTREACH                                           | C-100       | 31012                     | 251,173                | 171,500              | 175,000             | 179,000             | 182,000             | 186,000             | 1,144,673                |
| WATER UTILITY REHABILITATION PROGRAM SUPPORT             | C-101       | 31013                     | 75,000                 | 75,000               | 75,000              | 75,000              | 75,000              | 75,000              | 450,000                  |
| WATER - TECHNOLOGY REPLACEMENT                           | C-102       | 31050                     | 51,978                 | 50,000               | 50,000              | 50,000              | 50,000              | 50,000              | 301,978                  |
| WATER-EU ENGINEERING TECHNOLOGY REPLACEMENT              | C-103       | 31051                     | 25,000                 | 25,000               | 25,000              | 25,000              | 25,000              | 25,000              | 150,000                  |
| EU OUTREACH                                              | C-104       | 31112                     | 239,155                | 184,500              | 187,500             | 192,000             | 196,000             | 200,000             | 1,199,155                |
| GROUNDWATER MANAGEMENT PLAN                              | C-105       | 30002 053005              | 2,597,906              | 225,000              | 225,000             | 225,000             | 225,000             | 225,000             | 3,722,906                |
| ADVANCED METERING INFRASTRUCTURE (AMI)                   | C-106       | 30003 163001              | 300,000                | 1,300,000            | 0                   | 0                   | 0                   | 0                   | 1,600,000                |
| WATER FACILITIES COND ASSESS                             | C-107       | 30003 163002              | 300,000                | 360,000              | 360,000             | 125,000             | 125,000             | 125,000             | 1,395,000                |
| ADVANCED METERING INFRASTRUCTURE (AMI)                   | C-108       | 30001 173001              | 7,000,000              | 0                    | 1,000,000           | 0                   | 0                   | 0                   | 8,000,000                |
| WELL 18 PUMP STATION                                     | C-109       | 30002 183002              | 1,000,000              | 1,500,000            | 0                   | 0                   | 0                   | 0                   | 2,500,000                |
| WTP PLC Rehabilitation Project                           | C-110       | 30003 183004              | 575,000                | 2,000,000            | 575,000             | 0                   | 0                   | 0                   | 3,150,000                |
| HANSON ASSET DATA CONVERSION                             | C-111       | 30001 500011              | 0                      | 200,000              | 0                   | 0                   | 0                   | 0                   | 200,000                  |
| STATE WATER EFFICIENCY FRAMEWORK                         | C-112       | 30001 500012              | 0                      | 100,000              | 50,000              | 50,000              | 50,000              | 50,000              | 300,000                  |
| RIVERARC FEASIBILITY                                     | C-113       | 30001 500013              | 0                      | 125,000              | 250,000             | 0                   | 0                   | 0                   | 375,000                  |
| ALTERNATIVE FOLSOM DIVERSION                             | C-114       | 30002 500014              | 0                      | 150,000              | 150,000             | 100,000             | 0                   | 0                   | 400,000                  |
| SMUD REASSIGNMENT                                        | C-115       | 30002 500015              | 0                      | 300,000              | 600,000             | 50,000              | 0                   | 0                   | 950,000                  |
| SITES RESERVOIR PROJ                                     | C-116       | 30002 500016              | 0                      | 100,000              | 50,000              | 50,000              | 50,000              | 50,000              | 300,000                  |
| INTERIM RENEWAL CONTRACT                                 | C-117       | 30002 500017              | 0                      | 200,000              | 0                   | 0                   | 0                   | 0                   | 200,000                  |
| INTEGRATED RESOURCES PLAN                                | C-118       | 30002 500018              | 0                      | 200,000              | 140,000             | 0                   | 0                   | 0                   | 340,000                  |
| LONG TERM WATER CONTRACT                                 | C-119       | 30002 500019              | 0                      | 1,950,000            | 0                   | 0                   | 0                   | 0                   | 1,950,000                |
| WATER SYSTEM MODEL                                       | C-120       | 30003 500020              | 0                      | 400,000              | 0                   | 0                   | 0                   | 0                   | 400,000                  |
| WELLS 6/7 CHEMICAL RETROFIT                              | C-121       | 30003 500021              | 0                      | 345,000              | 0                   | 0                   | 0                   | 0                   | 345,000                  |
| STONERIDGE TANK SITE IMPROVEMENTS                        | C-122       | 30003 500022              | 0                      | 320,000              | 0                   | 0                   | 0                   | 0                   | 320,000                  |
| INDUSTRIAL AVE 12 INCH WATER MAIN REHABILITATION PROJECT | C-123       | 30003 500023              | 0                      | 230,000              | 0                   | 0                   | 0                   | 0                   | 230,000                  |
| WATER METER RETROFIT                                     | C-124       | 30004 500024              | 0                      | 100,000              | 0                   | 0                   | 0                   | 0                   | 100,000                  |
| <b>TOTAL</b>                                             |             |                           | <b>\$ 13,045,212</b>   | <b>\$ 11,301,000</b> | <b>\$ 4,602,500</b> | <b>\$ 1,811,000</b> | <b>\$ 1,668,000</b> | <b>\$ 1,676,000</b> | <b>\$ 34,103,712</b>     |

## WATER PROJECTS

| <u>PROJECT TITLE</u>                                        | <u>Page</u> | <u>PROJECT<br/>NUMBER</u> | <u>PRIOR<br/>YEARS</u> | <u>FY 2017-18</u>   | <u>FY 2018-19</u>  | <u>FY 2019-20</u>  | <u>FY 2020-21</u>  | <u>FY 2021-22</u>  | <u>TOTAL<br/>PROJECT</u> |
|-------------------------------------------------------------|-------------|---------------------------|------------------------|---------------------|--------------------|--------------------|--------------------|--------------------|--------------------------|
| WATER METER PURCHASE AND REPLACEMENT                        | C-56        | 31002 - 31003             | \$700,000              | \$350,000           | \$350,000          | \$350,000          | \$350,000          | \$350,000          | \$2,450,000              |
| WATER METER RETROFIT - MULTI FAMILY DWELLING                | C-57        | 31011                     | 360,000                | 180,000             | 180,000            | 180,000            | 180,000            | 180,000            | 1,260,000                |
| WATER-OUTREACH                                              | C-58        | 31012                     | 478,586                | 160,000             | 171,666            | 175,099            | 178,601            | 182,173            | 1,346,125                |
| WATER UTILITY REHABILITATION PROGRAM SUPPORT                | C-59        | 31013                     | 150,000                | 75,000              | 75,000             | 75,000             | 75,000             | 75,000             | 525,000                  |
| WATER - TECHNOLOGY REPLACEMENT                              | C-60        | 31050                     | 54,353                 | 50,000              | 50,000             | 50,000             | 50,000             | 50,000             | 304,353                  |
| WATER-EU ENGINEERING-TECHNOLOGY REPLACEMENT                 | C-61        | 31051                     | 50,000                 | 25,000              | 25,000             | 25,000             | 25,000             | 25,000             | 175,000                  |
| EU OUTREACH                                                 | C-62        | 31112                     | 307,641                | 175,500             | 184,671            | 188,364            | 192,132            | 195,974            | 1,244,282                |
| GROUNDWATER MANAGEMENT PLAN                                 | C-63        | 30002 / 053005            | 2,372,906              | 225,000             | 225,000            | 225,000            | 225,000            | 225,000            | 3,497,906                |
| ADVANCED METERING INFRASTRUCTURE (AMI)                      | C-64        | 30001 / 173001            | 1,000,000              | 6,000,000           | 0                  | 0                  | 0                  | 0                  | 7,000,000                |
| WELL 9 PUMP STATION PROJECT                                 | C-65        | 30002 / 173002            | 1,000,000              | 1,500,000           | 0                  | 0                  | 0                  | 0                  | 2,500,000                |
| COOK RIOLO TO BASELINE 24" WATER MAIN AND METERING FACILITY | C-66        | 30002 / 183001            | 0                      | 2,050,000           | 3,400,000          | 3,050,000          | 0                  | 0                  | 8,500,000                |
| WELL 18 PUMP STATION                                        | C-67        | 30002 / 183002            | 0                      | 1,000,000           | 1,500,000          | 0                  | 0                  | 0                  | 2,500,000                |
| WELL 6 COLUMN PIPE REHAB                                    | C-68        | 30003 / 183003            | 0                      | 90,000              | 0                  | 0                  | 0                  | 0                  | 90,000                   |
| <b>TOTAL</b>                                                |             |                           | <b>\$6,473,486</b>     | <b>\$11,880,500</b> | <b>\$6,161,337</b> | <b>\$4,318,463</b> | <b>\$1,275,733</b> | <b>\$1,283,147</b> | <b>\$31,392,666</b>      |

## WATER PROJECTS

| <u>PROJECT TITLE</u>                                  | <u>Page</u> | <u>PROJECT NUMBER</u> | <u>PRIOR YEARS</u> | <u>FY 2016-17</u>  | <u>FY 2017-18</u>  | <u>FY 2018-19</u>  | <u>FY 2019-20</u>  | <u>FY 2020-21</u> | <u>TOTAL PROJECT</u> |
|-------------------------------------------------------|-------------|-----------------------|--------------------|--------------------|--------------------|--------------------|--------------------|-------------------|----------------------|
| ONGOING ANNUAL PROJECTS                               | C-63        | 31002 - 31003         | \$350,000          | \$350,000          | \$350,000          | \$350,000          | \$350,000          | \$350,000         | \$2,100,000          |
| WATER METER RETROFIT - MULTI FAMILY DWELLING          | C-64        | 31011                 | 180,000            | 180,000            | 180,000            | 180,000            | 180,000            | 0                 | 900,000              |
| WATER-OUTREACH                                        | C-65        | 31012                 | 223,456            | 161,500            | 46,500             | 46,500             | 46,500             | 46,500            | 570,956              |
| WATER UTILITY REHABILITATION PROGRAM SUPPORT          | C-66        | 31013                 | 75,000             | 75,000             | 75,000             | 75,000             | 75,000             | 75,000            | 450,000              |
| WATER - TECHNOLOGY REPLACEMENT                        | C-67        | 31050                 | 50,000             | 50,000             | 50,000             | 50,000             | 50,000             | 50,000            | 300,000              |
| WATER-EU ENGINEERING-TECHNOLOGY REPLACEMENT           | C-68        | 31051                 | 25,000             | 25,000             | 25,000             | 25,000             | 25,000             | 25,000            | 150,000              |
| EU OUTREACH                                           | C-69        | 31112                 | 138,322            | 119,000            | 119,000            | 119,000            | 119,000            | 119,000           | 733,322              |
| GROUNDWATER MANAGEMENT PLAN                           | C-70        | 30002 / 053005        | 2,197,906          | 175,000            | 225,000            | 225,000            | 225,000            | 0                 | 3,047,906            |
| ADVANCED METERING INFRASTRUCTURE (AMI)                | C-71        | 30001 / 173001        | 0                  | 1,000,000          | 6,000,000          | 0                  | 0                  | 0                 | 7,000,000            |
| WELL 9 PUMP STATION PROJECT                           | C-72        | 30002 / 173002        | 0                  | 1,000,000          | 1,500,000          | 0                  | 0                  | 0                 | 2,500,000            |
| SUNRISE AVE 24 IN WATER SYSTEM REHAB PROJECT          | C-73        | 30003 / 173003        | 0                  | 1,125,000          | 0                  | 0                  | 0                  | 0                 | 1,125,000            |
| WATER TREATMENT PLANT 2MG TANK REHABILITATION PROJECT | C-74        | 30003 / 173004        | 0                  | 1,525,000          | 0                  | 0                  | 0                  | 0                 | 1,525,000            |
| <b>TOTAL</b>                                          |             |                       | <b>\$3,239,684</b> | <b>\$5,785,500</b> | <b>\$8,570,500</b> | <b>\$1,070,500</b> | <b>\$1,070,500</b> | <b>\$665,500</b>  | <b>\$20,402,184</b>  |



# WASTEWATER

| PROJECT TITLE                                                                    | PAGE  | FUND<br>IFASIERP | PROJECT No.<br>IFASIERP | PRIOR YEARS<br>ACTUALS | FY2018-19<br>AMENDED BUDGET<br>& CARRYOVER |                | FY2019-20           | FY2020-21   | FY2021-22   | FY2022-23   | FY2023-24   | TOTAL<br>PROJECT    |
|----------------------------------------------------------------------------------|-------|------------------|-------------------------|------------------------|--------------------------------------------|----------------|---------------------|-------------|-------------|-------------|-------------|---------------------|
|                                                                                  |       |                  |                         |                        |                                            |                |                     |             |             |             |             |                     |
| Wastewater and Recycled Water Reliability                                        | C-131 | 474 / 2024       | 183503 / 400146         | \$ 77,308              | \$                                         | 468,421        | \$ 104,167          | \$ 0        | \$ 0        | \$ 0        | \$ 0        | \$ 649,896          |
| Pleasant Grove Influent Pump Station Variable Frequency Drive Replacement        | C-132 | 474 / 6230       | 500060 / 500060         | 0                      | 0                                          | 0              | 330,000             | 0           | 0           | 0           | 0           | 330,000             |
| Dry Creek Wastewater Treatment Plant 66-inch Influent Pipe Replacement           | C-133 | 474 / 6230       | 500061 / 500061         | 0                      | 0                                          | 0              | 815,000             | 0           | 0           | 0           | 0           | 815,000             |
| Pleasant Grove Wastewater Treatment Plant Washer Compactor Replacement           | C-134 | 474 / 6230       | 500062 / 500062         | 0                      | 0                                          | 0              | 300,000             | 0           | 0           | 0           | 0           | 300,000             |
| Dry Creek Operations and Laboratory Building                                     | C-135 | 474 / 6230       | 500063 / 500063         | 0                      | 0                                          | 0              | 370,000             | 0           | 0           | 0           | 0           | 370,000             |
| Dry Creek and Pleasant Grove Wastewater Treatment Plants Lighting Rehabilitation | C-136 | 474 / 6230       | 500064 / 500064         | 0                      | 0                                          | 0              | 640,000             | 0           | 0           | 0           | 0           | 640,000             |
| <b>TOTAL</b>                                                                     |       |                  |                         | <b>\$ 77,308</b>       | <b>\$</b>                                  | <b>468,421</b> | <b>\$ 2,559,167</b> | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 3,104,896</b> |

# WASTEWATER

| CARRYOVER PROJECTS<br>PROJECT TITLE                                                       | FUND<br>IFASIERP | PROJECT No.<br>IFASIERP | PRIOR YEARS<br>ACTUALS | FY2018-19<br>AMENDED BUDGET<br>& CARRYOVER |                     | FY2019-20   | FY2020-21   | FY2021-22   | FY2022-23   | FY2023-24   | TOTAL<br>PROJECT     |
|-------------------------------------------------------------------------------------------|------------------|-------------------------|------------------------|--------------------------------------------|---------------------|-------------|-------------|-------------|-------------|-------------|----------------------|
|                                                                                           |                  |                         |                        |                                            |                     |             |             |             |             |             |                      |
| Supervisory Control and Data Acquisition System Replacement                               | 474 / 6230       | 103501 / 400027         | \$ 9,966,019           | \$ 3,399,332                               | \$ 0                | \$ 0        | \$ 0        | \$ 0        | \$ 0        | \$ 0        | \$ 13,365,351        |
| Atkinson Street at Dry Creek Wastewater Pipe                                              | 474 / 6230       | 123503 / 400036         | 3,709                  | 310,791                                    | 0                   | 0           | 0           | 0           | 0           | 0           | 314,500              |
| Shadowbrook Lift Station and Foremain                                                     | 474 / 6230       | 143501 / 400046         | 1,406,424              | 668,577                                    | 0                   | 0           | 0           | 0           | 0           | 0           | 2,075,001            |
| Dry Creek Wastewater Treatment Plant Programmable Logic Controller Rehabilitation Project | 474 / 6230       | 153505 / 400064         | 10,051                 | 1,639,949                                  | 0                   | 0           | 0           | 0           | 0           | 0           | 1,650,000            |
| 2018 Sewer Collection System Cured-in-Place-Pipe Rehabilitation                           | 474 / 6230       | 163502 / 400078         | 399,293                | 650,707                                    | 0                   | 0           | 0           | 0           | 0           | 0           | 1,050,000            |
| Wastewater Interceptor Cleaning Project                                                   | 474 / 6230       | 163504 / 400079         | 172,411                | 82,589                                     | 0                   | 0           | 0           | 0           | 0           | 0           | 255,000              |
| Wastewater Interceptor Inspection/Condition Assessment/Cleaning                           | 474 / 6230       | 163505 / 400080         | 9,865                  | 305,135                                    | 0                   | 0           | 0           | 0           | 0           | 0           | 315,000              |
| Wastewater Condition Assessment                                                           | 474 / 6230       | 163506 / 400081         | 844,911                | 517,084                                    | 0                   | 0           | 0           | 0           | 0           | 0           | 1,361,995            |
| Maximo/Granite XP Integration Database Migration                                          | 474 / 6230       | 163508 / 400082         | 0                      | 150,000                                    | 0                   | 0           | 0           | 0           | 0           | 0           | 150,000              |
| Dry Creek Wastewater Treatment Plant Nitrate Reduction                                    | 474 / 6230       | 163509 / 400083         | 5,391,484              | 16,351,739                                 | 0                   | 0           | 0           | 0           | 0           | 0           | 21,743,223           |
| Foothills Boulevard 42-inch Regional Sewer                                                | 470 / 6201       | 173502 / 400105         | 101,671                | 8,328                                      | 0                   | 0           | 0           | 0           | 0           | 0           | 109,999              |
| Historical Data Repository Upgrade                                                        | 474 / 6230       | 173506 / 400108         | 1,645,022              | 2,154,980                                  | 0                   | 0           | 0           | 0           | 0           | 0           | 3,800,002            |
| Dry Creek Wastewater Treatment Plant Cogeneration                                         | 474 / 6230       | 173510 / 400109         | 1,609,582              | 7,565,201                                  | 0                   | 0           | 0           | 0           | 0           | 0           | 9,174,783            |
| 2017 Dry Creek Wastewater Treatment Plant Roof Rehabilitation                             | 470 / 6201       | 183501 / 400144         | 122,195                | 22,805                                     | 0                   | 0           | 0           | 0           | 0           | 0           | 145,000              |
| Castle Court Lift Station Rehabilitation                                                  | 474 / 6230       | 183502 / 400145         | 0                      | 50,000                                     | 0                   | 0           | 0           | 0           | 0           | 0           | 50,000               |
| Sewer Foremain Condition Assessment                                                       | 474 / 6230       | 500010 / 500010         | 0                      | 400,000                                    | 0                   | 0           | 0           | 0           | 0           | 0           | 400,000              |
| <b>TOTAL CARRYOVER</b>                                                                    |                  |                         | <b>\$ 21,682,637</b>   | <b>\$ 34,277,217</b>                       | <b>\$ 0</b>         | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 55,959,854</b> |
| <b>TOTAL WASTEWATER PROJECTS</b>                                                          |                  |                         |                        |                                            |                     |             |             |             |             |             |                      |
|                                                                                           |                  |                         | <b>\$ 21,759,945</b>   | <b>\$ 34,745,638</b>                       | <b>\$ 2,559,167</b> | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 0</b> | <b>\$ 59,064,750</b> |

## WASTEWATER PROJECTS

| <u>PROJECT TITLE</u>                 | <u>Page</u> | <u>PROJECT NUMBER</u> | <u>PRIOR YEARS</u>   | <u>FY 2018-19</u>    | <u>FY 2019-20</u>   | <u>FY 2020-21</u> | <u>FY 2021-22</u> | <u>FY 2022-23</u> | <u>TOTAL PROJECT</u> |
|--------------------------------------|-------------|-----------------------|----------------------|----------------------|---------------------|-------------------|-------------------|-------------------|----------------------|
| UPGRADE SEWER LINE                   | C-86        | 31502                 | \$ 150,000           | \$ 150,000           | \$ 150,000          | \$ 150,000        | \$ 150,000        | \$ 150,000        | \$ 900,000           |
| CLEAN OUT INSTALLATION               | C-87        | 31506                 | 50,000               | 50,000               | 50,000              | 50,000            | 50,000            | 50,000            | 300,000              |
| SEWER SERVICE UPGRADE                | C-88        | 31508                 | 100,000              | 100,000              | 100,000             | 100,000           | 100,000           | 100,000           | 600,000              |
| EMERGENCY COLLECTION SYSTEM REPAIR   | C-89        | 31509                 | 500,000              | 500,000              | 500,000             | 500,000           | 500,000           | 500,000           | 3,000,000            |
| WASTEWATER-OUTREACH                  | C-90        | 31512                 | 130,110              | 90,500               | 93,000              | 94,500            | 96,500            | 98,000            | 602,610              |
| WASTEWATER - TECHNOLOGY REPLACEMENT  | C-91        | 31550                 | 51,978               | 50,000               | 50,000              | 50,000            | 50,000            | 50,000            | 301,978              |
| PLC REHABILITATION PROJECT           | C-92        | 30503 153505          | 1,400,000            | 250,000              | 0                   | 0                 | 0                 | 0                 | 1,650,000            |
| DCWWTP NITRATE REDUCTION PROJECT     | C-93        | 30503 163509          | 10,090,248           | 9,628,931            | 0                   | 0                 | 0                 | 0                 | 19,719,179           |
| DRY CREEK WWTP COGENERATION          | C-94        | 30503 173510          | 1,705,628            | 6,700,328            | 0                   | 0                 | 0                 | 0                 | 8,405,956            |
| RECYCLED WATER EXPANSION EVALUATION  | C-95        | 30503 183503          | 90,000               | 455,729              | 104,167             | 0                 | 0                 | 0                 | 649,896              |
| SEWER FORCEMAIN CONDITION ASSESSMENT | C-96        | 30503 500010          | 0                    | 400,000              | 0                   | 0                 | 0                 | 0                 | 400,000              |
| <b>TOTAL</b>                         |             |                       | <b>\$ 14,267,964</b> | <b>\$ 18,375,488</b> | <b>\$ 1,047,167</b> | <b>\$ 944,500</b> | <b>\$ 946,500</b> | <b>\$ 948,000</b> | <b>\$ 36,529,619</b> |

## WASTEWATER PROJECTS

| PROJECT TITLE                            | Page | PROJECT NUMBER | PRIOR YEARS | FY 2017-18  | FY 2018-19   | FY 2019-20  | FY 2020-21  | FY 2021-22  | TOTAL PROJECT |
|------------------------------------------|------|----------------|-------------|-------------|--------------|-------------|-------------|-------------|---------------|
| UPGRADE SEWER LINE                       | C-70 | 31502          | \$300,000   | \$150,000   | \$150,000    | \$150,000   | \$150,000   | \$150,000   | \$1,050,000   |
| CLEAN OUT INSTALLATION                   | C-71 | 31506          | 100,000     | 50,000      | 50,000       | 50,000      | 50,000      | 50,000      | 350,000       |
| SEWER MANHOLE UPGRADE                    | C-72 | 31507          | 950,000     | 250,000     | 250,000      | 250,000     | 250,000     | 250,000     | 2,200,000     |
| SEWER SERVICE UPGRADE                    | C-73 | 31508          | 200,000     | 100,000     | 100,000      | 100,000     | 100,000     | 100,000     | 700,000       |
| EMERGENCY COLLECTION SYSTEM REPAIR       | C-74 | 31509          | 1,000,000   | 500,000     | 500,000      | 500,000     | 500,000     | 500,000     | 3,500,000     |
| WASTEWATER-OUTREACH                      | C-75 | 31512          | 159,571     | 85,500      | 90,984       | 92,765      | 94,569      | 96,409      | 619,798       |
| WASTEWATER - TECHNOLOGY REPLACEMENT      | C-76 | 31550          | 104,353     | 50,000      | 50,000       | 50,000      | 50,000      | 50,000      | 354,353       |
| SHADOWBROOK LIFT STATION & FORCE MAIN    | C-77 | 30503 / 143501 | 1,524,999   | 550,000     | 0            | 0           | 0           | 0           | 2,074,999     |
| PLC REHABILITATION PROJECT               | C-78 | 30503 / 153505 | 400,000     | 1,000,000   | 250,000      | 0           | 0           | 0           | 1,650,000     |
| WASTEWATER INTERCEPTOR CLEANING PROJECT  | C-79 | 30503 / 163504 | 100,000     | 15,000      | 0            | 0           | 0           | 0           | 115,000       |
| DCWWTP NITRATE REDUCTION PROJECT         | C-80 | 30503 / 163509 | 1,700,000   | 3,766,451   | 4,105,696    | 0           | 0           | 0           | 9,572,147     |
| SOFTWARE APPLICATION UPGRADES            | C-81 | 30501 / 173505 | 300,000     | 1,250,000   | 1,250,000    | 0           | 0           | 0           | 2,800,000     |
| DRY CREEK WWTP COGENERATION              | C-82 | 30503 / 173510 | 1,091,616   | 407,919     | 6,395,000    | 1,747,523   | 0           | 0           | 9,642,058     |
| 2017 DCWWTP ROOF REHABILITATION          | C-83 | 30505 / 183501 | 0           | 115,000     | 0            | 0           | 0           | 0           | 115,000       |
| CASTLE COURT LIFT STATION REHABILITATION | C-84 | 30503 / 183502 | 0           | 50,000      | 0            | 0           | 0           | 0           | 50,000        |
| WW & RW RELIABILITY                      | C-85 | 30503 / 183503 | 0           | 90,000      | 90,000       | 0           | 0           | 0           | 180,000       |
| TOTAL                                    |      |                | \$7,930,539 | \$8,429,870 | \$13,281,680 | \$2,940,288 | \$1,194,569 | \$1,196,409 | \$34,973,355  |

## WASTEWATER PROJECTS

| PROJECT TITLE                                                         | Page | PROJECT NUMBER | PRIOR YEARS | FY 2016-17 | FY 2017-18 | FY 2018-19 | FY 2019-20 | FY 2020-21 | TOTAL PROJECT                                                                           |
|-----------------------------------------------------------------------|------|----------------|-------------|------------|------------|------------|------------|------------|-----------------------------------------------------------------------------------------|
| UPGRADE SEWER LINE                                                    | C-76 | 31502          | \$150,000   | \$150,000  | \$150,000  | \$150,000  | \$150,000  | \$0        | \$750,000                                                                               |
| CLEAN OUT INSTALLATION                                                | C-77 | 31506          | 50,000      | 50,000     | 50,000     | 50,000     | 50,000     | 0          | 250,000                                                                                 |
| SEWER MANHOLE UPGRADE                                                 | C-78 | 31507          | 250,000     | 250,000    | 250,000    | 250,000    | 250,000    | 0          | 1,250,000                                                                               |
| SEWER SERVICE UPGRADE                                                 | C-79 | 31508          | 100,000     | 100,000    | 100,000    | 100,000    | 100,000    | 0          | 500,000                                                                                 |
| EMERGENCY COLLECTION SYSTEM REPAIR                                    | C-80 | 31509          | 500,000     | 500,000    | 500,000    | 500,000    | 500,000    | 0          | 2,500,000                                                                               |
| WASTEWATER UTILITY REHABILITATION PROGRAM SUPPORT                     | C-81 | 31510          | 75,000      | 75,000     | 75,000     | 75,000     | 75,000     | 75,000     | 450,000                                                                                 |
| WASTEWATER-OUTREACH                                                   | C-82 | 31512          | 70,855      | 63,500     | 0          | 0          | 0          | 0          | 134,355                                                                                 |
| WASTEWATER - TECHNOLOGY REPLACEMENT                                   | C-83 | 31550          | 50,000      | 50,000     | 50,000     | 50,000     | 50,000     | 50,000     | 300,000                                                                                 |
| WW INTERCEPTOR INSPECTION, CONDITION AND CLEANING PH II               | C-84 | 30503 / 163505 | 200,000     | 115,000    | 0          | 0          | 0          | 0          | 315,000                                                                                 |
| ROOF REHABILITATION PROJECT AT THE REGIONAL DCWWTP FACILITY           | C-85 | 30505 / 173501 | 0           | 315,000    | 0          | 0          | 0          | 0          | 315,000                                                                                 |
| FOOTHILLS BLVD 42 INCH REGIONAL SEWER REHABILITATION                  | C-86 | 30505 / 173502 | 0           | 110,000    | 0          | 0          | 0          | 0          | 110,000                                                                                 |
| DRY CREEK WASTEWATER TREATMENT PLANT - DIGESTER 1 ROOF REHABILITATION | C-87 | 30505 / 173503 | 0           | 355,000    | 0          | 0          | 0          | 0          | 355,000                                                                                 |
| PG WWTP & DCWWP - SECONDARY CLARIFIER COATING                         | C-88 | 30503 / 173504 | 0           | 680,000    | 0          | 0          | 0          | 0          | 680,000                                                                                 |
| SOFTWARE APPLICATION UPGRADES                                         | C-89 | 30501 / 173505 | 0           | 300,000    | 1,250,000  | 1,250,000  | 1,250,000  | 1,250,000  | 5,300,000                                                                               |
| TOTAL                                                                 |      |                |             |            |            |            |            |            | \$1,445,855    \$3,113,500    \$2,425,000    \$2,425,000    \$1,375,000    \$13,209,355 |



## COUNCIL COMMUNICATION

**CC #: 0991**

**File #: 0704**

**Title:** Per Capita Grant Program - Approval of Project Application

**Contact:** Tara Gee 916-774-5253 tgee@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 7.8.**

### RECOMMENDATION TO COUNCIL

Staff recommends City Council adopt a resolution to approve the filing of project(s) application(s) for Per Capita (Prop 68) grant funds.

### BACKGROUND

The State Department of Parks and Recreation has been delegated the responsibility by the Legislature of the State of California for the administration of the Per Capita Grant Program, setting up necessary procedures governing application(s). These procedures, established by the State Department of Parks and Recreation, require the grantee's Governing Body to certify by resolution the approval of project application(s) before submission of said applications to the State. The grantee will enter into a contract(s) with the State of California to complete submitted and approved project(s).

The per capita amount for the City of Roseville is \$177,952 and can be applied towards new capital, rehabilitation/replacement or new parkland acquisition. If the project(s) meets the state's definition of underserved, no local match is required. Underserved areas are defined as under-parked (insufficient parkland/1,000 population and based on the General Plan standard or income level). If the project does not meet either one of these two criteria, a 20% local match will be required. If the latter, staff will return to the Council with a budget adjustment.

Once the resolution has been approved and submitted to the State Department of Parks & Recreation, staff will work with the State Project Officer to determine an appropriate project or projects.

Projects under this grant must be completed by December 2023.

### FISCAL IMPACT

The amount of the per capita grant and timelines are most conducive to a rehabilitation project in either Royer, Saugstad, White, or Weber Parks, or Johnson Pool. Upgrades to any of these parks

& recreation sites will require no new General Fund allocations.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) only applies to projects which have the potential to cause a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA. (CEQA Guidelines §15061(b)(3)).

Respectfully Submitted,

Tara Gee, Park Planning & Development Superintendent

Jill Geller, Parks, Recreation & Libraries Director



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Dominick Casey, City Manager

### **ATTACHMENTS:**

Description

Resolution 20-369

RESOLUTION NO. 20-369

APPROVING THE CITY OF ROSEVILLE PER CAPITA GRANT PROGRAM APPLICATION  
TO THE STATE DEPARTMENT OF PARKS AND RECREATION, AND AUTHORIZING  
THE CITY MANAGER OR HIS DESIGNEE TO EXECUTE ALL RELATED FORMS AND  
AGREEMENTS ON BEHALF OF THE CITY OF ROSEVILLE

WHEREAS, the State Department of Parks and Recreation has been delegated the responsibility by the Legislature of the State of California for the administration of the Per Capita Grant Program, setting up necessary procedures governing application(s); and

WHEREAS, said procedures established by the State Department of Parks and Recreation require the City Council of the City of Roseville to certify by resolution the approval of project application(s) before submission of said applications to the State; and

WHEREAS, the City of Roseville will enter into a contract(s) with the State of California to complete project(s);

NOW, THEREFORE, BE IT RESOLVED that the City Council of the City of Roseville hereby:

1. Approves the filing of project application(s) for Per Capita program grant project(s); and
2. Certifies that said grantee has or will have available, prior to commencement of project work utilizing Per Capita funding, sufficient funds to complete the project(s); and
3. Certifies that the grantee has or will have sufficient funds to operate and maintain the project(s), and
4. Certifies that all projects proposed will be consistent with the park and recreation element of the [city/county/district's] general or recreation plan (PRC §80063(a)), and
5. Certifies that these funds will be used to supplement, not supplant, local revenues in existence as of June 5, 2018 (PRC §80062(d)), and
6. Certifies that it will comply with the provisions of §1771.5 of the State Labor Code, and
7. (PRC §80001(b)(8)(A-G)) To the extent practicable, as identified in the "Presidential Memorandum--Promoting Diversity and Inclusion in Our National Parks, National Forests, and Other Public Lands and Waters," dated January 12, 2017, the [city/county/district] will consider a range of actions that include, but are not limited to, the following:
  - (A) Conducting active outreach to diverse populations, particularly minority, low-income, and disabled populations and tribal communities, to increase awareness within those communities and the public generally about specific programs and opportunities.
  - (B) Mentoring new environmental, outdoor recreation, and conservation leaders to increase diverse representation across these areas.



- (C) Creating new partnerships with state, local, tribal, private, and nonprofit organizations to expand access for diverse populations.
  - (D) Identifying and implementing improvements to existing programs to increase visitation and access by diverse populations, particularly minority, low-income, and disabled populations and tribal communities.
  - (E) Expanding the use of multilingual and culturally appropriate materials in public communications and educational strategies, including through social media strategies, as appropriate, that target diverse populations.
  - (F) Developing or expanding coordinated efforts to promote youth engagement and empowerment, including fostering new partnerships with diversity-serving and youth-serving organizations, urban areas, and programs.
  - (G) Identifying possible staff liaisons to diverse populations.
8. Agrees that to the extent practicable, the project(s) will provide workforce education and training, contractor and job opportunities for disadvantaged communities (PRC §80001(b)(5)).
  9. Certifies that the grantee shall not reduce the amount of funding otherwise available to be spent on parks or other projects eligible for funds under this division in its jurisdiction. A one-time allocation of other funding that has been expended for parks or other projects, but which is not available on an ongoing basis, shall not be considered when calculating a recipient's annual expenditures. (PRC §80062(d)).
  10. Certifies that the grantee has reviewed, understands, and agrees to the General Provisions contained in the contract shown in the Procedural Guide; and
  11. Delegates the authority to the (designated position, not name of person occupying position), or designee to conduct all negotiations, sign and submit all documents, including, but not limited to applications, agreements, amendments, and payment requests, which may be necessary for the completion of the grant scope(s); and
  12. Agrees to comply with all applicable federal, state and local laws, ordinances, rules, regulations and guidelines.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 20\_, by the following vote on roll call:

AYES            COUNCILMEMBERS:

NOES            COUNCILMEMBERS:

ABSENT        COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk



## COUNCIL COMMUNICATION

**CC #: 0988**  
**File #: 0800-03**

**Title:** Metering Services for Energy Imbalance Market - Professional Services Agreement  
**Contact:** Joe Pasco 916-746-1663 jpasco@roseville.ca.us

**Meeting Date: 9/16/2020**  
**Item #: 7.9.**

### RECOMMENDATION TO COUNCIL

Staff recommends City Council adopt a Resolution authorizing the City Manager to execute a professional services agreement with Trimark Associates, Inc. for metering services required for participation in the Western Energy Imbalance Market (EIM).

### BACKGROUND

On September 4, 2019, the Roseville City Council approved the City of Roseville executing a participation agreement with Balancing Authority of Northern California (BANC) to join the California Independent System Operator's (CAISO) Western Energy Imbalance Market (EIM) as part of the BANC Phase 2 EIM implementation effort (Phase 2).

A key requirement of participation in EIM is the ability to electronically send validated wholesale meter readings for Roseville's owned power plants and the energy coming into or out of the City of Roseville to CAISO.

Roseville Electric Utility currently contracts for wholesale meter reading services, but the existing services do not meet requirements for EIM. Staff solicited proposals through Request for Proposals (RFP) 07-077 for metering services for EIM. Trimark Associates, Inc. was the sole bidder, and is also the leading service provider in California for grid scale metering services. The evaluation team reviewed and scored the proposal, finding Trimark Associates, Inc. to be a suitable vendor to provide the requested scope of services based on their safety, quality, demonstrated experience, completeness of proposal, and price. The new agreement supersedes and enhances existing services to meet participation requirements for EIM, including completion of required meter documentation, setup of data management systems, and testing communication of the meter data. Additionally it includes the required ongoing electronic transfer of validated meter readings to CAISO to enable Roseville and CAISO to settle revenues and costs for Roseville's participation in EIM.

### FISCAL IMPACT

The total cost of services will not exceed \$166,690. Costs through June 2021 of \$55,170 are included in the Electric Department FY 2020-21 budget. The remaining costs will be budgeted in subsequent fiscal years and subject to City Council approval.

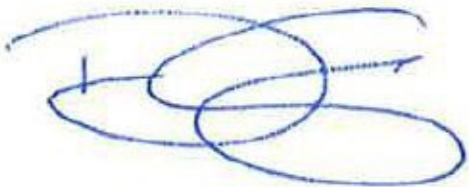
### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a professional services agreement meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Joe Pasco, Electric Business Analyst

Michelle Bertolino, Electric Utility Director

A handwritten signature in blue ink, appearing to read 'Dominick Casey', with a stylized, overlapping loop structure.

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Dominick Casey, City Manager

### **ATTACHMENTS:**

#### **Description**

Resolution 20-366

PSA for Metering Services for EIM

RESOLUTION NO. 20-366

APPROVING A PROFESSIONAL SERVICES AGREEMENT, BY AND BETWEEN THE CITY OF ROSEVILLE AND TRIMARK ASSOCIATES, INC., AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE

WHEREAS, a professional services agreement for Metering Services for Energy Imbalance Market, by and between the City of Roseville and Trimark Associates, Inc., has been reviewed by the City Council; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Roseville that said agreement is hereby approved and that the City Manager is authorized to execute it on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 20\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk



## COUNCIL COMMUNICATION

**CC #: 0990**

**File #: 0717**

**Title:** Old Roseville Fire Station, 400 Lincoln Street – Lease Agreement Amendment

**Contact:** Robert Cline 916-746-1172 [racline@roseville.ca.us](mailto:racline@roseville.ca.us)

**Meeting Date: 9/16/2020**

**Item #: 7.10.**

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council adopt a resolution authorizing the City Manager to execute a First Amendment to the Lease Agreement between the City of Roseville and the Roseville Fire Museum deferring the Roseville Fire Museum's first year of rent of \$6,204 to years two, three and four.

### BACKGROUND

On October 2, 2019, the City entered into a long-term Lease Agreement with the Roseville Fire Museum (RFM) for the property located at 400 Lincoln Street. The Lease Agreement allows the RFM to make necessary improvements to successfully and fully operate a museum. Additionally, the Lease Agreement provides that the RFM would pay annual rent in arrears, but that the rental amount could be offset based on the value of mutually agreed upon improvements to the property constructed by the RFM.

On March 4, 2020, Governor Gavin Newsom (Governor) proclaimed a State of Emergency in California as a result of the COVID-19 pandemic. Furthermore, on March 19, 2020, the Governor issued Executive Order N-33-20 ordering all of California to stay at home, unless in the category of essential services. As a result, the pandemic and stay at home order has prevented the RFM from being able to effectively fundraise which has prevented the RFM from constructing any improvements to the property. The economic impact to the RFM caused by these closures and the inability to construct any improvements to date, and because other landlords in the commercial real estate market are currently deferring rental payments, the parties desire to amend the Lease Agreement as described below:

1. Rent Deferral. The annual rent due on October 2, 2020 for year 1 of the Lease is \$6,204. Rent due from year one will be deferred and paid to the City in three equal installments in years 2, 3 and 4 resulting in the following rent schedule:

Year 1 (2020): \$0 (deferred into Years 2, 3 and 4)

Year 2 (2021): \$8,272

Year 3 (2022): \$8,272

Year 4 (2023): \$8,272  
Years 5-25 (2024-2044): \$6,204

2. All other provisions of the Lease Agreement shall remain unchanged and in full force and effect.

### FISCAL IMPACT

The proposed Lease Amendment will not affect the total rent to the City over the twenty-five year term. Rent due from year one will be deferred and paid to the City in three equal installments in years 2, 3 and 4. However, if mutually agreed-upon improvements are completed, the determined amount will qualify as rent credit. In addition to annual rent, the RFM will pay to maintain the property and all utility costs.

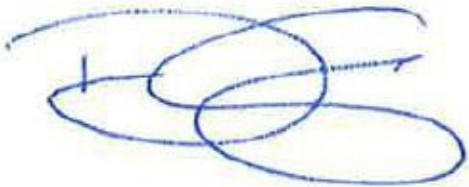
### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065(c)(3) and §15378. A lease amendment meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Robert Cline, Development Analyst

Laura Matteoli, Economic Development Director



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Dominick Casey, City Manager

### **ATTACHMENTS:**

#### **Description**

Resolution 20-368

Amendment to Lease Agreement - Roseville Fire Museum Lincoln Street

RESOLUTION NO. 20-368

APPROVING A FIRST AMENDMENT TO LEASE AGREEMENT, BETWEEN THE CITY OF ROSEVILLE AND ROSEVILLE FIRE MUSEUM, AND AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE

WHEREAS, a First Amendment to Lease Agreement Between the City of Roseville and Roseville Fire Museum regarding the Old Roseville Fire Station located at 400 Lincoln Street, has been reviewed by the City Council; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Roseville that said first amendment is hereby approved and that the City Manager is authorized to execute it on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 20\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk

**FIRST AMENDMENT TO LEASE AGREEMENT  
BETWEEN THE CITY OF ROSSEVILLE  
AND ROSEVILLE FIRE MUSEUM**

**OLD ROSEVILLE FIRE STATION**

THIS FIRST AMENDMENT TO LEASE AGREEMENT ("First Amendment") is made and entered into on this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by and between the City of Roseville, a municipal corporation ("CITY"), and Roseville Fire Museum, a California nonprofit corporation ("LESSEE"); and

**WITNESSETH:**

WHEREAS, on October 2, 2019, CITY and LESSEE entered into a Lease Agreement for the Old Roseville Fire Station located at 400 Lincoln Street in Roseville ("Property"); and

WHEREAS, LESSEE intended to renovate and repair the Property in order to operate a fire museum; and

WHEREAS, the Lease Agreement provided that LESSEE would pay Annual Rent in arrears, but that the rental amount could be offset based on the value of mutually agreed upon improvements to the Property constructed by LESSEE; and

WHEREAS, on March 4, 2020, Governor Gavin Newsom ("Governor") proclaimed a State of Emergency in California as a result of the COVID-19 pandemic; and

WHEREAS, on March 19, 2020, the Governor issued Executive Order N-33-20 ordering all of California to stay at home, unless in the category of essential services; and



WHEREAS, this pandemic and stay at home order has prevented LESSEE from being able to effectively fundraise; and

WHEREAS, furthermore this pandemic has prevented LESSEE from constructing any improvements to the Property; and

WHEREAS, as a result of the economic impact to LESSEE caused by these closures and the inability to construct any improvements to date, and because other landlords in the commercial real estate market are currently deferring rental payments, the parties desire to amend the Lease Agreement as described herein.

NOW, THEREFORE, the parties agree as follows:

1. Rent Deferral. The Annual Rent due on October 2, 2020 for Year 1 of the Lease is hereby deferred and will be paid to the City in three equal installments in Years 2, 3 and 4.

Therefore, the rent schedule shall be as follows:

Year 1 (2020): \$0 (deferred into Years 2, 3 and 4)

Year 2 (2021): \$8,272

Year 3 (2022): \$8,272

Year 4 (2023): \$8,272

Years 5-25 (2024-2044): \$6,204

2. All other provisions of the Lease Agreement shall remain unchanged and in full force and effect.

[Signatures Next Page]

IN WITNESS WHEREOF, the City of Roseville, a municipal corporation, has authorized the execution of this First Amendment to Lease Agreement in duplicate by its City Manager and attested to by its City Clerk under the authority of Resolution No. \_\_\_\_\_, adopted by the Council of the City of Roseville on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, and LESSEE has caused this First Amendment to Lease Agreement to be executed.

CITY:

CITY OF ROSEVILLE, a  
municipal corporation:

BY: \_\_\_\_\_  
DOMINICK CASEY  
City Manager

LESSEE:

ROSEVILLE FIRE MUSEUM, a  
California nonprofit corporation:

BY:   
STEVEN MINNICH  
President

ATTEST:

and

BY: \_\_\_\_\_  
SONIA OROZCO  
City Clerk

BY: \_\_\_\_\_  
JAMES GIBLIN  
Secretary/Treasurer

APPROVED AS TO FORM:

BY: \_\_\_\_\_  
ROBERT R. SCHMITT  
City Attorney

IN WITNESS WHEREOF, the City of Roseville, a municipal corporation, has authorized the execution of this First Amendment to Lease Agreement in duplicate by its City Manager and attested to by its City Clerk under the authority of Resolution No. \_\_\_\_\_, adopted by the Council of the City of Roseville on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, and LESSEE has caused this First Amendment to Lease Agreement to be executed.

CITY:

LESSEE:

CITY OF ROSEVILLE, a  
municipal corporation:

ROSEVILLE FIRE MUSEUM, a  
California nonprofit corporation:

BY: \_\_\_\_\_  
DOMINICK CASEY  
City Manager

BY: \_\_\_\_\_  
STEVEN MINNICH  
President

ATTEST:

and

BY: \_\_\_\_\_  
SONIA OROZCO  
City Clerk

BY:  \_\_\_\_\_  
JAMES GIBLIN  
Secretary/Treasurer

APPROVED AS TO FORM:

BY: \_\_\_\_\_  
ROBERT R. SCHMITT  
City Attorney

APPROVED AS TO SUBSTANCE:

BY:   
LAURA MATTEOLI  
Economic Development Director



## COUNCIL COMMUNICATION

**CC #: 0976**

**File #: 0704**

**Title:** Child Care Software - Professional Services Agreement Amendment

**Contact:** Natasha Martin 916-774-5234 nmartin@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 7.11.**

### RECOMMENDATION TO COUNCIL

Recommend Council adopt a resolution to approve a first amendment to professional services agreement with Cirrus Group, LLC, and authorize the City Manager to execute it.

### BACKGROUND

DayCare Works is an internet based software solution for managing Adventure Club registration, billing, accounts receivable, human resources, reporting and analytics. We have utilized this software since the inception of the professional service agreement on May 20, 2015 which covered a five-year period. The terms of the original professional service agreement allow for an extension of two additional years. Our Adventure Club program relies on DayCare Works to manage all aspects of our childcare program registration and accounting, including our public interface and ongoing customer support.

### FISCAL IMPACT

The professional service agreement amendment will have a fiscal impact not to exceed \$88,000 through the end of the extension on June 30, 2022.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute§21065 and CEQA State Guidelines§15060(c)(3) and §15378. Approval of a first amendment to professional services agreement for child care software meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Natasha Martin, Parks, Recreation & Libraries Manager

Jill Geller, Parks, Recreation & Libraries Director



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Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-356

Cirrus Group, LLC Amendment

RESOLUTION NO. 20-356

APPROVING A FIRST AMENDMENT TO PROFESSIONAL SERVICES AGREEMENT, BY  
AND BETWEEN THE CITY OF ROSEVILLE AND CIRRUS GROUP, LLC, AND  
AUTHORIZING THE CITY MANAGER TO EXECUTE IT ON BEHALF OF  
THE CITY OF ROSEVILLE

WHEREAS, a first amendment to professional services agreement for child care software, by and between the City of Roseville and Cirrus Group, LLC, has been reviewed by the City Council; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Roseville that said first amendment is hereby approved and that the City Manager is authorized to execute it on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 20\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk

**FIRST AMENDMENT TO  
PROFESSIONAL SERVICES AGREEMENT**

Project: Child Care Software

THIS FIRST AMENDMENT TO AGREEMENT is made and entered into this 11 day of August, 2020, by and between the City of Roseville, a municipal corporation ("CITY"), and Cirrus Group, LLC, a Michigan limited liability company ("CONSULTANT"); and

WITNESSETH:

WHEREAS, CITY and CONSULTANT previously entered into a Professional Services Agreement dated May 20, 2015 ("Agreement") regarding child care software ("Project"); and

WHEREAS, both parties wish to extend the terms of service for an additional two (2) year period; and

WHEREAS, CONSULTANT is willing and able to provide such additional services.

NOW, THEREFORE, the parties agree as follows:

1. Section 1 of the Agreement is amended by adding an additional paragraph to read as follows:

"This First Amendment to Agreement shall commence on July 1, 2020 and terminate on June 30, 2022."

2. Section 3 of the Agreement is amended by adding an additional paragraph to read as follows:



“CITY shall pay eighty-eight thousand dollars (\$88,000), in consideration of the additional services as set forth in Exhibit “A” to the First Amendment to Agreement.

This brings the total not to exceed contract amount to two hundred seventy-six thousand, six hundred dollars (\$276,600).”

3. Section 4 of the Agreement is amended by adding an additional paragraph to read as follows”

“CONSULTANT agrees to defend and indemnify CITY if, despite the parties intent and practice, any venue, agency, or court with competent jurisdiction determines that CONSULTANT and/or any of its agents, officers, employees, volunteers, independent contractors, or subcontractors, are characterized as employee(s) of CITY.”

4. Section 21 of the Agreement is amended by replacing the existing paragraph to read as follows”

“21. Notices. Any notices to parties required by this Agreement shall be delivered personally or mailed, U.S. first class postage prepaid, addressed as follows:

CITY OF ROSEVILLE

Natasha Martin, Manager  
City of Roseville  
316 Vernon Street, Ste. 400  
Roseville, CA 95678

CONSULTANT

Marc Arseneau, CFO  
Cirrus Group, LLC  
1125 17<sup>th</sup> Street, #1800  
Denver, CO 80202”

5. All other provisions of the Agreement shall remain unchanged and in full force and effect.

IN WITNESS WHEREOF, the City of Roseville, a municipal corporation, has authorized the execution of this First Amendment to Agreement in duplicate by its City Manager and

attested to by its City Clerk under the authority of Resolution No. \_\_\_\_\_, adopted by the Council of the City of Roseville on the \_\_\_\_ day of \_\_\_\_\_, 20\_\_, and CONSULTANT has caused this First Amendment to Agreement to be executed.

CITY OF ROSEVILLE, a  
municipal corporation

BY: \_\_\_\_\_  
DOMINICK CASEY  
City Manager

ATTEST:

BY: \_\_\_\_\_  
SONIA OROZCO  
City Clerk

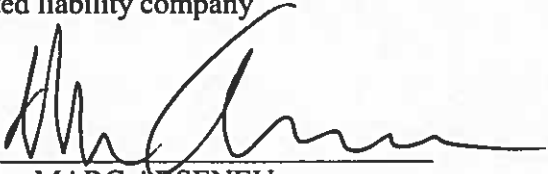
APPROVED AS TO FORM:

BY: \_\_\_\_\_  
ROBERT R. SCHMITT  
City Attorney

APPROVED AS TO SUBSTANCE:

BY:   
JILL GELLER  
Parks, Recreation & Libraries Director

CIRRUS GROUP, LLC, a Michigan  
limited liability company

BY:   
MARC ARSENEU  
Chief Financial Officer

and

BY:   
JOANN KINTZEL  
Chief Executive Officer



## COUNCIL COMMUNICATION

CC #: 0977

File #: 0400-04-09-1

**Title:** Creekview Offsite Sewer Project - Notice of Completion  
**Contact:** Ignacio Vizcarra 916-774-5578 ivizcarra@roseville.ca.us

Meeting Date: 9/16/2020

Item #: 7.12.

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council adopt the attached resolution accepting Creekview Offsite Sewer, CWJ #190083, as complete and authorizing the City Engineer to execute the Notice of Completion.

### BACKGROUND

The Engineering Division has made a final inspection of the above project and has found the roadway infrastructure work complete in accordance with the improvement plans and City Specifications.

### FISCAL IMPACT

The actions requested as part of this action have no impact to the City's General Fund. Construction costs were paid by the developer.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a Notice of Completion meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Ignacio Vizcarra, Construction Inspector

Mike Isom, Development Services Director



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Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-357

Creekview Offsite Sewer NOC.

Creekview\_OffsiteSewer Vicinity map-Exhibit A

Westpark Ph 4 Large Lot Map.

RESOLUTION NO. 20-357

RESOLUTION OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS CREEKVIEW OFFSITE SEWER PROJECT, APPROVING THE "NOTICE OF COM PLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING A PORTION OF THOSE RESPECTIVE DEDICATIONS OFFERED ON THE RECORDED MAPS OF "THE FINAL MAP OF WESTPARK PHASE 4 LARGE LOT SUBDIVISION, SUBDIVISION NO. 000044" BE IT RESOLVED by the Council of the City of Roseville as follows:

1. The "Notice of Completion" on file in the City Clerk's Department relative to that public work known as the Creekview Offsite Sewer is hereby approved and the public work accepted.
2. A portion of the right-of-way and easements located adjacent thereto as offered for dedication on The Final Map of Westpark Phase 4, Large Lot Subdivision, Subdivision NO. 000044, recorded in Book CC of Maps, Page 29, in the office of the recorder of Placer County, is hereby accepted by the City in part as said dedications relates to the improvement plan set known as Creekview Offsite Sewer. The remaining offers of dedication will be accepted at a later date as improvements are approved and accepted.
3. The City Engineer is hereby authorized and directed to execute said Notice on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville, this\_\_\_\_\_day of\_\_\_\_\_, 20\_\_\_\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
CITY CLERK

RECORDING REQUESTED BY AND WHEN  
RECORDED MAIL TO:

CITY CLERK  
CITY OF ROSEVILLE  
311 VERNON STREET  
ROSEVILLE, CA 95678

Exempt from recording fees  
Pursuant to Gov't Code §27383

---

**NOTICE OF COMPLETION**

NOTICE IS HEREBY GIVEN that the public work of improvement known as the \_\_\_\_\_ Project was completed and accepted by the City of Roseville on \_\_\_\_\_. The location is situated in the City of Roseville, County of Placer, State of California and is indicated on the attached map, marked as Exhibit "A" and incorporated herein by this reference. The real property herein described is owned by the City of Roseville, 311 Vernon Street, Roseville CA 95678.

The direct/general contractor on said project was \_\_\_\_\_.

The surety on said project was \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_  
City of Roseville  
Owner

ATTEST:

\_\_\_\_\_  
Sonia Orozco, City Clerk

State of California     )  
County of Placer        )

I, \_\_\_\_\_, being first duly sworn, depose and say: I am the \_\_\_\_\_ of the City of Roseville, a municipal corporation in the State of California, owner of the property described in the above Notice. I am duly authorized to make this verification for and on behalf of the City of Roseville. I have read the Notice of Completion and know its contents and the facts stated therein are true.

\_\_\_\_\_

City of Roseville

|                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

State of California     )  
County of Placer        )

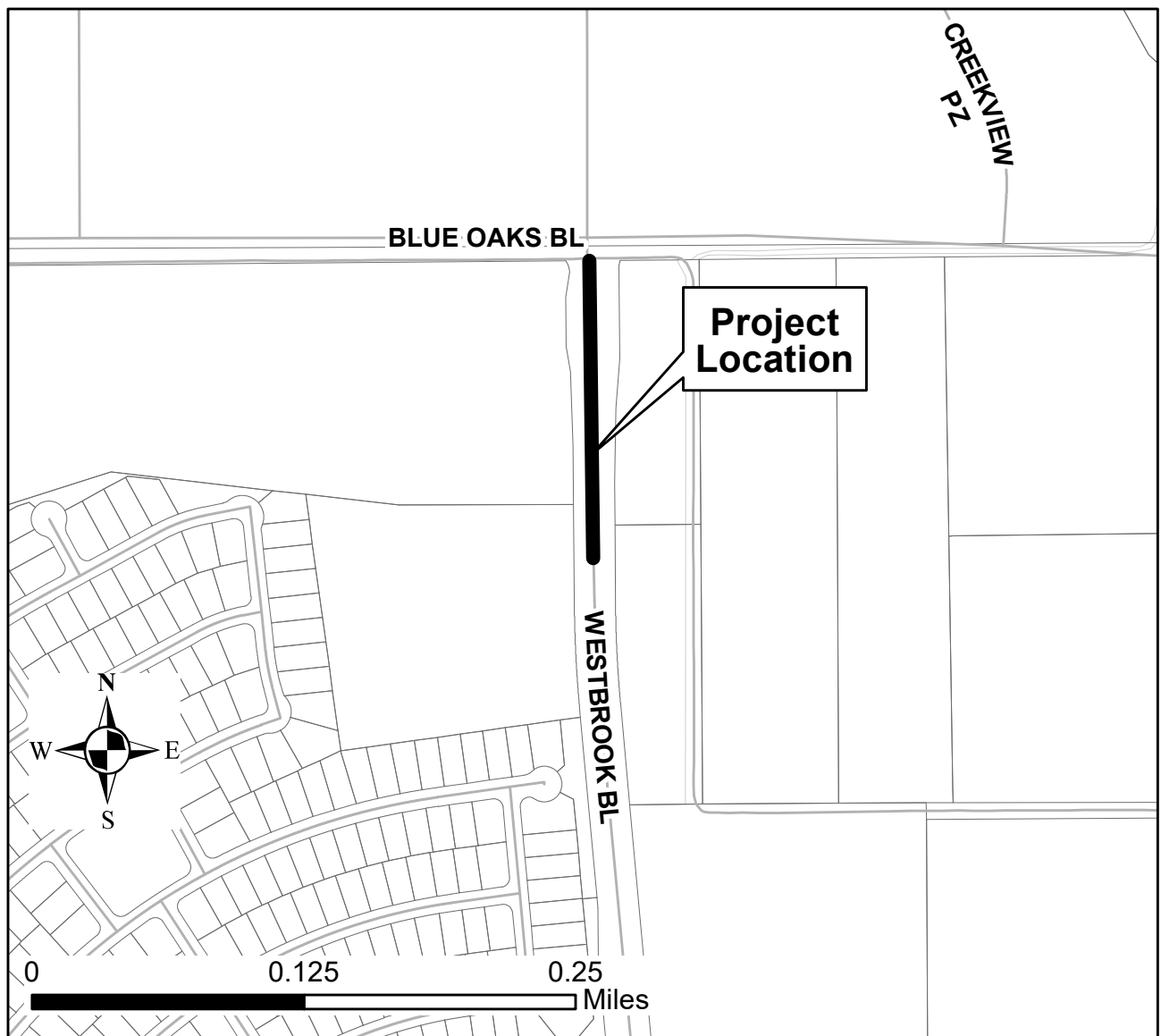
Subscribed and sworn to (or affirmed) before  
me on this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_, \_\_\_\_\_  
proved to me on the basis of satisfactory  
evidence to be the person(s) who appeared  
before me.

*Place Notary Seal and/or Stamp Above*

\_\_\_\_\_  
*Signature of Notary Public*

# EXHIBIT A

## City of Roseville Creekview Offsite Sewer





**OWNER'S STATEMENT**

THE UNDERSIGNED HEREBY CERTIFY THAT THEY ARE THE ONLY PERSONS HAVING ANY RECORD TITLE INTEREST IN THE REAL PROPERTY INCLUDED WITHIN THE SUBDIVISION SHOWN UPON THIS FINAL MAP OF "WESTPARK - PHASE 4" AND THEY HEREBY CONSENT TO THE PREPARATION AND RECORDATION OF THIS FINAL MAP AND HEREBY OFFER FOR DEDICATION AND DO HEREBY DEDICATE TO PARTICULAR PURPOSES THE FOLLOWING:

THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED AS EASEMENT FOR PUBLIC PURPOSES:

(A) PUBLIC EASEMENTS FOR THE INSTALLATION AND MAINTENANCE OF, BUT NOT LIMITED TO ELECTROLIERS, WATER AND GAS PIPES, SEWER AND DRAINAGE PIPES, AND FOR UNDERGROUND WIRE AND CONDUITS FOR ELECTRIC, TELEPHONE AND TELEVISION SERVICES AND TRAFFIC CONTROL APPURTENANCES TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER, UNDER AND ACROSS THOSE STRIPS OF LAND LYING CONTIGUOUS TO THE RIGHT OF WAY AS SHOWN HEREON AND DESIGNATED "P.U.E." (PUBLIC UTILITY EASEMENT).

(B) PUBLIC EASEMENTS FOR THE INSTALLATION AND MAINTENANCE OF, BUT NOT LIMITED TO ELECTROLIERS, WATER AND GAS PIPES, SEWER AND DRAINAGE PIPES, AND FOR UNDERGROUND WIRE AND CONDUITS FOR ELECTRIC, TELEPHONE AND TELEVISION SERVICES AND TRAFFIC CONTROL APPURTENANCES TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER UNDER AND ACROSS THOSE STRIPS OF LAND LYING BETWEEN THE REAR AND/OR SIDELINES OF THE LOT AND THE LINES SHOWN HEREON AND DESIGNATED "P.U.E." (PUBLIC UTILITY EASEMENT).

(C) AN EASEMENT FOR THE INSTALLATION AND MAINTENANCE OF SEWER AND WATER PIPES DESIGNATED "SEWER AND WATER EASEMENT".

THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED IN FEE FOR PUBLIC PURPOSES:

(A) AS PUBLIC RIGHT OF WAY (INCLUDING ALL IMPROVEMENTS THEREON) THE STREET SHOWN HEREON AS BROOKSTONE DRIVE.

THE REAL PROPERTY DESCRIBED BELOW IS IRREVOCABLY DEDICATED IN FEE FOR PUBLIC PURPOSES:

(A) LOT 1A & 1B SHOWN HEREON TO THE CITY OF ROSEVILLE FOR OPEN SPACE

(B) AS PUBLIC RIGHT OF WAY (INCLUDING ALL IMPROVEMENTS THEREON) THE STREET SHOWN HEREON AS WESTBROOK BOULEVARD.

WEST ROSEVILLE, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

[Signature]  
BY: JEFF JONES  
ITS: Manager

**NOTARY ACKNOWLEDGMENT**

STATE OF CALIFORNIA  
COUNTY OF PLACER

ON OCT. 26, 2011, BEFORE ME, SANDRA LESSARD, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED JEFF JONES AND [Signature], WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME IN THEIR AUTHORIZED CAPACITIES, AND THAT BY THEIR SIGNATURES ON THE INSTRUMENT, THE PERSONS OR THE ENTITY UPON BEHALF OF WHICH THE PERSONS ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT. WITNESS MY HAND AND OFFICIAL SEAL.

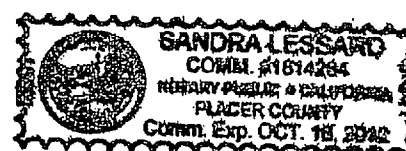
[Signature]  
SIGNATURE

PRINT NAME SANDRA LESSARD

MY PRINCIPAL PLACE OF BUSINESS IS PLACER COUNTY.

MY COMMISSION NUMBER IS: 1814284

MY COMMISSION EXPIRES ON: OCT. 18, 2012



# FINAL MAP OF WESTPARK - PHASE 4 LARGE LOT SUBDIVISION SUBDIVISION NO. 000044

BEING A SUBDIVISION OF A PORTION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF "WESTPARK PHASE 1 - LARGE LOT SUBDIVISION", SUBDIVISION NO. 03-08, FILED FOR RECORD IN BOOK AA OF MAPS, AT PAGE 4, PLACER COUNTY RECORDS, AND THE EAST HALF OF THE EAST HALF OF SECTION 22, BEING A PORTION OF SECTIONS 22, 23, 25 AND 26, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

CITY OF ROSEVILLE • PLACER COUNTY • CALIFORNIA

**Mackay & Somps**  
ENGINEERS PLANNERS SURVEYORS  
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

DECEMBER 2011

Sheet 1 of 9

18424-LLM

**TRUSTEE STATEMENT**

PLACER TITLE COMPANY, A CALIFORNIA CORPORATION, AS TRUSTEE UNDER DEED OF TRUST RECORDED ON APRIL 8, 2011, AS INSTRUMENT NO. 2011-0027982, OFFICIAL RECORDS PLACER COUNTY, AGAINST THE LAND HEREIN SHOWN CONSENTS TO THE MAKING AND FILING OF THIS MAP.

Placer title Company  
BY: [Signature]  
CELIA FRENCH V.P.  
PRINT NAME AND TITLE  
BY: [Signature]  
Julie Piccard, Asst. Secretary  
PRINT NAME AND TITLE

**NOTARY ACKNOWLEDGMENT**

STATE OF CALIFORNIA  
COUNTY OF PLACER

ON NOVEMBER 3, 2011, BEFORE ME, T.C. MURPHY, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED CELIA FRENCH AND JULIE PICCARD, WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME IN THEIR AUTHORIZED CAPACITIES, AND THAT BY THEIR SIGNATURES ON THE INSTRUMENT, THE PERSONS OR THE ENTITY UPON BEHALF OF WHICH THE PERSONS ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT. WITNESS MY HAND AND OFFICIAL SEAL.

[Signature]  
SIGNATURE

PRINT NAME T.C. MURPHY

MY PRINCIPAL PLACE OF BUSINESS IS PLACER COUNTY.

MY COMMISSION NUMBER IS: 1949422

MY COMMISSION EXPIRES ON: Sept. 21, 2015

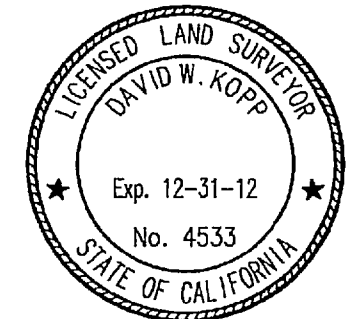
**SURVEYOR'S STATEMENT**

THIS FINAL MAP OF "WESTPARK - PHASE 4 LARGE LOT SUBDIVISION" WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCES AT THE REQUEST OF WEST ROSEVILLE, LLC, ON JANUARY 24, 2005. I HEREBY STATE THAT THIS FINAL MAP OF "WESTPARK - PHASE 4" SUBSTANTIALLY CONFORMS TO THE CONDITIONALLY APPROVED TENTATIVE MAP, AND THAT ALL THE MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED, OR THEY WILL BE SET IN THOSE POSITIONS ON OR BEFORE DECEMBER 1, 2012 AND THAT THE MONUMENTS ARE, OR WILL BE, SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

MACKAY & SOMPS CIVIL ENGINEERS, INC.

DAVID W. KOPP, P.L.S. 4533  
EXPIRATION DATE: DECEMBER 31, 2012

DATE: 10/25/11

**CITY ENGINEER'S STATEMENT**

I HEREBY STATE THAT I HAVE EXAMINED THIS FINAL MAP OF "WESTPARK - PHASE 4 LARGE LOT SUBDIVISION" AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP ON FILE AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.

[Signature] DATE: 11-14-2011

RHON HERNDON, R.C.E. 50909  
ACTING CITY ENGINEER, CITY OF ROSEVILLE  
LICENSE EXPIRES: SEPTEMBER 30, 2013

I HEREBY STATE THAT I AM SATISFIED THIS THIS FINAL MAP OF "WESTPARK - PHASE 4 LARGE LOT SUBDIVISION" IS TECHNICALLY CORRECT.

FOR RHON HERNDON, ACTING CITY ENGINEER, CITY OF ROSEVILLE

[Signature] DATE: 11/14/11

TIMOTHY G. BLAIR  
PLS# 8278 EXPIRES DECEMBER 31, 2011

**CITY CLERK'S STATEMENT**

I HEREBY STATE THAT THE CITY COUNCIL, CITY OF ROSEVILLE, HAS APPROVED THIS FINAL MAP OF "WESTPARK - PHASE 4 LARGE LOT SUBDIVISION", AND HAS ACCEPTED ON BEHALF OF THE PUBLIC, SUBJECT TO IMPROVEMENT, THE RIGHTS OF WAY AND EASEMENTS HEREON OFFERED FOR DEDICATION IN ACCORDANCE WITH THE TERMS OF THAT OFFER. THE CITY COUNCIL REJECTS AT THIS TIME, BUT RESERVES THE RIGHT TO ACCEPT AT A LATER DATE, ON BEHALF OF THE PUBLIC ALL IRREVOCABLE OFFERS OF DEDICATION IN ACCORDANCE WITH THE TERMS OF THOSE OFFERS.

[Signature]  
CITY CLERK, CITY OF ROSEVILLE

DATE: 11/17/11

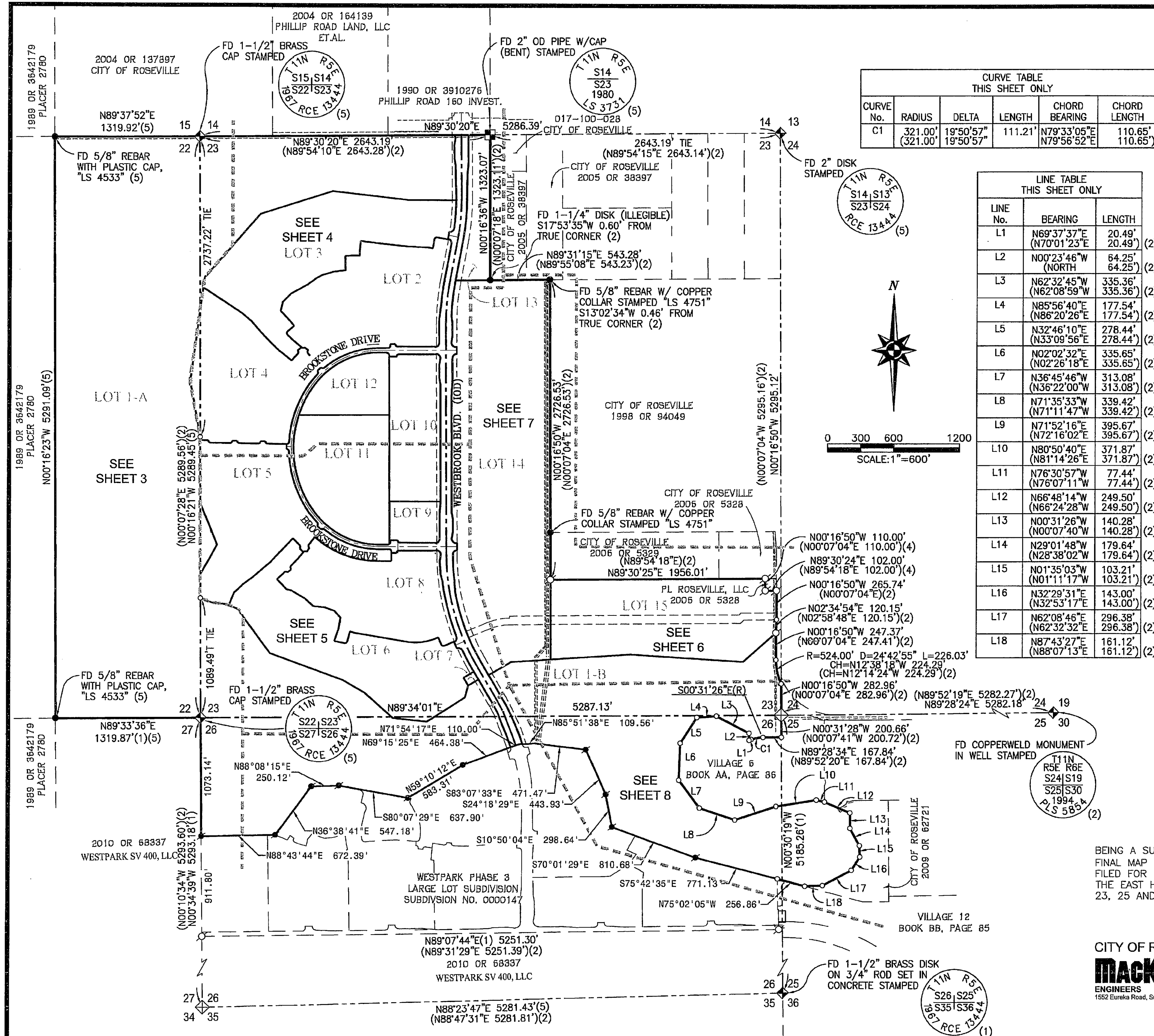
BY: [Signature]  
ASSISTANT CITY CLERK

**RECORDER'S STATEMENT**

FILED THIS 28<sup>th</sup> DAY OF December, 2011, AT 1:35 PM.  
IN BOOK CC OF MAPS, AT PAGE 29 AT THE REQUEST OF  
PL ROSEVILLE, LLC

DOCUMENT NO. 2011- 0104206  
FEE: 732.00

JIM MCCAULEY  
PLACER COUNTY RECORDER  
BY: C. Costa  
DEPUTY



## LEGEND:

- DIMENSION POINT
- ◆ FOUND SECTION CORNER OR QUARTER CORNER AS NOTED
- ◇ SECTION CORNER, NOTHING FOUND OR SET
- FOUND MONUMENT AS NOTED
- FOUND 5/8" REBAR WITH PLASTIC CAP STAMPED "LS 4533"
- ⊗ SET 3/4" GALVANIZED PIPE WITH PLASTIC CAP STAMPED "LS 4533"
- ⊗ SET 5/8" REBAR WITH PLASTIC CAP STAMPED "LS 4533"
- ⊗ SET COPPERWELD SURVEY MONUMENT WITH CENTER PUNCH IN MONUMENT WELL STAMPED "LS 4533"
- (1) "18" SURVEYS 49
- (2) "AA" MAPS 4 (WESTPARK-PHASE 1 LARGE LOT SUBD.)
- (3) "BB" MAPS 85 (WESTPARK VILLAGE 12)
- (4) DOC. NO. 2006-0005328
- (5) "18" SURVEYS 64
- AC. ACRES
- (OA) OVERALL
- (R) RADIAL BEARING
- P.U.E. PUBLIC UTILITY EASEMENT
- (W-81) SPECIFIC PLAN LOT DESIGNATION

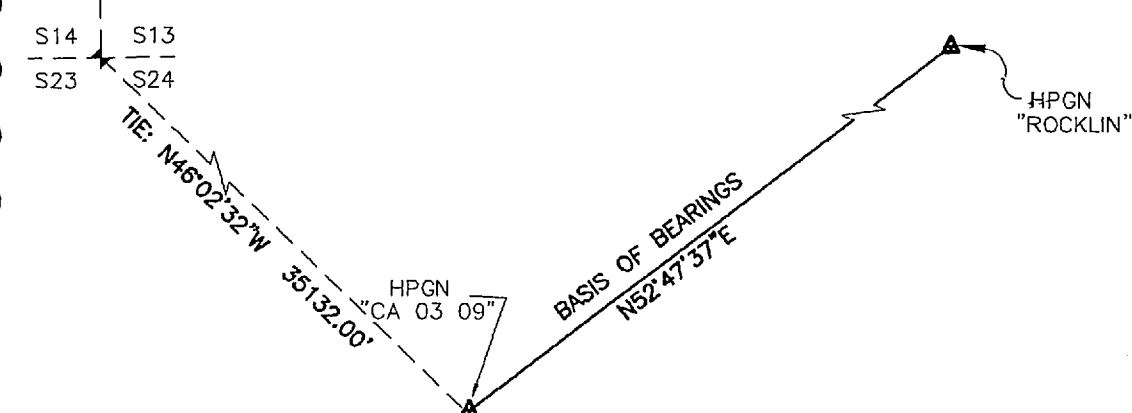
## NOTES:

1. DISTANCES ARE IN FEET AND DECIMALS THEREOF.

| LARGE LOT # | SPECIFIC PLAN # |
|-------------|-----------------|
| 1A          | W-81            |
| 1B          | W-83            |
| 2.00        | W-18a           |
| 3.00        | W-18b           |
| 4.00        | W-18c           |
| 5.00        | W-17c           |
| 6.00        | W-17b           |
| 7.00        | W-77            |
| 8.00        | W-17a           |
| 9.00        | W-30            |
| 10.00       | W-19            |
| 11.00       | W-50            |
| 12.00       | W-70            |
| 13.00       | W-60b           |
| 14.00       | W-60a           |
| 15.00       | W-61            |

## BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 2 (NAD 83), AND SPECIFICALLY N52°47'37"E BETWEEN CALIFORNIA HIGH PRECISION GEODETIC NETWORK MONUMENTS "CA 03-09" AND "ROCKLIN". DISTANCES SHOWN HEREON ARE GROUND DISTANCES.



### FINAL MAP OF WESTPARK - PHASE 4 LARGE LOT SUBDIVISION SUBDIVISION NO. 000044

BEING A SUBDIVISION OF A PORTION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF "WESTPARK PHASE 1 - LARGE LOT SUBDIVISION", SUBDIVISION NO. 03-08, FILED FOR RECORD IN BOOK AA OF MAPS, AT PAGE 4, PLACER COUNTY RECORDS, AND THE EAST HALF OF THE EAST HALF OF SECTION 22, BEING A PORTION OF SECTIONS 22, 23, 25 AND 26, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

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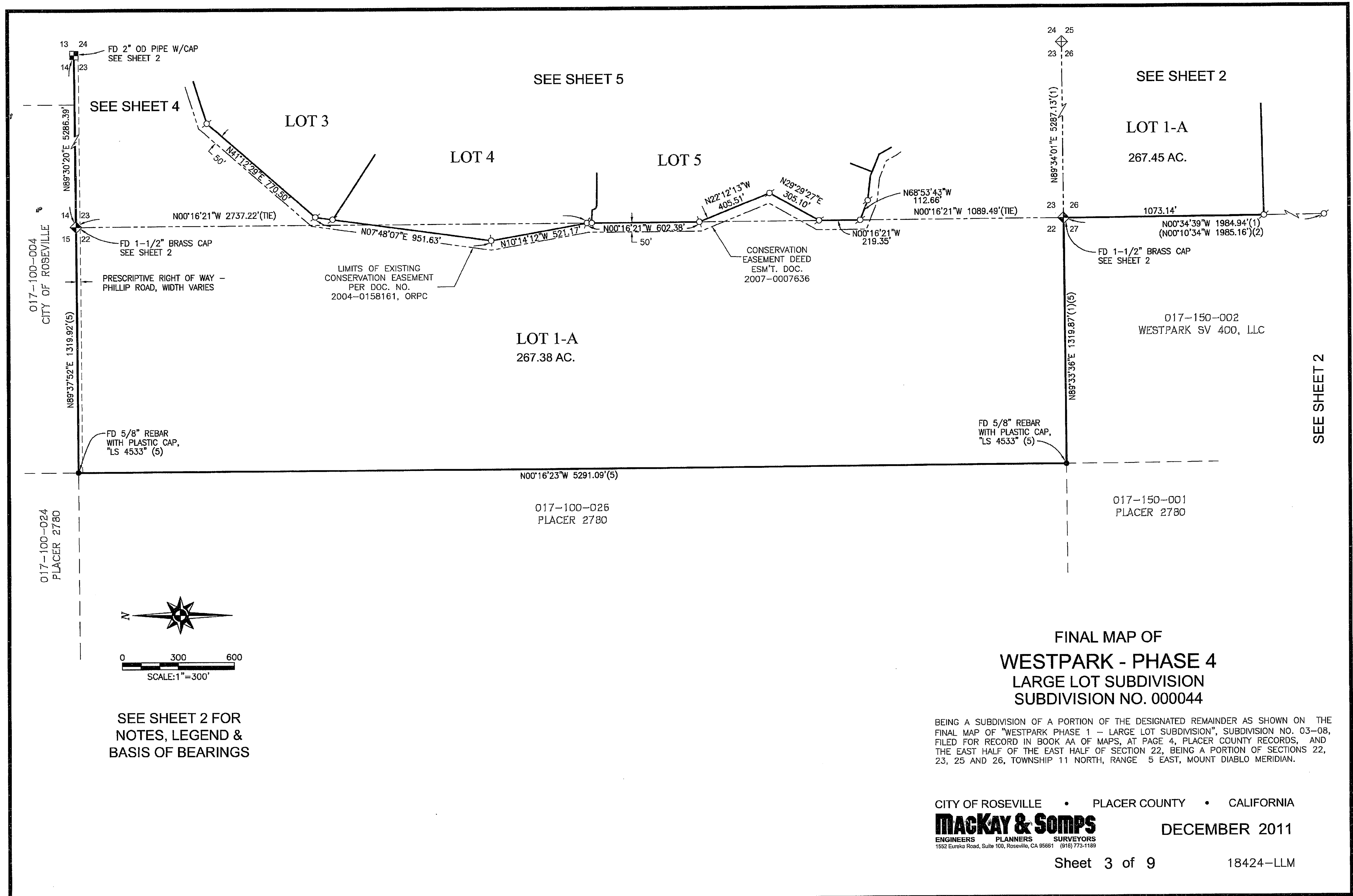
**Mackay & Somp**  
ENGINEERS PLANNERS SURVEYORS  
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

DECEMBER 2011

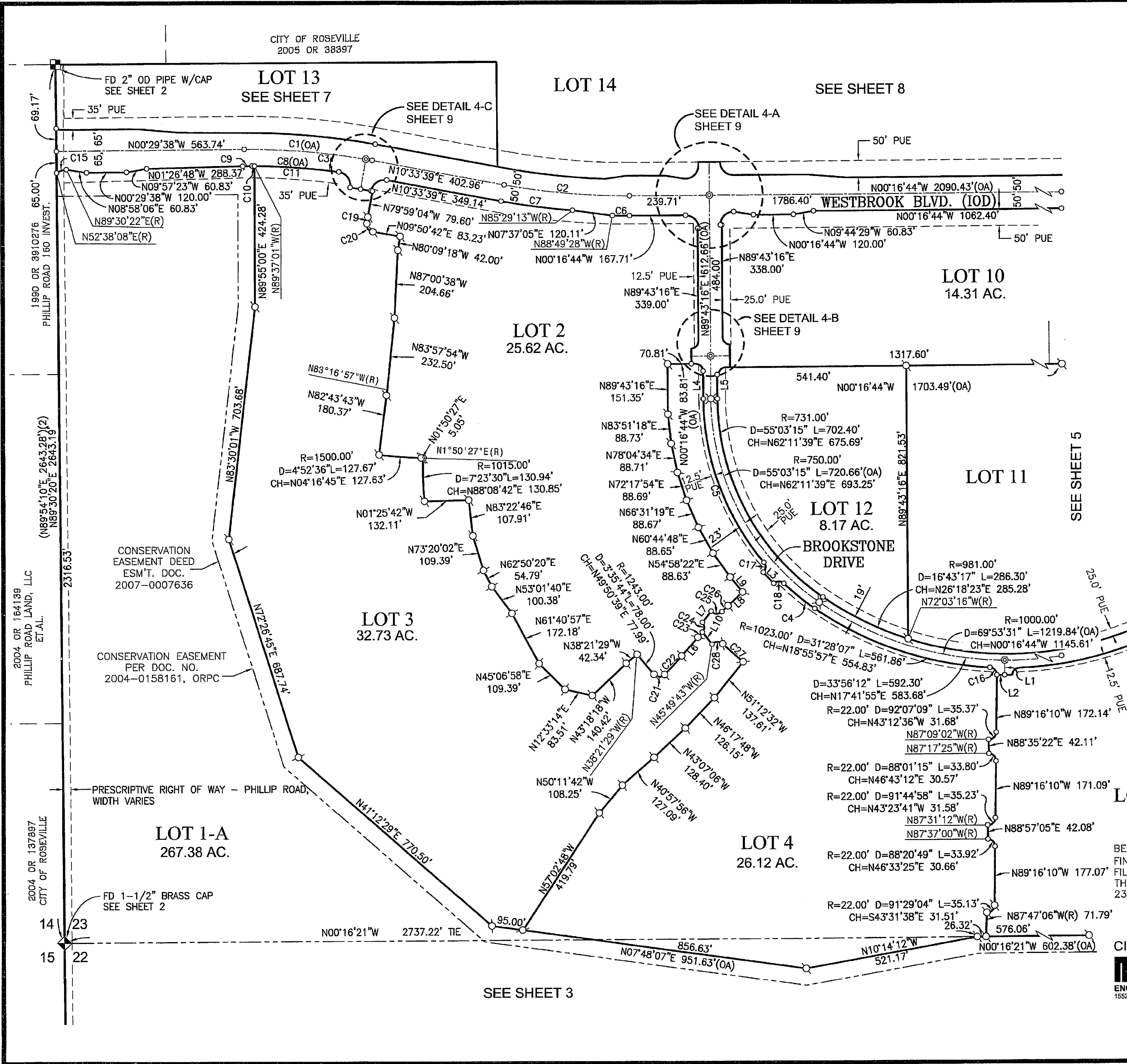
Sheet 2 of 9

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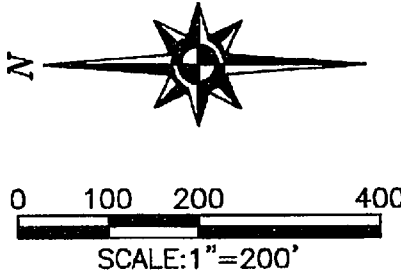




| LINE TABLE |             |        |
|------------|-------------|--------|
| LINE No.   | BEARING     | LENGTH |
| L1         | N89°16'10"W | 44.03' |
| L2         | N00°43'50"E | 23.00' |
| L3         | N46°47'35"E | 46.00' |
| L4         | N89°43'16"E | 83.66' |
| L5         | N89°43'16"E | 72.66' |
| L6         | N49°19'38"W | 74.35' |
| L7         | N52°15'57"W | 42.88' |
| L8         | N43°12'25"W | 59.71' |
| L9         | N50°11'19"E | 58.28' |
| L10        | N51°31'56"E | 46.72' |

| CURVE TABLE |          |           |         |               |
|-------------|----------|-----------|---------|---------------|
| CURVE No.   | RADIUS   | DELTA     | LENGTH  | CHORD BEARING |
| C1(OA)      | 2000.00' | 11°03'17" | 385.88' | N05°02'00"E   |
| C2          | 2000.00' | 10°50'23" | 378.38' | N05°08'27"E   |
| C3          | 2000.00' | 10°30'34" | 366.85' | N04°45'39"E   |
| C4          | 773.00'  | 8°52'53"  | 119.82' | N39°06'27"E   |
| C5          | 773.00'  | 39°40'59" | 535.38' | N69°52'46"E   |
| C6          | 2060.00' | 1°27'16"  | 52.29'  | N00°26'54"E   |
| C7          | 2050.00' | 6°02'52"  | 216.38' | N07°32'13"E   |
| C8(OA)      | 1950.00' | 7°40'20"  | 261.12' | N04°01'08"E   |
| C9          | 1000.00' | 1°37'47"  | 28.44'  | N00°37'55"W   |
| C10         | 1950.00' | 0°12'01"  | 6.82'   | N00°16'59"E   |
| C11         | 1950.00' | 7°28'19"  | 254.30' | N04°07'09"E   |
| C15         | 50.00'   | 36°52'14" | 32.18'  | N18°55'45"W   |
| C16         | 22.00'   | 87°31'55" | 33.61'  | N46°57'51"E   |
| C17         | 22.00'   | 86°45'18" | 33.31'  | N86°35'04"W   |
| C18         | 22.00'   | 86°45'18" | 33.31'  | N00°10'14"E   |
| C19         | 764.00'  | 1°30'59"  | 20.22'  | N80°44'34"W   |
| C20         | 22.00'   | 88°39'14" | 34.04'  | N54°10'19"E   |
| C21         | 22.00'   | 93°41'08" | 35.97'  | N01°12'13"E   |
| C22         | 1177.00' | 3°41'17"  | 75.76'  | N47°29'00"W   |
| C23         | 1223.00' | 0°56'52"  | 20.23'  | N48°51'12"W   |
| C24         | 22.00'   | 82°31'49" | 31.69'  | N89°38'41"W   |
| C25         | 22.00'   | 93°58'49" | 36.09'  | N02°35'21"E   |
| C26         | 1223.00' | 1°11'39"  | 25.49'  | N43°48'14"W   |
| C27         | 1031.00' | 4°32'14"  | 81.64'  | N41°54'10"E   |
| C28         | 22.00'   | 92°56'32" | 35.69'  | N02°17'59"W   |

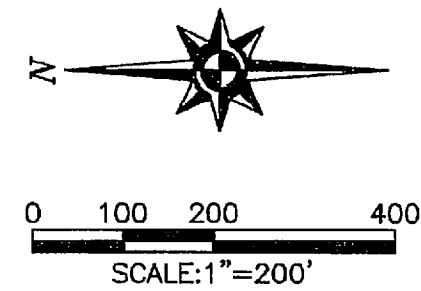
SEE SHEET 2 FOR  
NOTES, LEGEND &  
BASIS OF BEARINGS



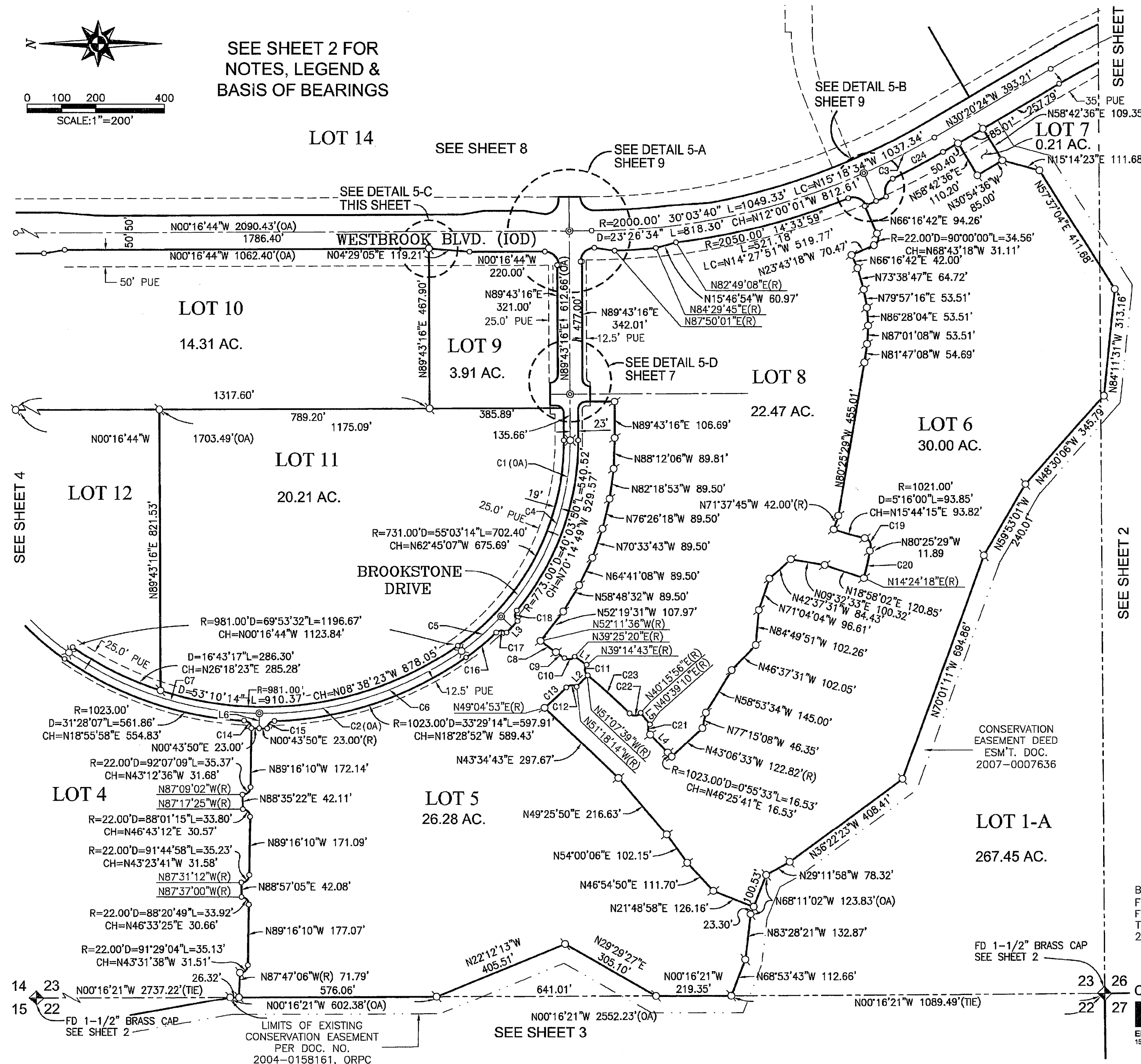
FINAL MAP OF  
WESTPARK - PHASE 4  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 000044

BEING A SUBDIVISION OF A PORTION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF "WESTPARK PHASE 1 - LARGE LOT SUBDIVISION", SUBDIVISION NO. 03-08, FILED FOR RECORD IN BOOK AA OF MAPS, AT PAGE 4, PLACER COUNTY RECORDS, AND THE EAST HALF OF THE EAST HALF OF SECTION 22, BEING A PORTION OF SECTIONS 22, 23, 25 AND 26, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

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DECEMBER 2011

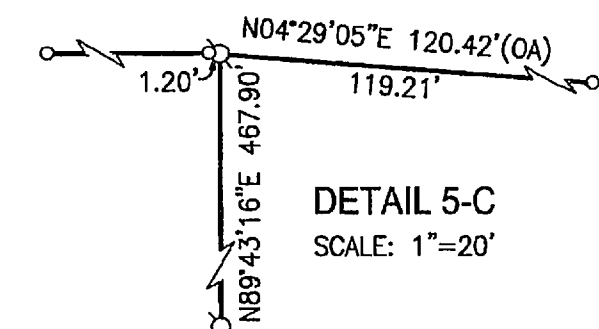


SEE SHEET 2 FOR  
NOTES, LEGEND &  
BASIS OF BEARINGS



| CURVE TABLE |         |           |         |               |              |
|-------------|---------|-----------|---------|---------------|--------------|
| CURVE No.   | RADIUS  | DELTA     | LENGTH  | CHORD BEARING | CHORD LENGTH |
| C1          | 750.00  | 55°03'15" | 720.66  | S62°45'07"E   | 693.25       |
| C2          | 1000.00 | 69°53'31" | 1219.84 | S00°16'44"E   | 1145.61      |
| C3          | 2000.00 | 6°37'06"  | 231.02  | S27°01'51"E   | 230.89       |
| C4          | 750.00  | 43°18'32" | 566.91  | S68°37'28"E   | 553.51       |
| C5          | 750.00  | 11°44'43" | 153.74  | S41°05'51"E   | 153.48       |
| C6          | 1000.00 | 35°57'19" | 627.54  | S17°14'50"E   | 617.29       |
| C7          | 1000.00 | 33°56'12" | 592.30  | S17°41'55"W   | 583.68       |
| C8          | 977.00  | 3°16'02"  | 55.71   | S36°10'23"W   | 55.71        |
| C9          | 1523.00 | 1°08'29"  | 30.34   | N35°08'36"E   | 30.34        |
| C10         | 22.00   | 86°15'31" | 33.12   | S07°26'55"E   | 30.08        |
| C11         | 22.00   | 90°22'22" | 34.70   | S84°03'32"W   | 31.21        |
| C12         | 22.00   | 84°29'56" | 32.45   | N03°33'12"W   | 29.58        |
| C13         | 1021.00 | 4°53'03"  | 87.03   | S43°21'38"E   | 87.01        |
| C14         | 22.00   | 87°31'55" | 33.61   | N46°57'52"E   | 30.44        |
| C15         | 22.00   | 87°31'55" | 33.61   | N45°30'13"W   | 30.44        |
| C16         | 773.00  | 8°30'01"  | 114.68  | S39°28'30"E   | 114.58       |
| C17         | 22.00   | 86°45'18" | 33.31   | N00°20'51"W   | 30.22        |
| C18         | 22.00   | 86°45'18" | 33.31   | S86°24'27"W   | 30.22        |
| C19         | 22.00   | 86°28'16" | 33.20   | N56°20'23"E   | 30.14        |
| C20         | 979.00  | 4°49'47"  | 82.53   | S78°00'35"E   | 82.50        |
| C21         | 22.00   | 84°41'16" | 32.52   | S88°18'32"W   | 29.64        |
| C22         | 22.00   | 94°49'54" | 36.41   | S02°19'07"E   | 32.40        |
| C23         | 1523.00 | 6°13'29"  | 165.46  | N41°59'06"E   | 165.38       |
| C24         | 2050.00 | 4°38'39"  | 166.16  | S28°01'04"E   | 166.12       |

| LINE TABLE |             |        |
|------------|-------------|--------|
| LINE No.   | BEARING     | LENGTH |
| L1         | S35°07'38"W | 42.11' |
| L2         | S45°29'01"E | 46.23' |
| L3         | N46°58'12"W | 46.00' |
| L4         | S45°57'54"W | 73.56' |
| L5         | S51°23'25"W | 42.78' |
| L6         | S89°16'10"E | 44.03' |



FINAL MAP OF  
**WESTPARK - PHASE 4**  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 000044

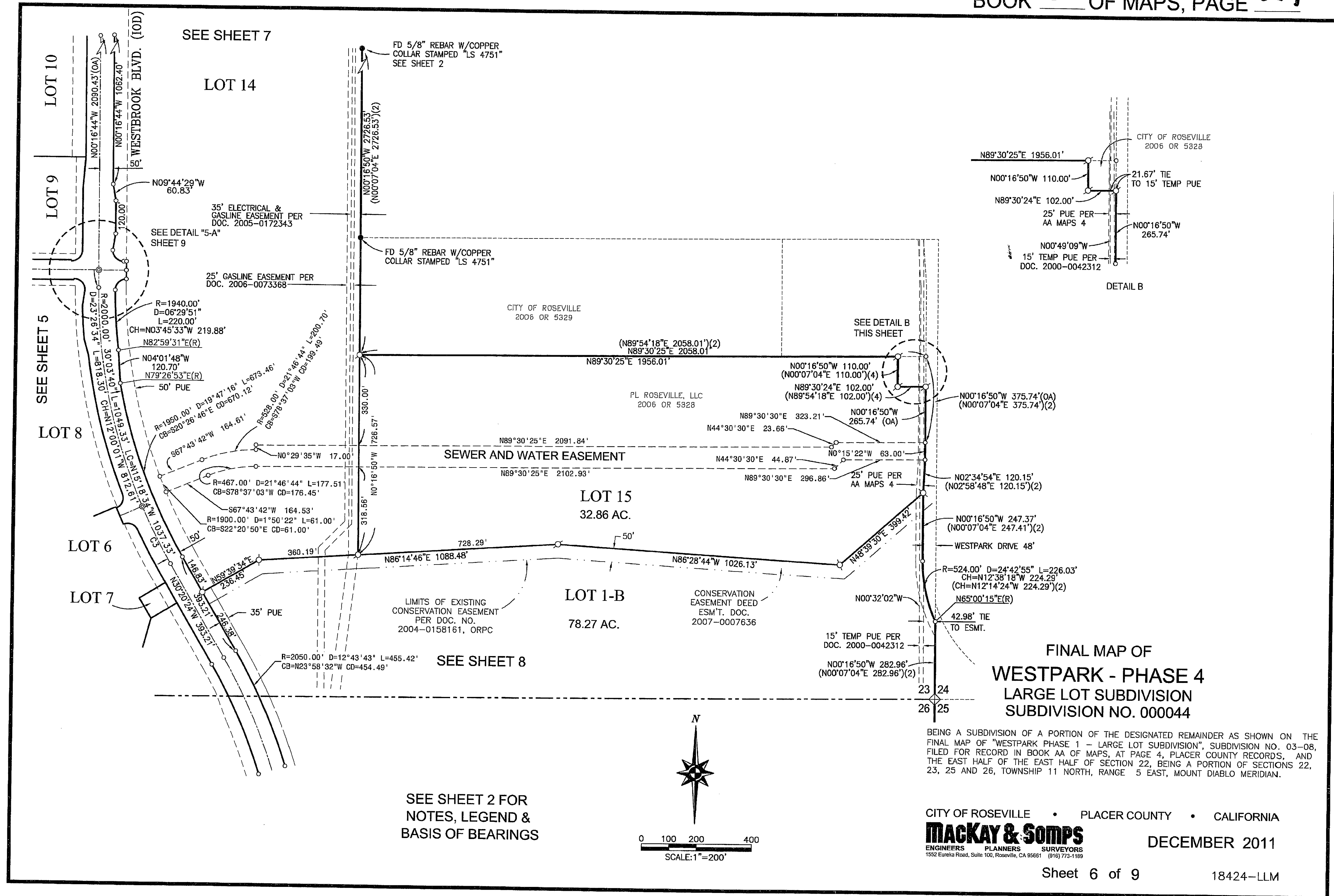
BEING A SUBDIVISION OF A PORTION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF "WESTPARK PHASE 1 - LARGE LOT SUBDIVISION", SUBDIVISION NO. 03-08, FILED FOR RECORD IN BOOK AA OF MAPS, AT PAGE 4, PLACER COUNTY RECORDS, AND THE EAST HALF OF THE EAST HALF OF SECTION 22, BEING A PORTION OF SECTIONS 22, 23, 25 AND 26, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

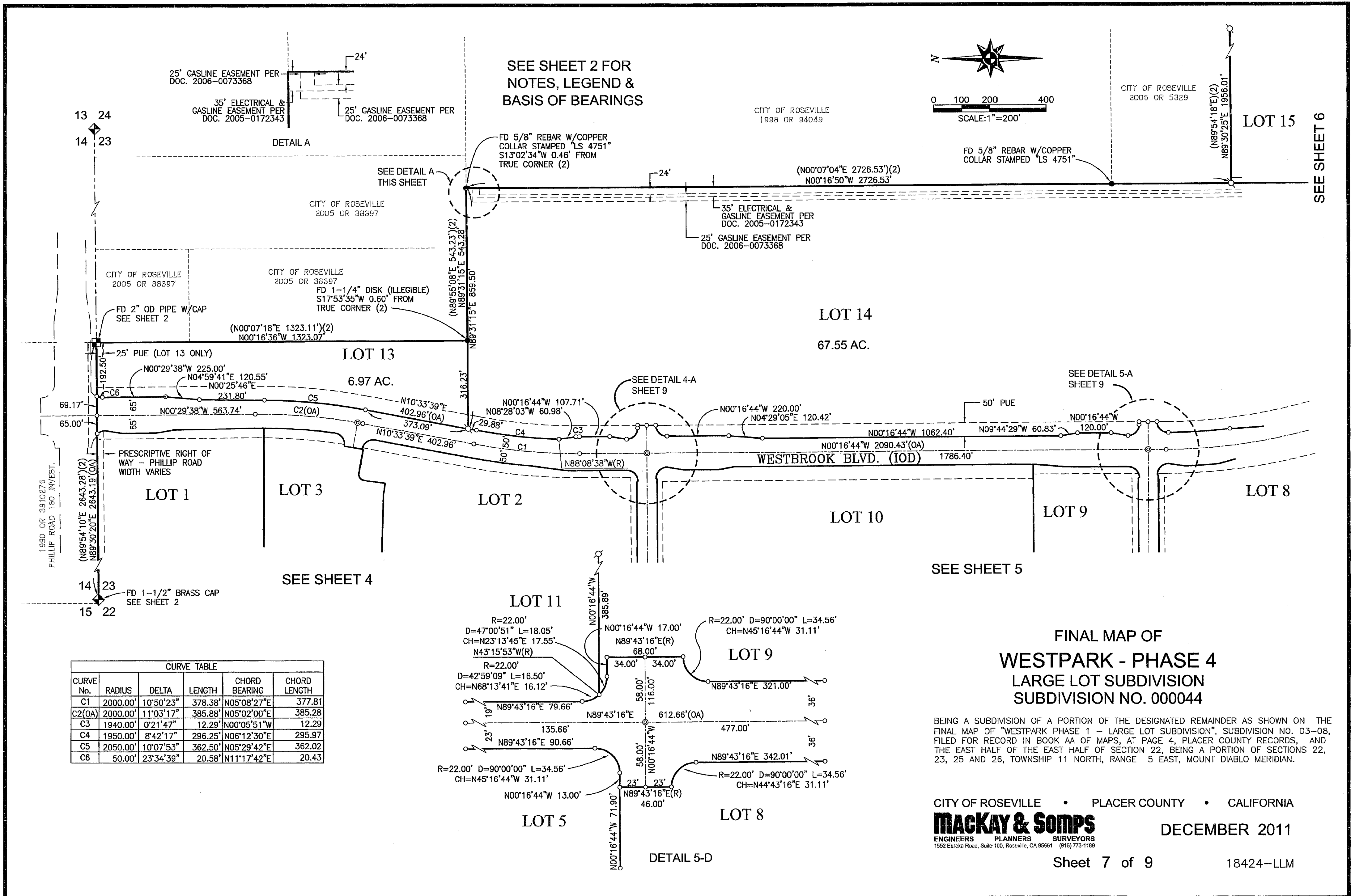
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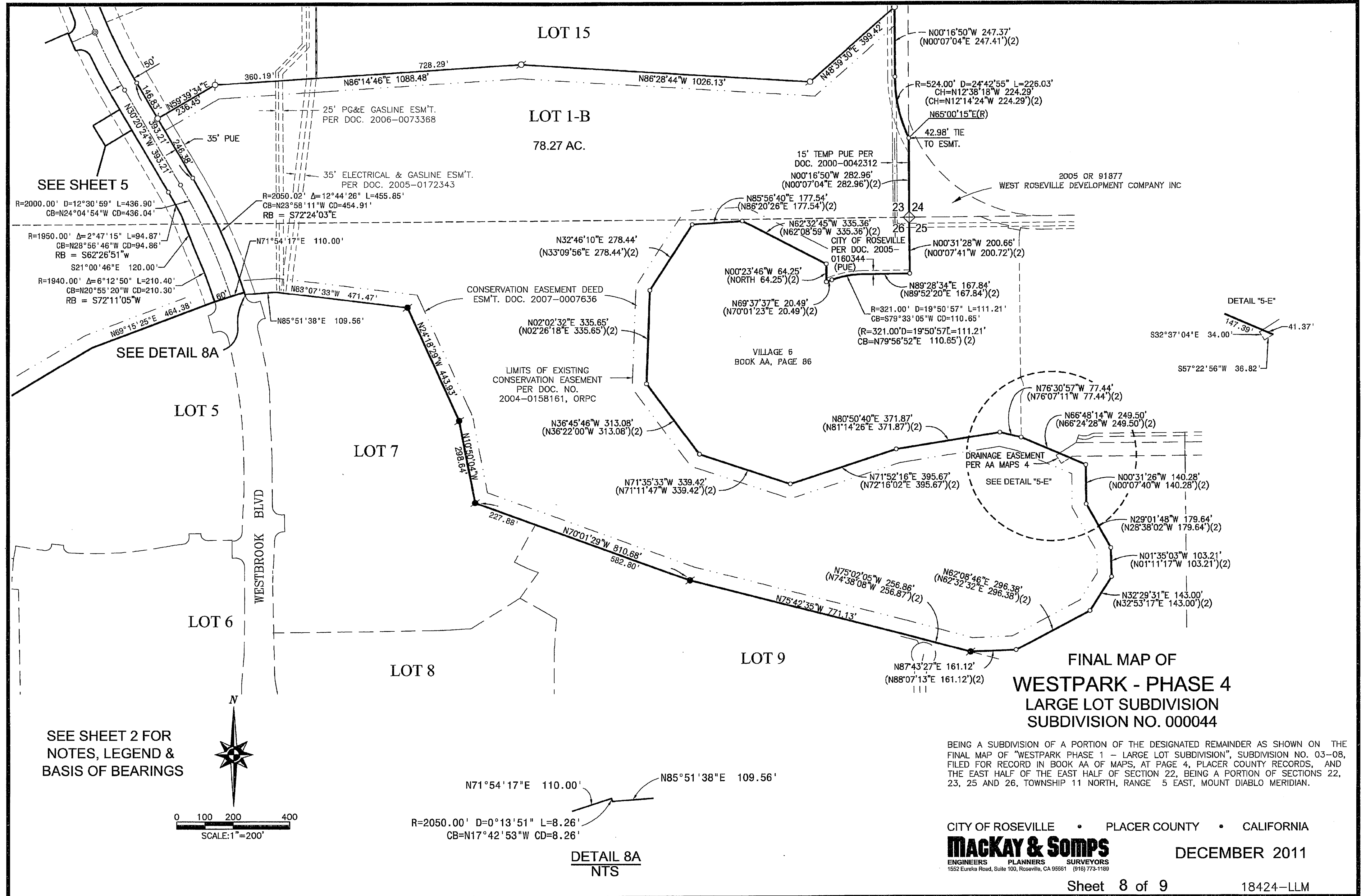
DECEMBER 2011





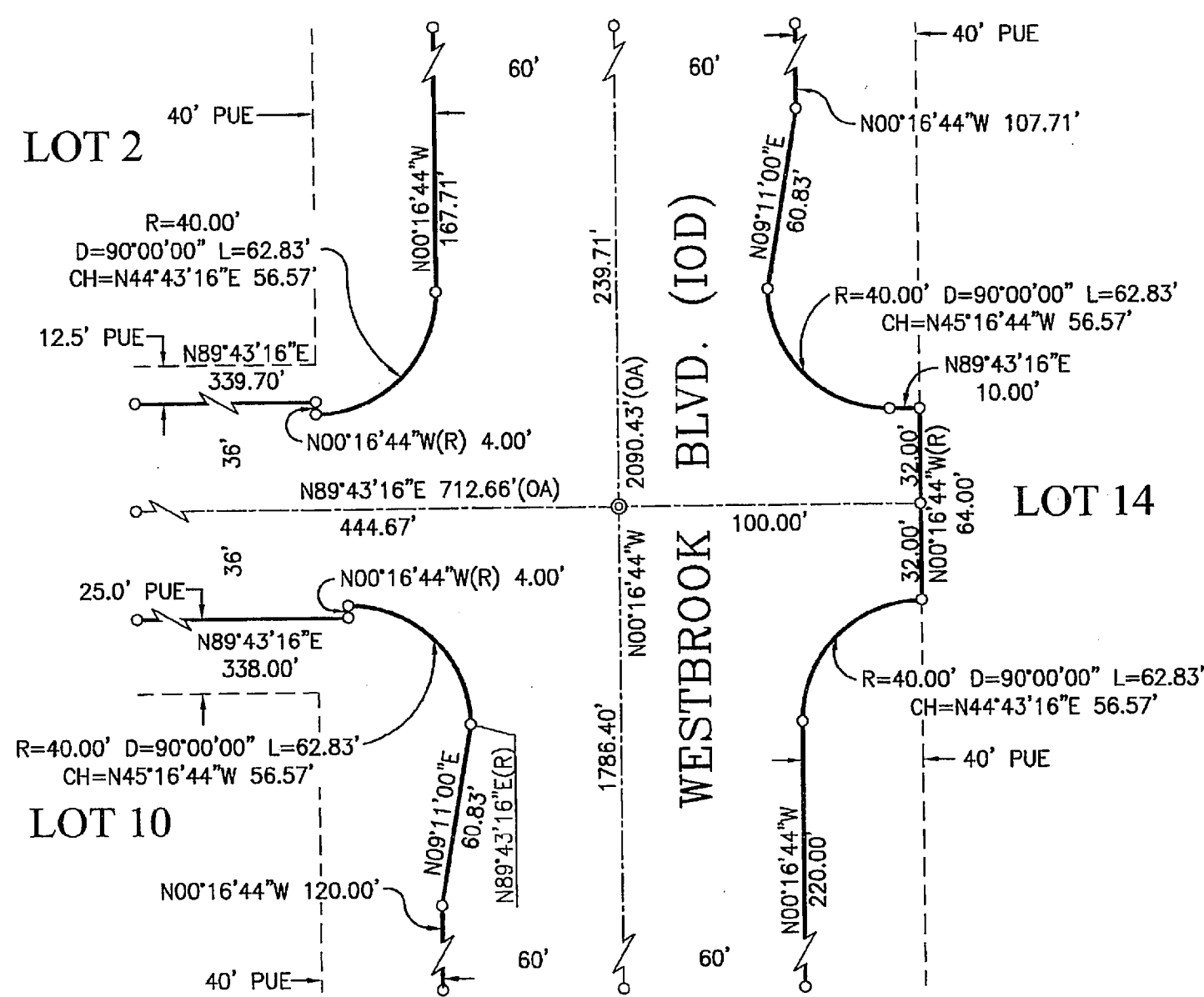




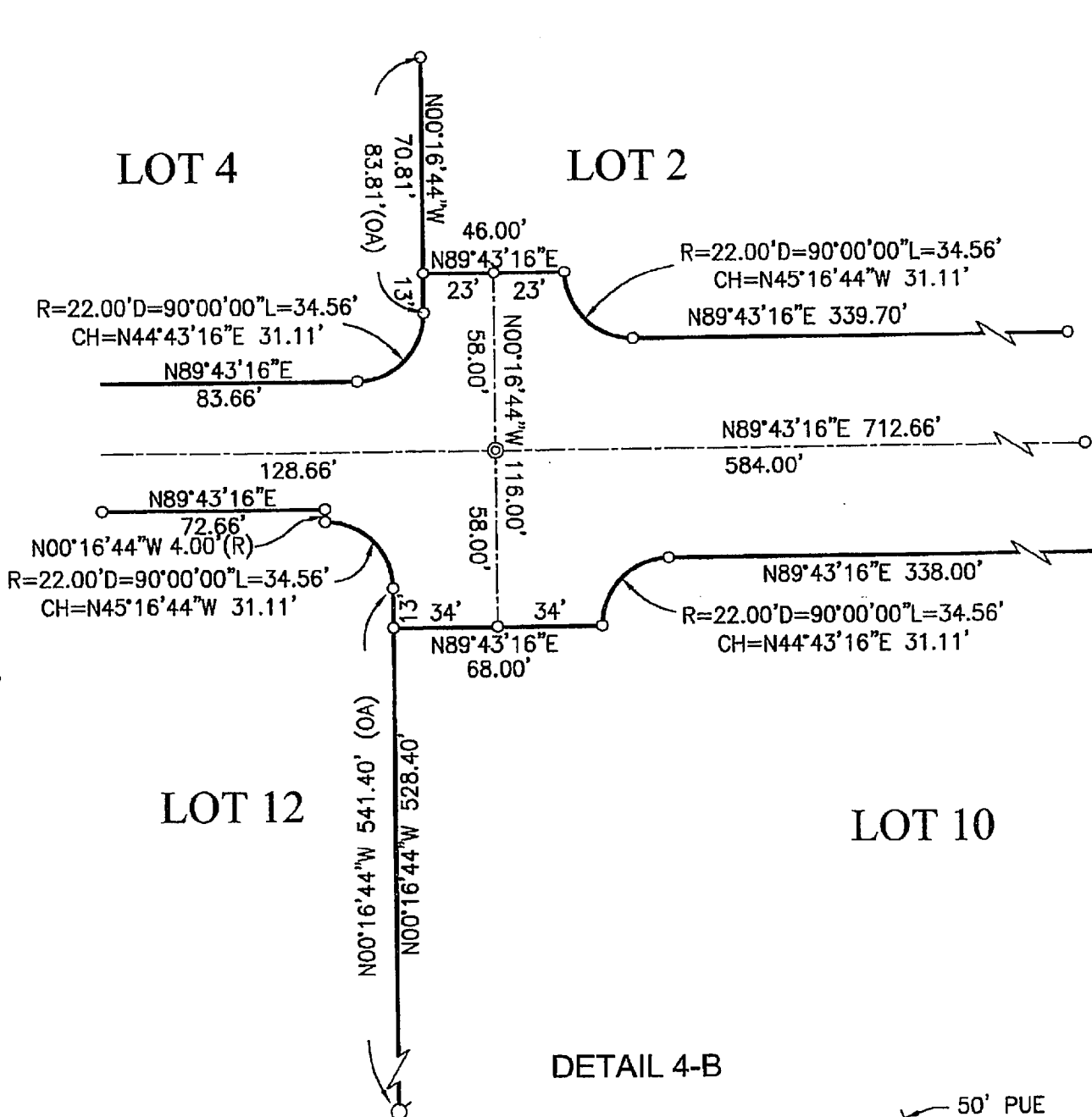


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m.jones  
08-09-11  
[1] Ph4 LLM Title.dwg

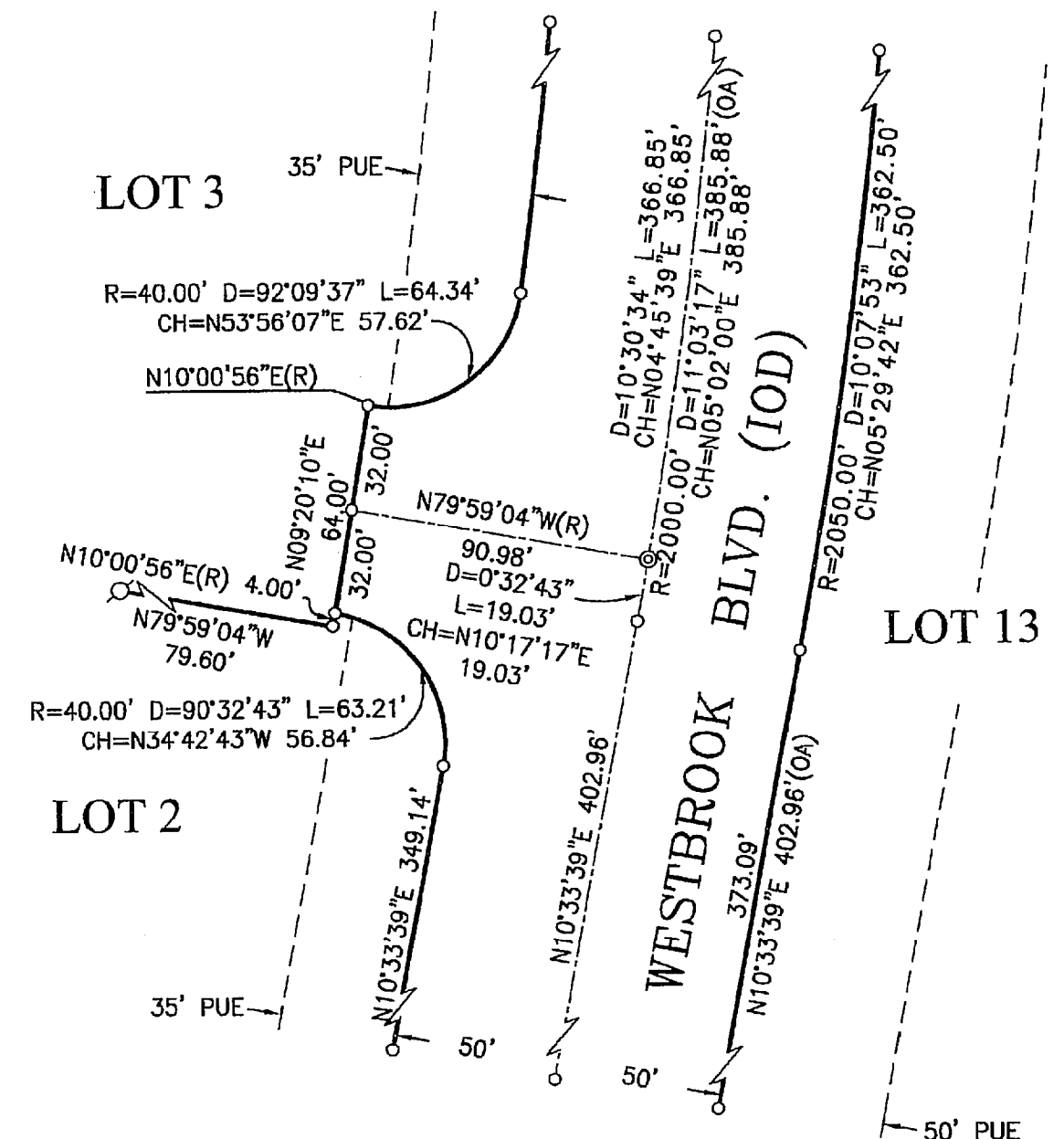




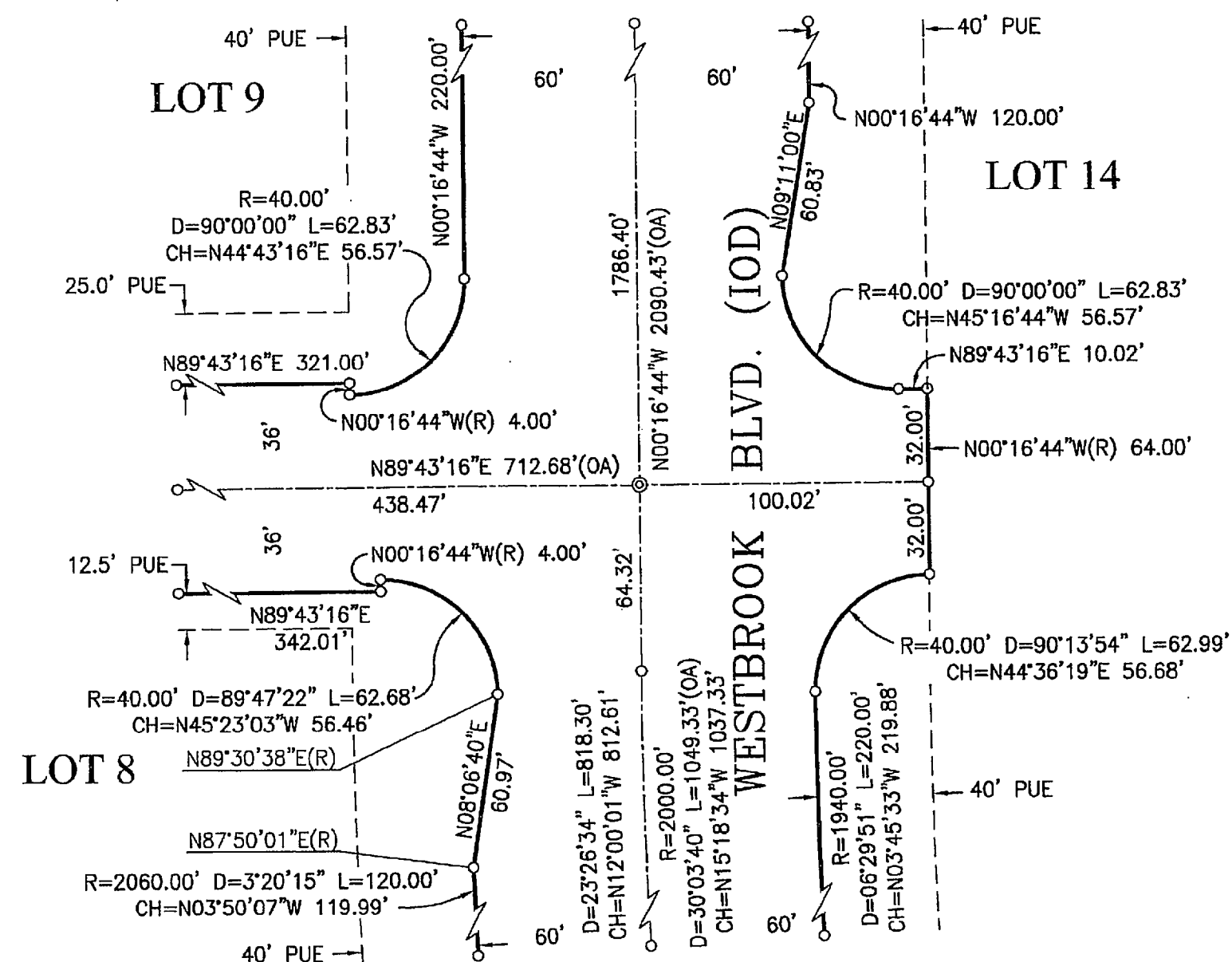
DETAIL 4-A



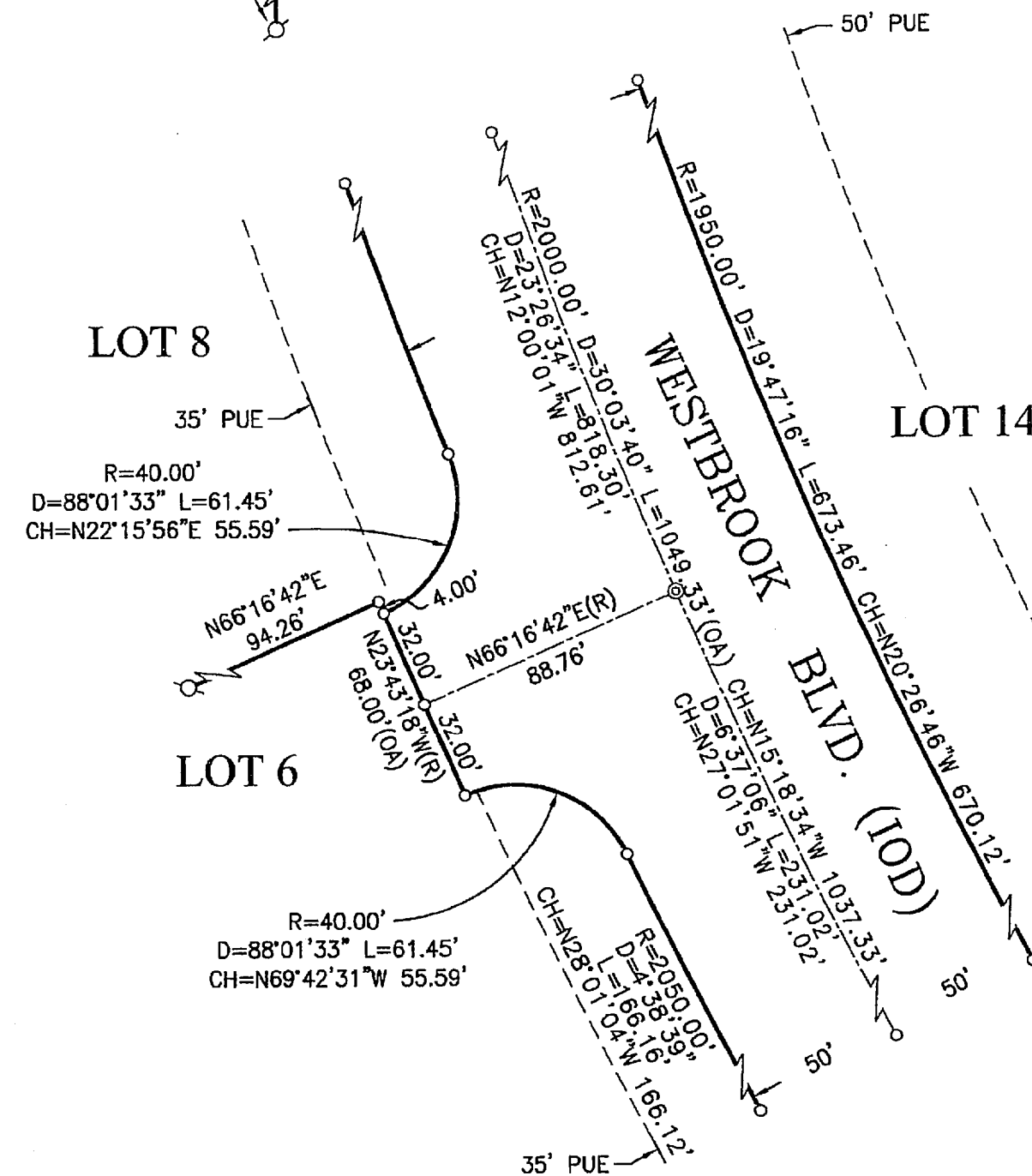
DETAIL 4-B



DETAIL 4-C



DETAIL 5-A



DETAIL 5-B

SEE SHEET 2 FOR  
NOTES, LEGEND &  
BASIS OF BEARINGS



0 25 50 100  
SCALE: 1"=50'

FINAL MAP OF  
**WESTPARK - PHASE 4**  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 000044

BEING A SUBDIVISION OF A PORTION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF "WESTPARK PHASE 1 - LARGE LOT SUBDIVISION", SUBDIVISION NO. 03-08, FILED FOR RECORD IN BOOK AA OF MAPS, AT PAGE 4, PLACER COUNTY RECORDS, AND THE EAST HALF OF THE EAST HALF OF SECTION 22, BEING A PORTION OF SECTIONS 22, 23, 25 AND 26, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

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**Mackay & Somp**  
ENGINEERS PLANNERS SURVEYORS  
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DECEMBER 2011

Sheet 9 of 9

18424-LLM



## COUNCIL COMMUNICATION

CC #: 0979

File #: 0400-04-09-01

**Title:** Creekview, Westbrook Boulevard - Segment 1 - Notice of Completion

**Contact:** Ignacio Vizcarra 916-774-5578 ivizcarra@roseville.ca.us

Meeting Date: 9/16/2020

Item #: 7.13.

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council adopt the attached resolution accepting Creekview, Westbrook Boulevard - Segment 1, CWJ #190066, as complete and authorizing the City Engineer to execute the Notice of Completion.

### BACKGROUND

The Engineering Division has made a final inspection of the above project and has found the roadway infrastructure work complete in accordance with the improvement plans and City Specifications.

### FISCAL IMPACT

The actions requested as part of this action have no impact to the City's General Fund. Construction costs were paid by the developer.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a Notice of Completion meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Ignacio Vizcarra, Construction Inspector

Mike Isom, Development Services Director



---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-359

Creekview Westbrook Blvd Segment 1 NOC.

Creekview WestbrookBlvd\_seg1 Exhibit A

Creekview Westbrook Blvd. Seg. 1 Final Map

RESOLUTION NO. 20-359

RESOLUTION OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS CREEKVIEW WESTBROOK BOULEVARD, SEGMENT 1 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING A PORTION OF THOSE RESPECTIVE DEDICATIONS OFFERED ON THE RECORDED MAPS OF "THE FINAL MAP OF CREEKVIEW PHASE 1 LARGE LOT SUBDIVISION, SUBDIVISION NO. PL 18-0190" BE IT RESOLVED by the Council of the City of Roseville as follows:

1. The "Notice of Completion" on file in the City Clerk's Department relative to that public work known as the Creekview Westbrook Boulevard Segment 1 is hereby approved and the public work accepted.
2. A portion of the right-of-way and easements located adjacent thereto as offered for dedication on The Final Map of Creekview Phase 1, Large Lot Subdivision, Subdivision No. PL18-0190, recorded in Book EE of Maps, Page 97, in the office of the recorder of Placer County, is hereby accepted by the City in part as said dedications relates to the improvement plan set known as Creekview Westbrook Boulevard Segment 1. The remaining offers of dedication will be accepted at a later date as improvements are approved and accepted.
3. The City Engineer is hereby authorized and directed to execute said Notice on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
CITY CLERK

RECORDING REQUESTED BY AND WHEN  
RECORDED MAIL TO:

CITY CLERK  
CITY OF ROSEVILLE  
311 VERNON STREET  
ROSEVILLE, CA 95678

Exempt from recording fees  
Pursuant to Gov't Code §27383

---

**NOTICE OF COMPLETION**

NOTICE IS HEREBY GIVEN that the public work of improvement known as the \_\_\_\_\_ Project was completed and accepted by the City of Roseville on \_\_\_\_\_. The location is situated in the City of Roseville, County of Placer, State of California and is indicated on the attached map, marked as Exhibit "A" and incorporated herein by this reference. The real property herein described is owned by the City of Roseville, 311 Vernon Street, Roseville CA 95678.

The direct/general contractor on said project was \_\_\_\_\_.

The surety on said project was \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_  
City of Roseville  
Owner

ATTEST:

\_\_\_\_\_  
Sonia Orozco, City Clerk

State of California    )  
County of Placer        )

I, \_\_\_\_\_, being first duly sworn, depose and say: I am the \_\_\_\_\_ of the City of Roseville, a municipal corporation in the State of California, owner of the property described in the above Notice. I am duly authorized to make this verification for and on behalf of the City of Roseville. I have read the Notice of Completion and know its contents and the facts stated therein are true.

\_\_\_\_\_

City of Roseville

|                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

State of California    )  
County of Placer        )

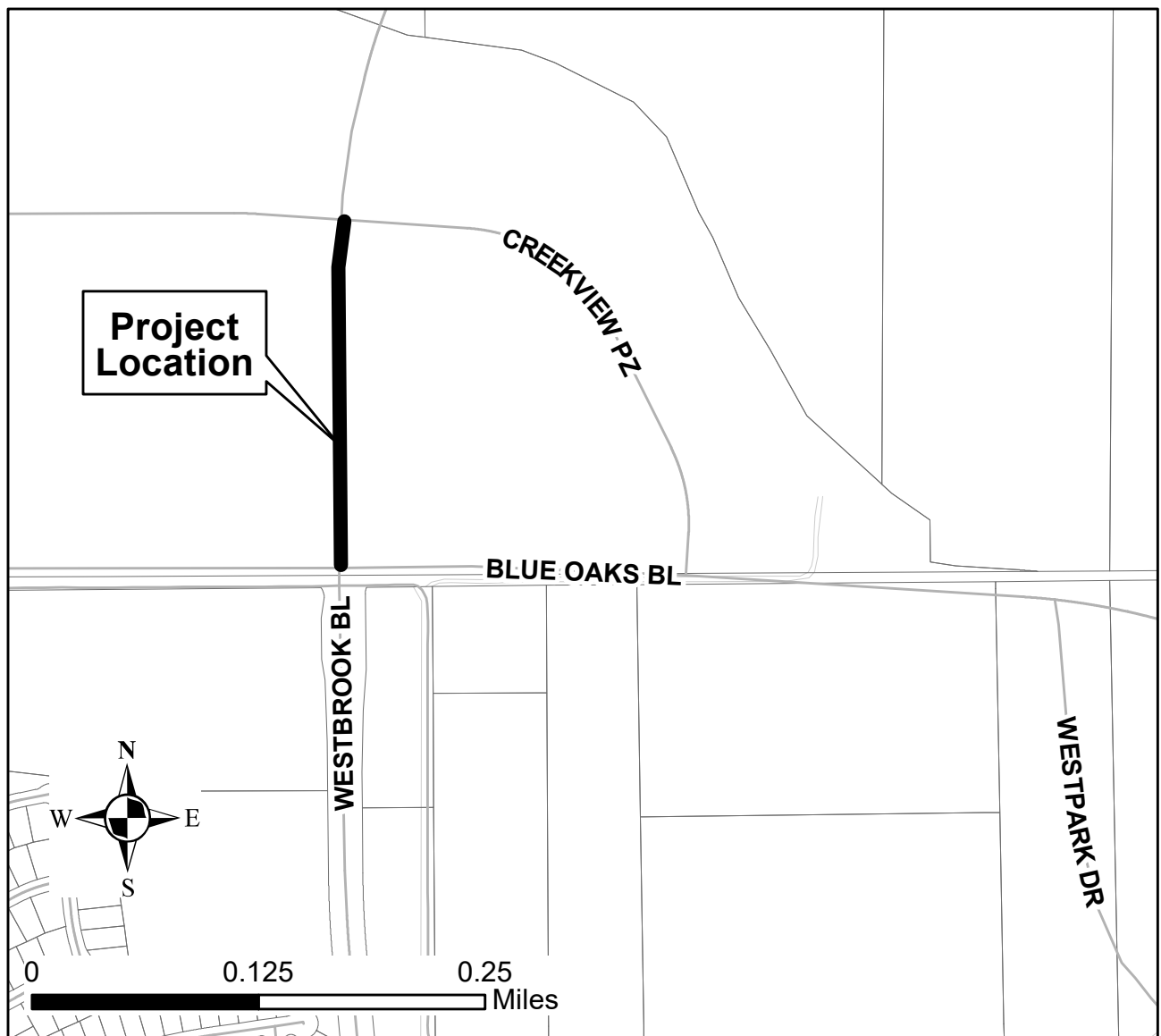
Subscribed and sworn to (or affirmed) before  
me on this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_, \_\_\_\_\_  
proved to me on the basis of satisfactory  
evidence to be the person(s) who appeared  
before me.

*Place Notary Seal and/or Stamp Above*

\_\_\_\_\_  
*Signature of Notary Public*

# EXHIBIT A

## City of Roseville Creekview Westbrook Boulevard - Segment 1





**OWNER'S STATEMENT**

THE UNDERSIGNED HEREBY CERTIFY THAT THEY ARE THE ONLY PERSONS HAVING ANY RECORD TITLE INTEREST IN THE REAL PROPERTY INCLUDED WITHIN THE SUBDIVISION SHOWN UPON THIS FINAL MAP OF "CREEKVIEW - PHASE 1 LARGE LOT SUBDIVISION" AND THEY HEREBY CONSENT TO THE PREPARATION AND RECORDATION OF THIS FINAL MAP AND HEREBY OFFER FOR DEDICATION AND DO HEREBY DEDICATE FOR SPECIFIC PURPOSES THE FOLLOWING:

THE REAL PROPERTY DESCRIBED BELOW IS IRREVOCABLY OFFERED FOR DEDICATION AS AN EASEMENT FOR PUBLIC PURPOSES:

- (A) PUBLIC EASEMENTS FOR THE INSTALLATION AND MAINTENANCE OF, BUT NOT LIMITED TO ELECTROLIERS, WATER AND GAS PIPES, SEWER AND DRAINAGE PIPES, AND FOR UNDERGROUND WIRE AND CONDUITS FOR ELECTRIC, TELEPHONE AND TELEVISION SERVICES AND TRAFFIC CONTROL APPURTENANCES TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER, UNDER AND ACROSS ALL THOSE AREAS SHOWN HEREON AS IOD/ROW (IRREVOCABLE OFFER OF DEDICATION/RIGHT OF WAY) AND THOSE STRIPS OF LAND LYING CONTIGUOUS TO THE RIGHT-OF-WAY AS SHOWN HEREON AND DESIGNATED "P.U.E." (PUBLIC UTILITY EASEMENT).
- (B) A PUBLIC EASEMENT FOR PEDESTRIAN / BICYCLE ACCESS AND THE INSTALLATION, REPAIR, REMOVAL OR REPLACEMENT OF LANDSCAPING TOGETHER WITH ANY AND ALL APPURTENANCES THERETO ON, OVER, UNDER AND ACROSS LOTS 4, 5, 6, 7, 10, 22 AND 23, AND THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "PASEO EASEMENT" (P.E.).
- (C) A PUBLIC EASEMENT FOR THE INGRESS AND EGRESS OF EMERGENCY VEHICLES, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER AND ACROSS THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED EMERGENCY VEHICLE ACCESS EASEMENT (E.V.A.E.).
- (D) A PUBLIC EASEMENT FOR THE INSTALLATION AND MAINTENANCE OF A BUS SHELTER TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER AND ACROSS THAT STRIP OF LAND SHOWN HEREON AND DESIGNATED "BUS SHELTER EASEMENT" (B.S.E.).
- (E) A PUBLIC EASEMENT FOR PEDESTRIAN AND BICYCLES ACCESS AND THE INSTALLATION AND MAINTENANCE OF THE BIKE PATH, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER AND ACROSS THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "BIKE PATH EASEMENT" (B.P.E.).
- (F) A PUBLIC EASEMENT FOR INGRESS AND EGRESS FOR THE PURPOSE OF CONSTRUCTION OF PUBLIC IMPROVEMENTS AND ANY AND ALL APPURTENANCES THERETO RELATED TO A STANDARD CITY OF ROSEVILLE PUBLIC STREET ON, OVER, UNDER, AND ACROSS BLUE OAKS BOULEVARD, WESTBROOK BOULEVARD, LOWER BANK DRIVE AND CLOUD DANCE DRIVE SHOWN HEREON AND DESIGNATED "CONSTRUCTION EASEMENT" (C.E.).

THE REAL PROPERTY DESCRIBED BELOW IS IRREVOCABLY OFFERED FOR DEDICATION IN FEE FOR PUBLIC PURPOSES:

- (A) AS PUBLIC RIGHT-OF-WAY BLUE OAKS BOULEVARD, BENCHMARK DRIVE, CLOUD DANCE DRIVE, DAYDREAM DRIVE, GRASSCREEK DRIVE, HOLT PARKWAY, LOWER BANK DRIVE, SKIPPING STONE WAY, WESTBROOK BOULEVARD AND WHISTLING BEND WAY, AND ALL THOSE AREAS SHOWN HEREON AS IOD/ROW (IRREVOCABLE OFFER OF DEDICATION/RIGHT OF WAY).
- (B) LOTS 28 AND 29 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR PUBLIC OPEN SPACE PURPOSES.
- (C) LOTS 15 AND 18 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR PUBLIC PARK PURPOSES.
- (D) LOT 21 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR A SANITARY SEWER LIFT STATION SITE.
- (E) LOT 26 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR RECYCLING CENTER SITE.
- (F) LOT 27 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR WATER TREATMENT/WELL SITE.

ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP  
A WASHINGTON LIMITED PARTNERSHIP

BY: Brian Moore  
Vice President

**NOTARY'S ACKNOWLEDGMENT**

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA

COUNTY OF PLACER

ON April 15th, 2020 BEFORE ME, Renee C. Kelly, A NOTARY PUBLIC

PERSONALLY APPEARED - Brian Moore  
WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL.

Renee C. Kelly  
SIGNATURE PRINTED NAME

MY PRINCIPAL PLACE OF BUSINESS IS PLACER COUNTY

MY COMMISSION EXPIRES: 4/21/2021 MY COMMISSION NUMBER: 2192761

\* OF CALIFORNIA THAT THE -KK

**SUBDIVISION MAP ACT SECTION 66477.5 CERTIFICATE**

PURSUANT TO SECTION 66477.5 OF THE SUBDIVISION MAP ACT THE CITY OF ROSEVILLE SHALL RECONVEY LOTS 21, 26 AND 27 AS DEDICATED HEREON, TO THE SUBDIVIDER NAMED BELOW IF THE CITY OF ROSEVILLE MAKES A DETERMINATION THAT THE SAME PUBLIC PURPOSE FOR WHICH THE PROPERTY WAS DEDICATED DOES NOT EXIST, OR THE PROPERTY OR ANY PORTION THEREOF IS NOT NEEDED FOR PUBLIC UTILITIES EXCEPT FOR ANY PORTION OF THE PROPERTY THAT IS REQUIRED FOR THE SAME PUBLIC PURPOSE OR PUBLIC UTILITIES.

SUBDIVIDER: ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP  
A WASHINGTON LIMITED PARTNERSHIP

ADDRESS: 3001 DOUGLAS BLVD., SUITE 200  
ROSEVILLE, CA 95661

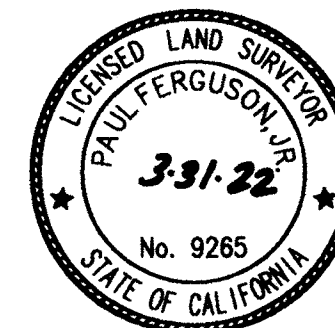
**SURVEYOR'S STATEMENT**

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, IN JANUARY, 2019, I HEREBY STATE THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN. THAT ALL THE MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED OR THAT THEY WILL BE SET IN THOSE POSITIONS BEFORE DECEMBER 31, 2022, AND THAT THE MONUMENTS ARE, OR WILL BE, SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, AND THAT THIS FINAL MAP SUBSTANTIALLY CONFORMS TO THE CONDITIONALLY APPROVED TENTATIVE MAP.

MACKAY & SOMPS CIVIL ENGINEERS, INC.

BY: Paul Ferguson  
PAUL FERGUSON, JR., PLS 9265  
EXPIRATION DATE: MARCH 31, 2022

DATE: 4/13/20

**CITY ENGINEER'S STATEMENT**

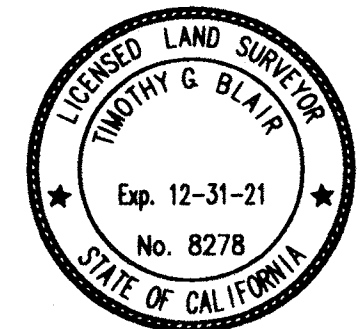
I HEREBY STATE THAT I HAVE EXAMINED THIS FINAL MAP OF "CREEKVIEW - PHASE 1 LARGE LOT SUBDIVISION" AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP ON FILE AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.

Marc Stout DATE: 4/16/20  
MARC STOUT, R.C.E. 69879  
CITY ENGINEER, CITY OF ROSEVILLE  
LICENSE EXPIRES: SEPTEMBER 30, 2020

I HEREBY STATE THAT I AM SATISFIED THIS FINAL MAP OF "CREEKVIEW - PHASE 1 LARGE LOT SUBDIVISION" IS TECHNICALLY CORRECT.

FOR MARC STOUT, CITY ENGINEER, CITY OF ROSEVILLE

Timothy G. Blair DATE: 4/16/20  
TIMOTHY G. BLAIR, PLS 8278  
EXPIRES DECEMBER 31, 2021

**CITY CLERK'S STATEMENT**

I HEREBY CERTIFY THAT THE CITY COUNCIL, CITY OF ROSEVILLE, HAS APPROVED THIS FINAL MAP OF "CREEKVIEW - PHASE 1 LARGE LOT SUBDIVISION", BUT REJECTS AT THIS TIME ON BEHALF OF THE PUBLIC, BUT RESERVES THE RIGHT TO ACCEPT AT A LATER DATE, ALL IRREVOCABLE OFFERS OF DEDICATION IN ACCORDANCE WITH THE TERMS OF THOSE OFFERS, AND HEREBY APPROVES THE ABANDONMENT OF THE EASEMENT LISTED HEREON WITHIN NOTE 3 ON SHEET 2.

Sonia Ornela  
CITY CLERK, CITY OF ROSEVILLE  
DATE: 4/16/2020 BY: \_\_\_\_\_  
ASSISTANT CITY CLERK

**RECORDER'S STATEMENT**

FILED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2020, AT \_\_\_\_\_ M. IN BOOK \_\_\_\_\_ OF MAPS, AT PAGE \_\_\_\_\_, IN THE OFFICE OF THE PLACER COUNTY RECORDER, AT THE REQUEST OF MACKAY & SOMPS CIVIL ENGINEERS, INC.

Ryan Remo DOCUMENT NO: 2020-CD51034  
RECORDER OF PLACER COUNTY  
STATE OF CALIFORNIA  
Deputy FEE: \$ 125.00

**FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190**

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

CITY OF ROSEVILLE • PLACER COUNTY • CALIFORNIA

**MACKAY & SOMPS**  
ENGINEERS PLANNERS SURVEYORS  
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189

APRIL 2020

SHEET 1 OF 15 18431.RST

SEE SHEET 2 FOR TRUSTEE'S STATEMENT AND ACKNOWLEDGMENT



TRUSTEE'S STATEMENT

FIRST AMERICAN TITLE COMPANY, A NEBRASKA CORPORATION, AS TRUSTEE UNDER DEED OF TRUST RECORDED ON MAY 24, 2019, AS INSTRUMENT NO. 2019-34783, OFFICIAL RECORDS OF PLACER COUNTY, AGAINST THE LAND HEREIN SHOWN CONSENTS TO THE MAKING AND FILING OF THIS MAP.

BY: [Signature] - Robin Nieto  
Vice President

BY: \_\_\_\_\_  
\_\_\_\_\_

NOTARY'S ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA

COUNTY OF Placer

ON April 15, 2020 BEFORE ME, V. Murphy, A NOTARY PUBLIC

PERSONALLY APPEARED Robin Nieto  
WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/they EXECUTED THE SAME IN HIS/HER/their AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/their SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL.

[Signature] V. Murphy  
SIGNATURE PRINTED NAME

MY PRINCIPAL PLACE OF BUSINESS IS Placer COUNTY

MY COMMISSION EXPIRES: Dec. 29, 2022 MY COMMISSION NUMBER: 22609216

NOTES:

- ALL CURVES ARE DIMENSIONED WITH RADIUS, DELTA, ARC LENGTH, CHORD BEARING AND CHORD LENGTH. DISTANCES SHOWN HEREON ARE IN FEET AND DECIMALS THEREOF AND ARE "GROUND" DISTANCES. DUE TO ROUNDING, THE SUM OF INDIVIDUAL DIMENSIONS MAY NOT EQUAL THE OVERALL DIMENSION.
- TOTAL AREA FOR THIS SUBDIVISION IS 461.327± ACRES, CONSISTING OF 18 LARGE LOTS, 1 COMMERCIAL LOT, 7 LANDSCAPE LOTS, 2 PUBLIC PARK LOTS, 2 PUBLIC OPEN SPACE LOTS, 1 CITY SANITARY SEWER LIFT STATION LOT, 1 CITY RECYCLING CENTER LOT AND 1 CITY WATER TREATMENT/WELL LOT.
- PURSUANT TO GOVERNMENT CODE SECTION 66434(G), THE FOLLOWING PUBLIC EASEMENT IS HEREBY ABANDONED:
  - HIGHWAY EASEMENT DEED TO THE COUNTY OF PLACER RECORDED IN BOOK 3841, AT PAGE 544, O.R.P.C., LYING WITHIN LOTS 6 AND 7, AND BLUE OAKS BOULEVARD.
- THIS PROPERTY IS SUBJECT TO AN EASEMENT FOR INGRESS, EGRESS AND UTILITY PURPOSES AND INCIDENTAL PURPOSES RECORDED ON SEPTEMBER 14, 1981 AS INSTRUMENT NO. 35702, IN BOOK 2431, AT PAGE 645, O.R.
- THIS PROPERTY IS SUBJECT TO THE PROVISIONS OF A REPORT OF A MINOR SUBDIVISION, SUBDIVISIONS NO. P-75146, FOR THE PAYMENT OF FEES TO RELIEVE OVERCROWDING OF SCHOOL SERVING THE AREA RECORD ON MARCH 5, 1990 IN BOOK 3841, AT PAGE 538, O.R.
- THIS PROPERTY IS SUBJECT TO THE THE TERMS AND PROVISIONS CONTAINED IN THAT CERTAIN DOCUMENT ENTITLED "DEVELOPMENT AGREEMENT BY AND BETWEEN THE CITY OF ROSEVILLE AND GRANITE BAY INVESTORS II, LLC, PHILLIPS ROAD 160 INVESTORS LIMITED PARTNERSHIP, PHILLIPS ROAD LAND, LLC, J & KD ENTERPRISES, LLC, SOULE INVESTMENTS, LLC, BENNETT WEST ROSEVILLE, LLC, DECOU WEST ROSEVILLE, LLC, BLUE OAKS - ROSEVILLE, LP AND CHUANG RELATIVE TO THE CREEKVIEW SPECIFIC PLAN" RECORDED ON NOVEMBER 28, 2012 AS INSTRUMENT NO. 2012-0113752, O.R. AND THE SUBSEQUENT ASSIGNMENTS OF DEVELOPMENT AGREEMENT AS FOLLOWS:
  - THAT DOCUMENT ENTITLED "ASSIGNMENT OF DEVELOPMENT AGREEMENT" FROM CHUANG FAMILY PARTNERSHIP, A CALIFORNIA PARTNERSHIP, FELIX CHUANG AND MARK CHUANG TO ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, A WASHINGTON LIMITED PARTNERSHIP, RECORDED ON MARCH 13, 2019 AS INSTRUMENT NO. 2019-0015249. O.R.
  - THAT DOCUMENT ENTITLED "ASSIGNMENT OF DEVELOPMENT AGREEMENT" FROM PHILLIPS ROAD 160 INVESTORS, A CALIFORNIA LIMITED PARTNERSHIP, TO ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, A WASHINGTON LIMITED PARTNERSHIP, RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0015249. O.R.
  - THAT DOCUMENT ENTITLED "ASSIGNMENT OF DEVELOPMENT AGREEMENT" FROM PHILLIPS ROAD LAND, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, SOULE INVESTMENTS, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, AND J & KED ENTERPRISES, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, TO ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, A WASHINGTON LIMITED PARTNERSHIP, RECORDED ON MARCH 13, 2019 AS INSTRUMENT NO. 2019-0034780 O.R.
  - THAT DOCUMENT ENTITLED "ASSIGNMENT OF DEVELOPMENT AGREEMENT" FROM BENNETT WEST ROSEVILLE, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, AND DECOU WEST ROSEVILLE, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, TO ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, A WASHINGTON LIMITED PARTNERSHIP, RECORDED ON MARCH 13, 2019 AS INSTRUMENT NO. 2019-0034781 O.R.
  - THAT DOCUMENT ENTITLED "ASSIGNMENT OF DEVELOPMENT AGREEMENT" FROM BLUE OAKS-ROSEVILLE, LP, A WASHINGTON LIMITED PARTNERSHIP, TO ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, A WASHINGTON LIMITED PARTNERSHIP, RECORDED ON MARCH 13, 2019 AS INSTRUMENT NO. 2019-0034782 O.R.
- THIS PROPERTY IS SUBJECT TO THAT DOCUMENT ENTITLED "ASSIGNMENT OF LEASES, RENTS AND PURCHASE AGREEMENTS" RECORDED MAY 24, 2019 AS INSTRUMENT NO. 2019-0034784, O.R.

BASIS OF BEARINGS:

THE BASIS OF BEARINGS FOR THIS MAP IS N 89°30'20" E AS SHOWN ON THE SOUTH LINE OF SECTION 14 PER THAT CERTAIN FINAL MAP ENTITLED "WESTPARK - PHASE 4 LARGE LOT SUBDIVISION" FILED FOR RECORD ON AUGUST 16, 2013 IN BOOK CC OF MAPS, AT PAGE 53, PLACER COUNTY RECORDS.

REFERENCES:

- DOC.# 2019-0050337 (LLA)
- 9 R.S. 56
- 17 P.M. 102
- 18 R.S. 15
- 18 R.S. 64
- BB MAPS 88
- CC MAPS 53
- EE MAPS 51

LEGEND:

- DIMENSION POINT
- FOUND MONUMENT AS NOTED
- ◆ FOUND SECTION CORNER AS NOTED
- FOUND QUARTER CORNER AS NOTED
- ⌀ SET 5/8" REBAR WITH PLASTIC CAP STAMPED "LS 9265"
- ⊙ SET COPPERWELD SURVEY MONUMENT WITH CENTER PUNCH IN MONUMENT WELL STAMPED "LS 9265"
- AC. ACRES
- BNDY BOUNDARY
- B.P.E. BIKE PATH EASEMENT
- B.S.E. BUS SHELTER EASEMENT
- C.E. CONSTRUCTION EASEMENT
- ESMT EASEMENT
- E.V.A.E. EMERGENCY VAEHICLE ACCESS EASEMENT
- FD FOUND
- IOD/ROW IRREVOCABLE OFFER OF DEDICATION/RIGHT-OF-WAY
- I.P. IRON PIPE
- LLA LOT LINE ADJUSTMENT
- OD OUTSIDE DIAMETER
- (OA) OVERALL
- O.R. OFFICIAL RECORDS OF PLACER COUNTY
- P.E. PASEO EASEMENT
- PGE PACIFIC GAS AND ELECTRIC COMPANY
- P.M. PARCEL MAP
- P.U.E. PUBLIC UTILITY EASEMENT
- R.S. RECORD OF SURVEY
- (R) RADIAL BEARING
- S.F. SQUARE FEET
- (X) SHEET INDEX
- BOUNDARY
- LOT LINE
- ADJACENT PROPERTY
- RIGHT-OF-WAY
- EASEMENT/I.O.D.
- EASEMENT/I.O.D.

FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

CITY OF ROSEVILLE • PLACER COUNTY • CALIFORNIA

**Mackay & Samps**  
ENGINEERS PLANNERS SURVEYORS  
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189

APRIL 2020

SHEET 2 OF 15 18431.RST

| LARGE LOT # | L.T.M. PLAN # | S.L.T.M. PLAN # |
|-------------|---------------|-----------------|
| 1           | C-41          | C-41            |
| 2           | C-42          | C-42            |
| 3           | C-25          | C-25            |
| 4           | LC-1          | LC-1            |
| 5           | LC-2          | LC-2            |
| 6           | LC-10         | LC-10           |
| 7           | LC-11         | LC-11           |
| 8           | C-70          | C-70            |
| 9           | C-17          | C-17            |
| 10          | LC-12         | LC-12           |
| 11          | C-24          | C-24            |
| 12          | C-23          | C-23            |
| 13          | C-13          | C-13            |
| 14          | C-14          | C-14            |
| 15          | C-63          | C-63            |
| 16          | C-15          | C-15            |
| 17          | C-12          | C-12            |
| 18          | C-62          | C-62            |
| 19          | C-11          | C-11            |
| 20          | C-10          | C-10            |
| 21          | C-82          | C-82            |
| 22          | LC-3          | LC-3            |
| 23          | LC-4          | LC-4            |
| 24          | C-16          | C-16            |
| 25          | C-43          | C-43            |
| 26          | C-83          | C-83            |
| 27          | C-84          | C-84            |
| 28          | C-54          | C-54            |
| 29          | C-53          | C-53            |
| 30          | -             | -               |
| 31          | -             | -               |
| 32          | -             | -               |
| 33          | -             | -               |



0 250 500 1000  
SCALE: 1"=500'

FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

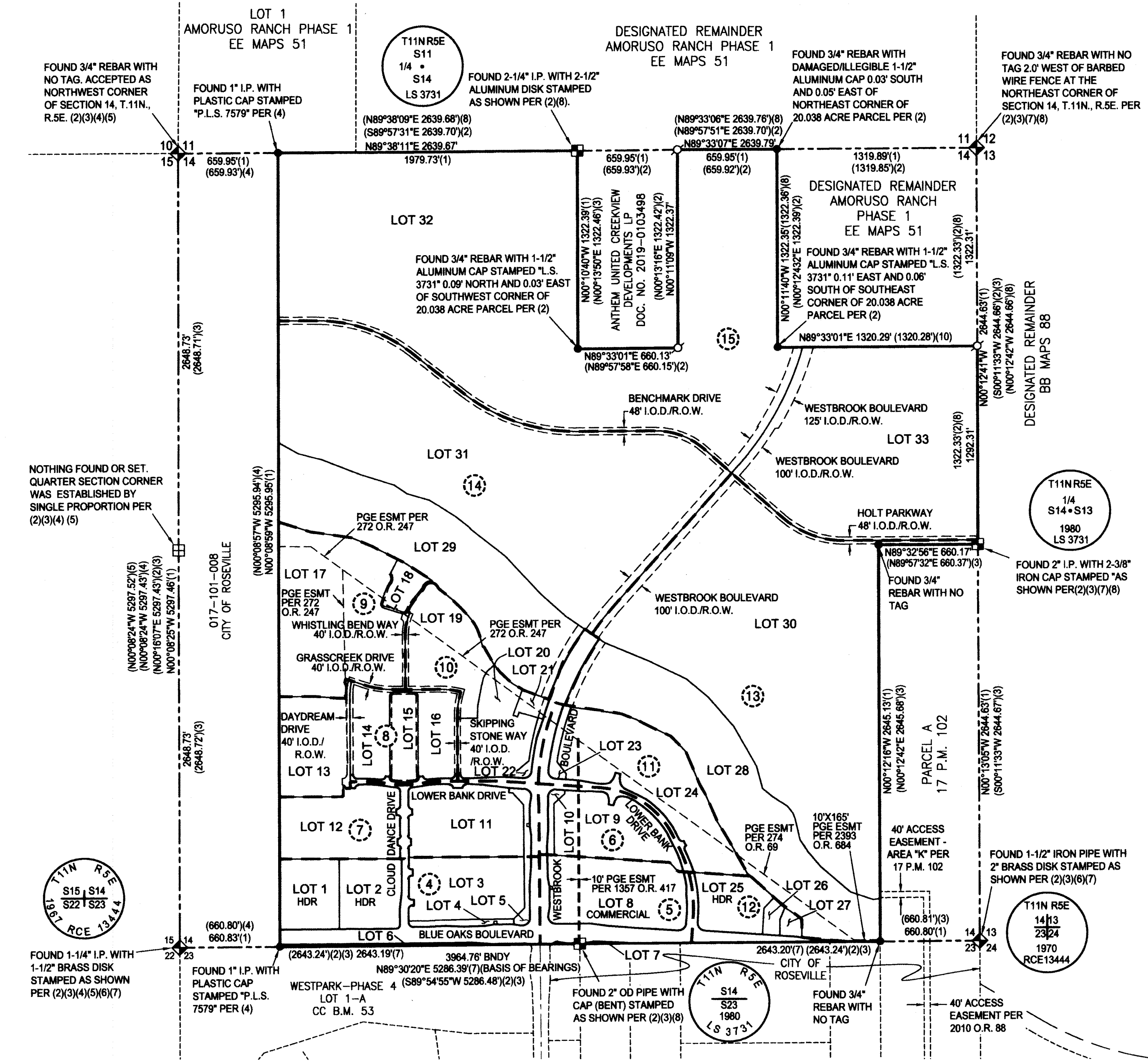
BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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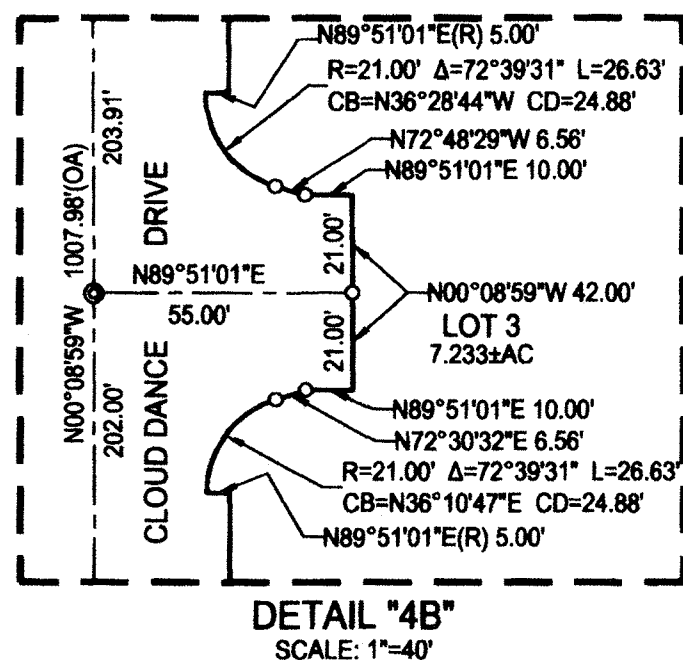
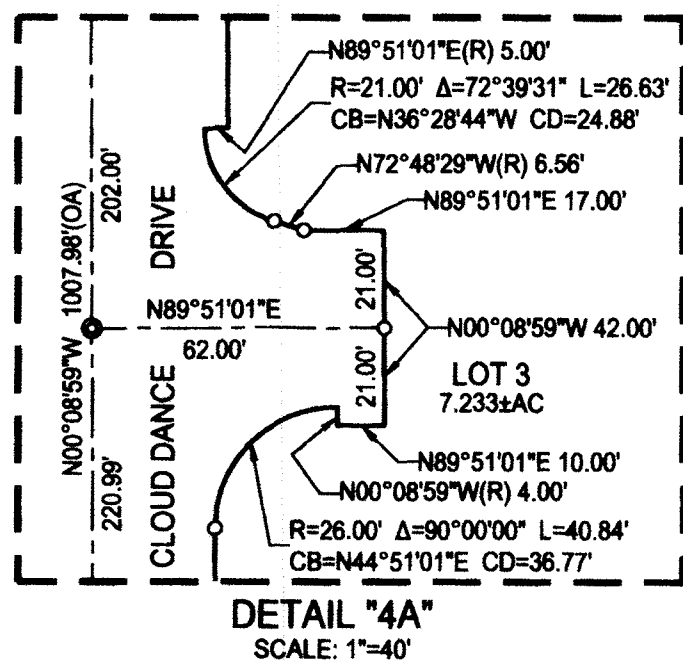
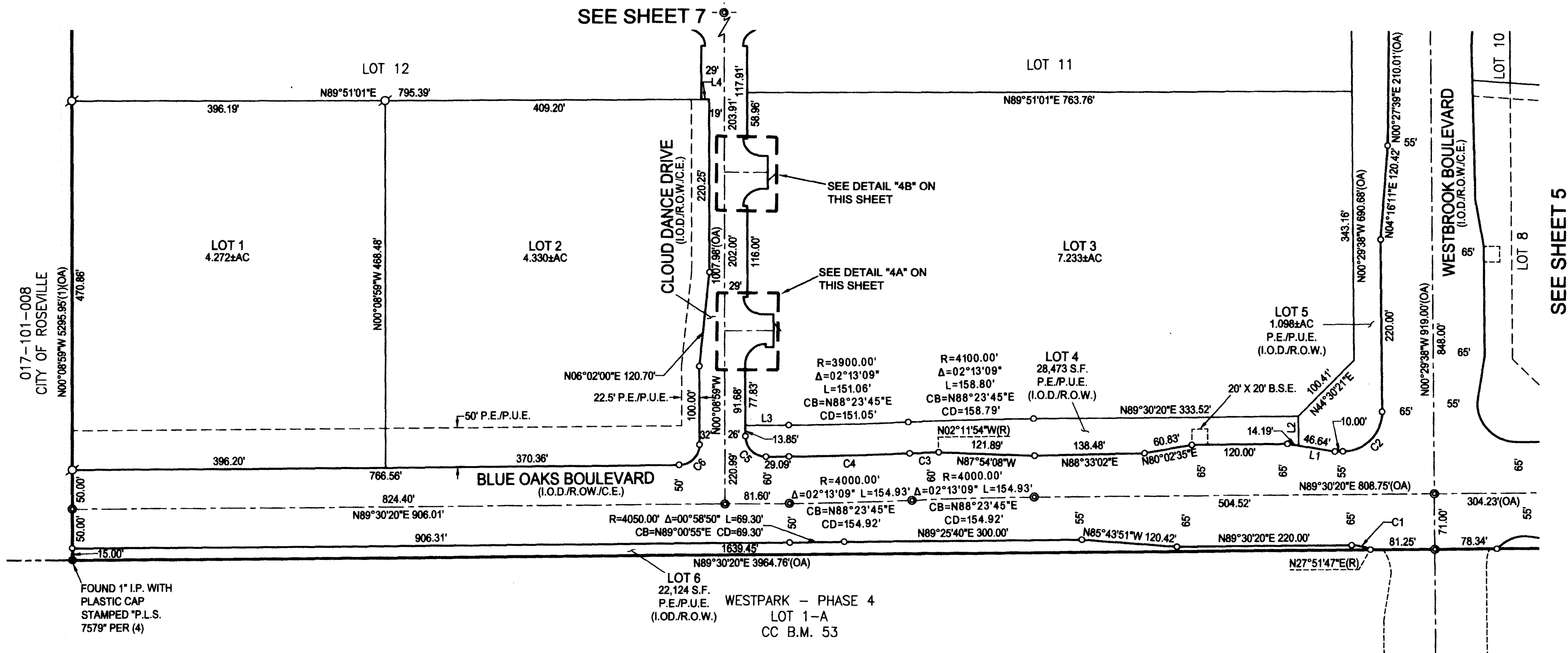
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SHEET 3 OF 15 18431.RST



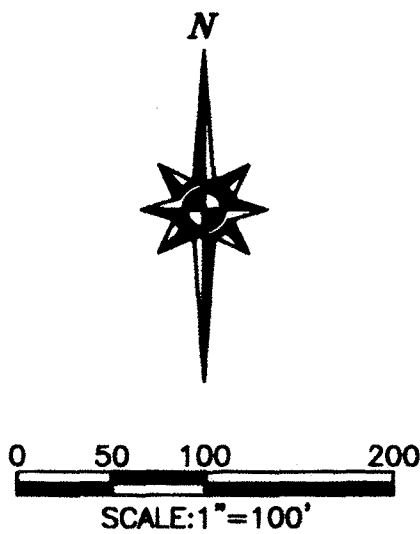
SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND





| Line Table |             |        |
|------------|-------------|--------|
| Line #     | Bearing     | Length |
| L1         | N81°01'56"W | 60.83' |
| L2         | N00°29'40"W | 37.33' |
| L3         | N89°30'20"E | 55.00' |
| L4         | N89°51'01"E | 10.00' |

| Curve Table |          |           |         |               |              |
|-------------|----------|-----------|---------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length  | Chord Bearing | Chord Length |
| C1          | 50.00'   | 28°21'27" | 24.75'  | N76°18'56"W   | 24.49'       |
| C2          | 50.00'   | 89°59'58" | 78.54'  | N44°30'21"E   | 70.71'       |
| C3          | 4060.00' | 00°30'56" | 36.52'  | N87°32'39"E   | 36.52'       |
| C4          | 3940.00' | 02°13'09" | 152.61' | N88°23'45"E   | 152.60'      |
| C5          | 26.00'   | 90°20'42" | 41.00'  | N45°19'19"W   | 36.88'       |
| C6          | 26.00'   | 89°39'18" | 40.68'  | N44°40'41"E   | 36.66'       |



FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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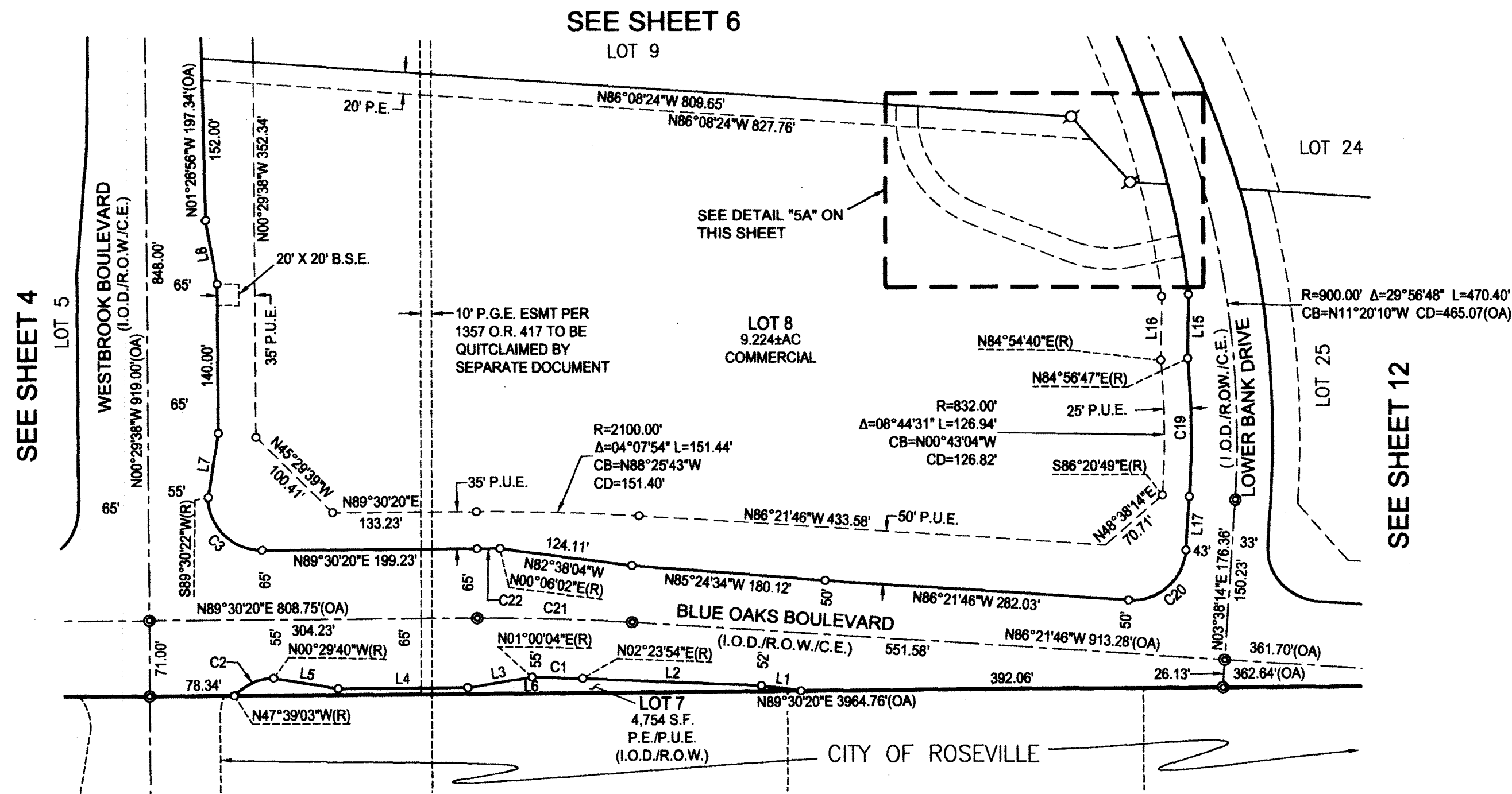
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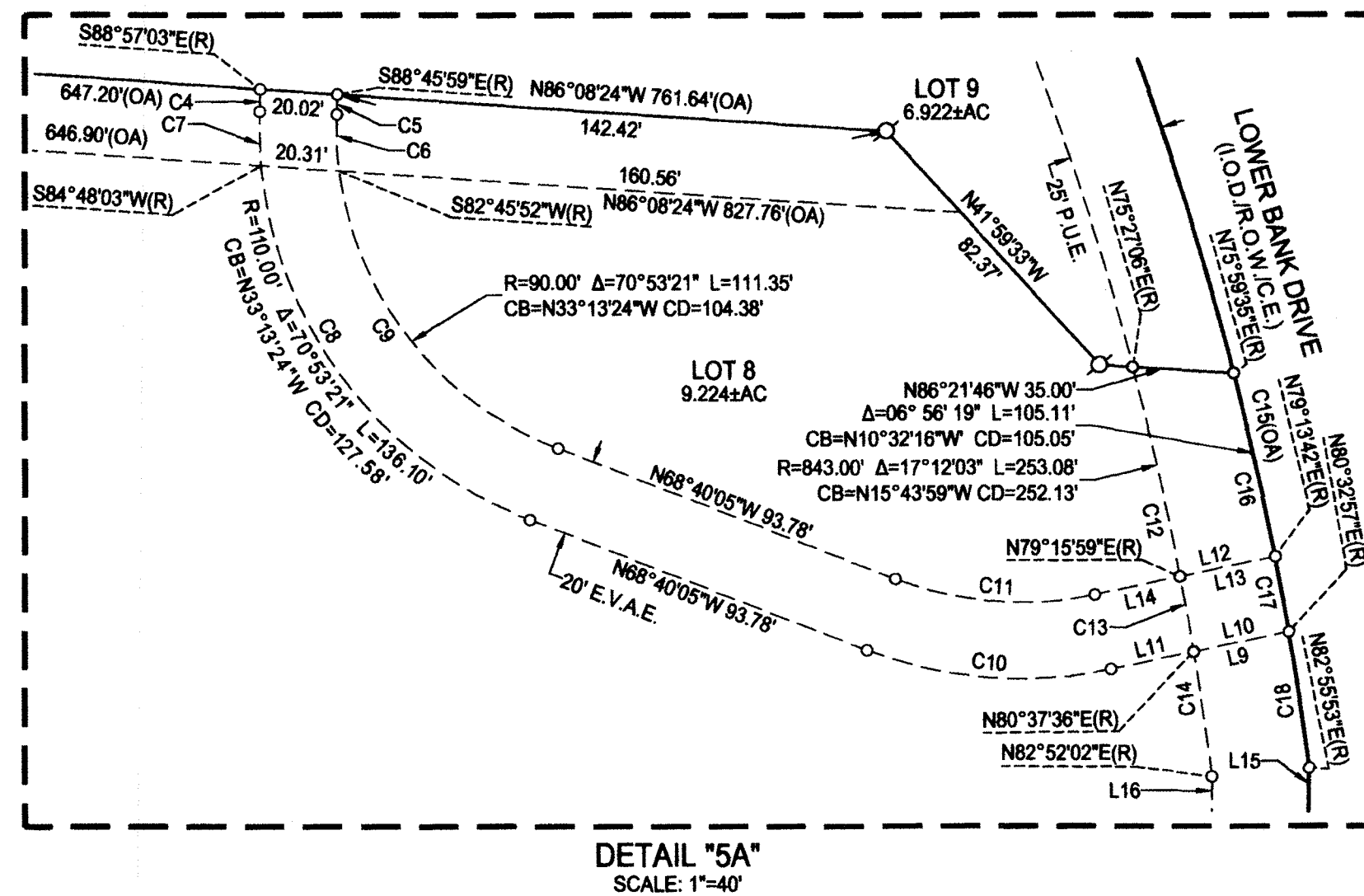
SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND





| Line Table |             |        |
|------------|-------------|--------|
| Line #     | Bearing     | Length |
| L1         | N82°29'17"W | 37.05  |
| L2         | N87°36'06"W | 165.67 |
| L3         | N80°39'36"E | 60.72  |
| L4         | N89°30'20"E | 120.00 |
| L5         | N81°01'56"W | 60.83  |
| L6         | N89°30'20"E | 526.20 |
| L7         | N08°58'06"E | 60.83  |
| L8         | N10°15'56"W | 60.88  |
| L9         | N77°56'30"E | 47.09  |
| L10        | N77°56'30"E | 25.03  |
| L11        | N77°56'30"E | 22.06  |
| L12        | N77°56'30"E | 47.77  |
| L13        | N77°56'30"E | 25.00  |
| L14        | N77°56'30"E | 22.77  |
| L15        | N00°46'21"E | 80.00  |
| L16        | N00°47'55"E | 59.56  |
| L17        | N03°38'14"E | 50.23  |

| Curve Table |          |           |         |               |              |
|-------------|----------|-----------|---------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length  | Chord Bearing | Chord Length |
| C1          | 1945.00' | 01°23'50" | 47.43'  | N88°18'01"W   | 47.43'       |
| C2          | 50.00'   | 47°09'23" | 41.15'  | N65°55'38"E   | 40.00'       |
| C3          | 50.00'   | 90°00'02" | 78.54'  | N45°29'39"W   | 70.71'       |
| C4          | 285.00'  | 01°10'19" | 5.83'   | N01°38'07"E   | 5.83'        |
| C5          | 305.00'  | 00°59'15" | 5.26'   | N01°43'39"E   | 5.26'        |
| C6          | 90.00'   | 09°27'24" | 14.85'  | N02°30'26"W   | 14.84'       |
| C7          | 110.00'  | 07°25'14" | 14.25'  | N01°29'21"W   | 14.24'       |
| C8          | 110.00'  | 63°28'07" | 121.85' | N36°56'01"W   | 115.72'      |
| C9          | 90.00'   | 61°25'57" | 96.50'  | N37°57'06"W   | 91.94'       |
| C10         | 110.00'  | 33°23'25" | 64.10'  | N85°21'47"W   | 63.20'       |
| C11         | 90.00'   | 33°23'25" | 52.45'  | N85°21'47"W   | 51.71'       |
| C12         | 843.00'  | 03°48'53" | 56.13'  | N12°38'27"W   | 56.12'       |
| C13         | 843.00'  | 01°21'37" | 20.01'  | N10°03'12"W   | 20.01'       |
| C14         | 843.00'  | 02°14'27" | 32.97'  | N08°15'11"W   | 32.97'       |
| C15         | 868.00'  | 17°17'37" | 261.99' | N15°42'55"W   | 261.00'      |
| C16         | 868.00'  | 03°14'07" | 49.01'  | N12°23'22"W   | 49.01'       |
| C17         | 868.00'  | 01°19'15" | 20.01'  | N10°06'40"W   | 20.01'       |
| C18         | 868.00'  | 02°22'57" | 36.09'  | N08°15'34"W   | 36.09'       |
| C19         | 857.00'  | 08°41'28" | 130.00' | N00°42'30"W   | 129.87'      |
| C20         | 50.00'   | 90°00'00" | 78.54'  | N48°38'14"E   | 70.71'       |
| C21         | 2000.00' | 04°07'54" | 144.23' | N88°25'43"W   | 144.19'      |
| C22         | 2065.00' | 00°35'42" | 21.45'  | N89°48'11"E   | 21.45'       |



SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND



FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

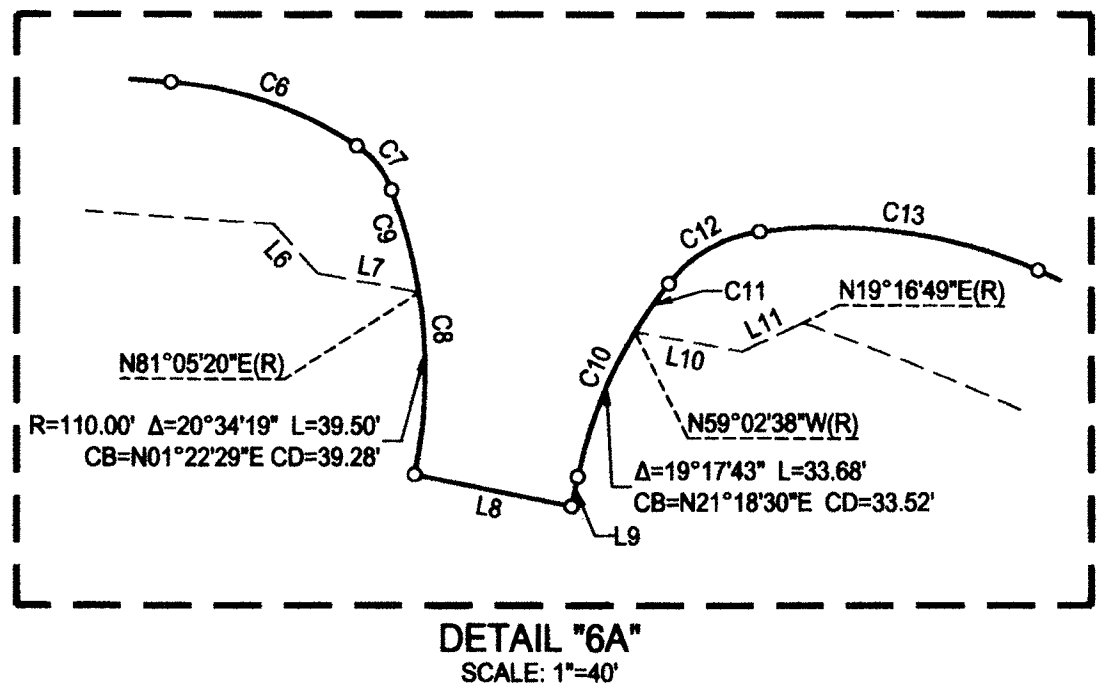
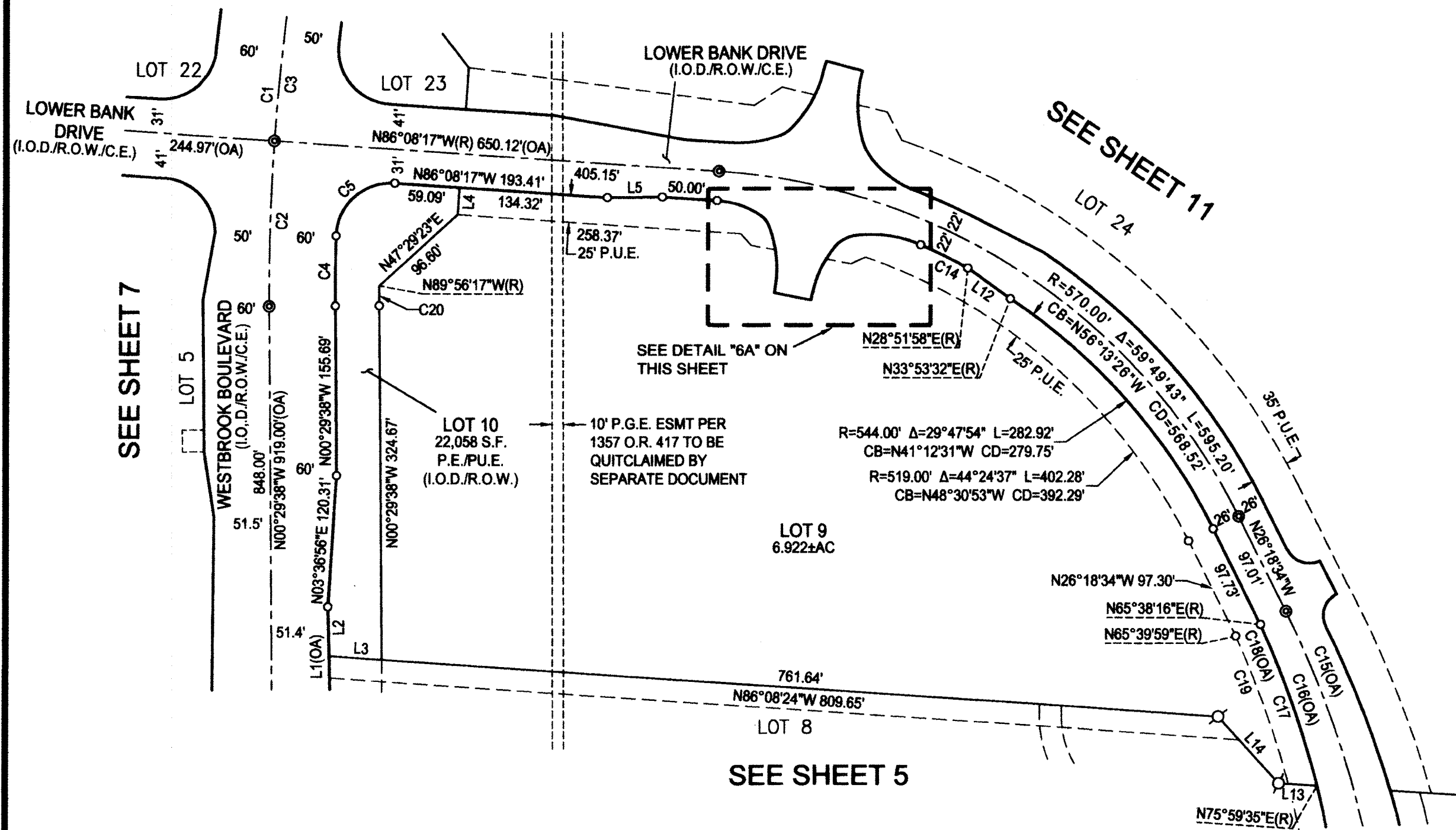
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**SHEET 5 OF 15**      18431.RST



| Line Table |                |         |
|------------|----------------|---------|
| Line #     | Bearing        | Length  |
| L1         | N01°26'56"W    | 197.34' |
| L2         | N01°26'56"W    | 45.34'  |
| L3         | N86°08'24"W    | 48.00'  |
| L4         | N03°51'43"E    | 25.00'  |
| L5         | N89°17'17"E    | 50.16'  |
| L6         | N41°08'17"W    | 14.14'  |
| L7         | N79°27'57"W    | 22.03'  |
| L8         | N78°20'22"W(R) | 34.00'  |
| L9         | N11°39'38"E    | 6.52'   |
| L10        | N79°27'57"W    | 23.35'  |
| L11        | N64°38'11"E    | 14.36'  |
| L12        | N53°50'59"W    | 48.05'  |
| L13        | N86°21'46"W    | 35.00'  |
| L14        | N41°59'33"W    | 82.37'  |

| Curve Table |          |           |          |               |              |
|-------------|----------|-----------|----------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length   | Chord Bearing | Chord Length |
| C1          | 2000.00' | 34°58'27" | 1220.83' | N16°59'35"E   | 1201.96'     |
| C2          | 2000.00' | 04°21'21" | 152.05'  | N01°41'02"E   | 152.01'      |
| C3          | 2000.00' | 30°37'06" | 1068.78' | N19°10'16"E   | 1056.11'     |
| C4          | 1940.00' | 01°53'58" | 64.32'   | N00°27'21"E   | 64.32'       |
| C5          | 50.00'   | 92°27'23" | 80.68'   | N47°38'02"E   | 72.21'       |
| C6          | 80.00'   | 30°28'00" | 42.54'   | N70°54'17"W   | 42.04'       |
| C7          | 20.00'   | 34°50'33" | 12.16'   | N38°15'00"W   | 11.98'       |
| C8          | 110.00'  | 32°29'22" | 62.38'   | N04°35'03"W   | 61.54'       |
| C9          | 110.00'  | 11°55'03" | 22.88'   | N14°52'12"W   | 22.84'       |
| C10         | 100.00'  | 26°34'24" | 46.38'   | N24°56'50"E   | 45.96'       |
| C11         | 100.00'  | 07°16'41" | 12.70'   | N34°35'42"E   | 12.69'       |
| C12         | 30.00'   | 43°59'00" | 23.03'   | N60°13'33"E   | 22.47'       |
| C13         | 110.00'  | 31°37'22" | 60.71'   | N81°58'16"W   | 59.94'       |
| C14         | 548.00'  | 05°01'33" | 48.07'   | N63°38'48"W   | 48.05'       |
| C15         | 900.00'  | 29°56'48" | 470.40'  | N11°20'10"W   | 465.07'      |
| C16         | 868.00'  | 17°17'37" | 261.99'  | N15°42'55"W   | 261.00'      |
| C17         | 868.00'  | 10°21'19" | 156.88'  | N19°11'04"W   | 156.66'      |
| C18         | 843.00'  | 17°12'03" | 253.08'  | N15°43'59"W   | 252.13'      |
| C19         | 843.00'  | 09°47'07" | 143.97'  | N19°26'27"W   | 143.80'      |
| C20         | 1900.00' | 00°33'21" | 18.43'   | N00°12'58"W   | 18.43'       |

FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

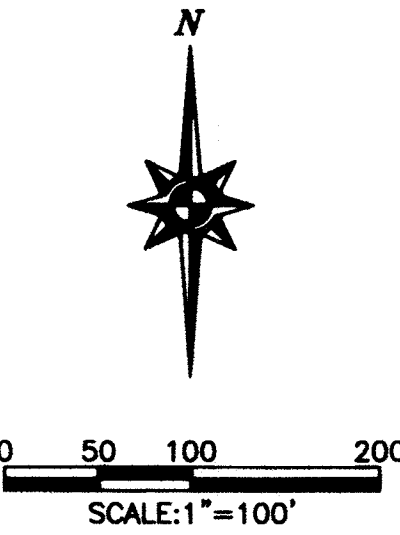
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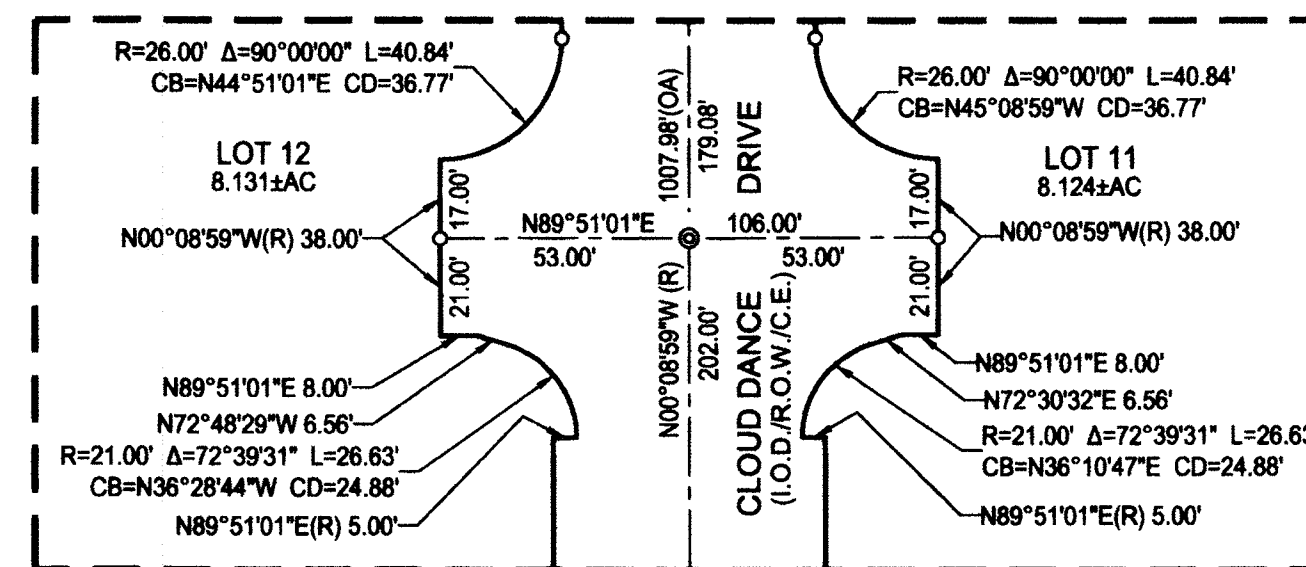
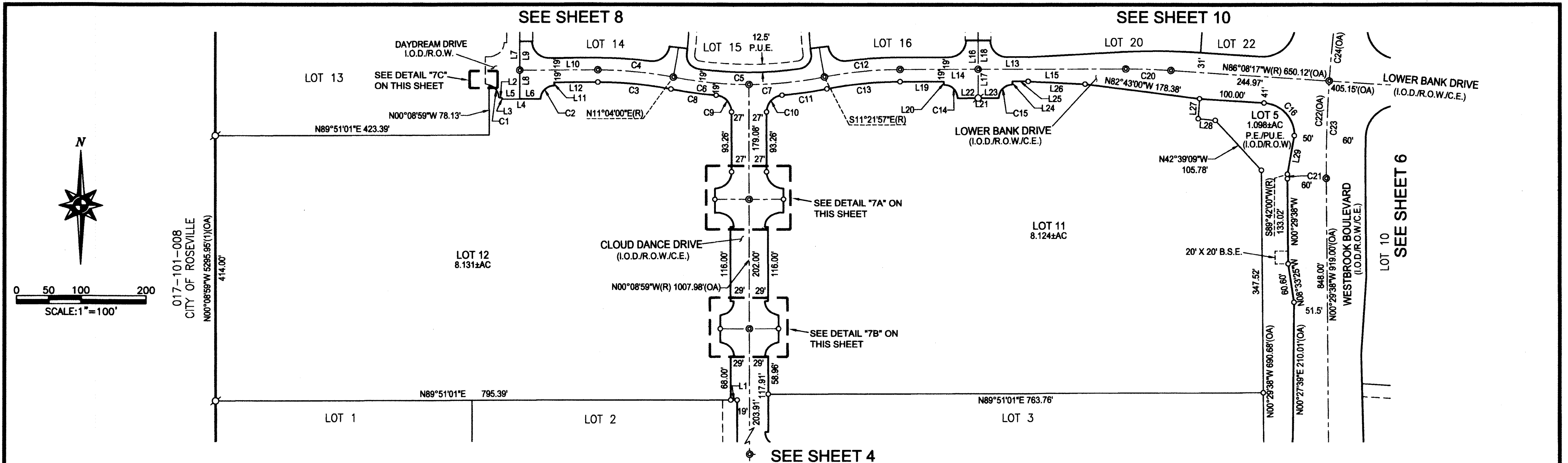
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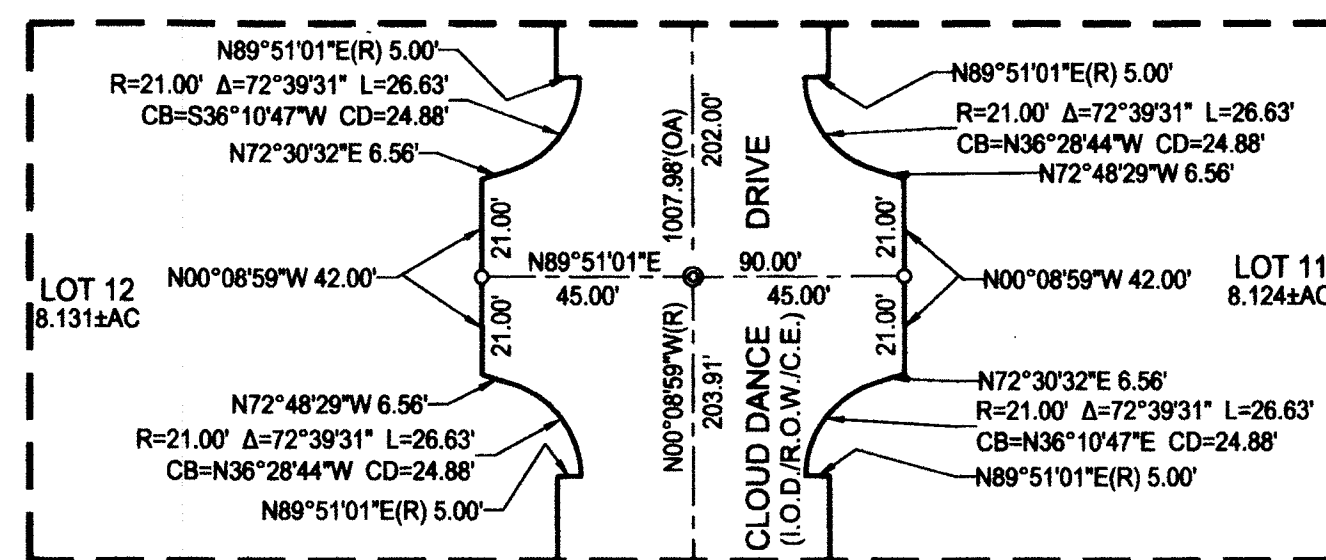
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**DETAIL "7A"**  
SCALE: 1"=40'

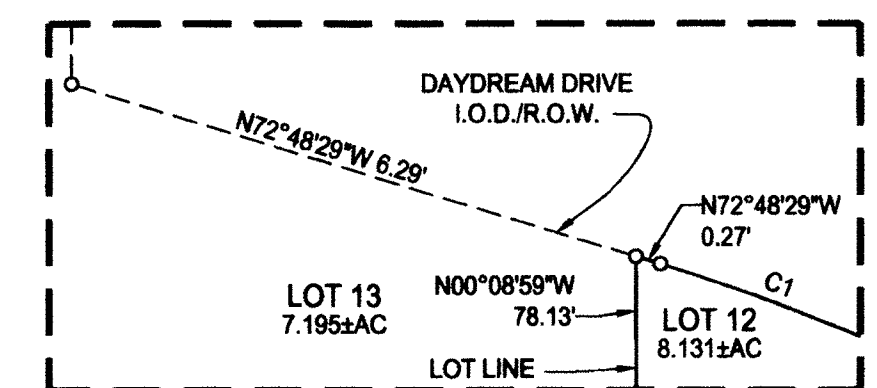


**DETAIL "7B"**  
SCALE: 1"=40'

| Curve Table |          |           |          |               |              |
|-------------|----------|-----------|----------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length   | Chord Bearing | Chord Length |
| C1          | 21.00'   | 72°39'31" | 26.83'   | N36°28'44"W   | 24.88'       |
| C2          | 21.00'   | 90°00'00" | 32.99'   | N44°51'01"E   | 29.70'       |
| C3          | 581.00'  | 11°12'59" | 113.74'  | N84°32'29"W   | 113.56'      |
| C4          | 600.00'  | 11°12'59" | 117.46'  | N84°32'29"W   | 117.27'      |
| C5          | 600.00'  | 22°25'58" | 234.91'  | N89°51'01"E   | 233.42'      |
| C6          | 600.00'  | 11°12'59" | 117.46'  | N84°32'29"W   | 117.27'      |
| C7          | 600.00'  | 11°12'59" | 117.46'  | N84°14'32"E   | 117.27'      |
| C8          | 619.00'  | 06°30'11" | 70.26'   | N82°11'05"W   | 70.22'       |
| C9          | 26.00'   | 85°17'12" | 38.70'   | N42°47'35"W   | 35.23'       |
| C10         | 26.00'   | 85°17'12" | 38.70'   | N42°29'37"E   | 35.23'       |
| C11         | 619.00'  | 06°30'11" | 70.26'   | N81°53'08"E   | 70.22'       |
| C12         | 600.00'  | 11°12'59" | 117.46'  | N84°14'32"E   | 117.27'      |
| C13         | 581.00'  | 11°12'59" | 113.74'  | N84°14'32"E   | 113.56'      |
| C14         | 21.00'   | 90°00'00" | 32.99'   | N45°08'59"W   | 29.70'       |
| C15         | 21.00'   | 90°00'00" | 32.99'   | N44°51'01"E   | 29.70'       |
| C16         | 50.00'   | 87°30'59" | 76.37'   | N42°22'48"W   | 69.16'       |
| C20         | 1000.00' | 04°00'41" | 70.01'   | N88°08'38"W   | 70.00'       |
| C21         | 2060.00' | 00°11'39" | 6.98'    | N00°23'49"W   | 6.98'        |
| C22         | 2000.00' | 34°58'27" | 1220.83' | N16°59'35"E   | 1201.96'     |
| C23         | 2000.00' | 04°21'21" | 152.05'  | N01°41'02"E   | 152.01'      |
| C24         | 2000.00' | 30°37'06" | 1068.78' | N19°10'16"E   | 1056.11'     |

| Line Table |                |        |
|------------|----------------|--------|
| Line #     | Bearing        | Length |
| L1         | N89°51'01"E    | 10.00  |
| L2         | N89°51'01"E(R) | 5.00   |
| L3         | N00°08'59"W    | 2.00   |
| L4         | N89°51'01"E(R) | 59.00  |
| L5         | N89°51'01"E    | 27.00  |
| L6         | N89°51'01"E(R) | 32.00  |
| L7         | N00°08'59"W    | 631.42 |
| L8         | N00°08'59"W    | 45.00  |
| L9         | N00°08'59"W    | 45.00  |
| L10        | N89°51'01"E(R) | 120.58 |
| L11        | N00°08'59"W    | 5.00   |
| L12        | N89°51'01"E    | 67.58  |
| L13        | N89°51'01"E    | 347.88 |
| L14        | N89°51'01"E    | 120.58 |
| L15        | N89°51'01"E    | 227.29 |
| L16        | N00°08'59"W    | 90.00  |
| L17        | N00°08'59"W    | 45.00  |
| L18        | N00°08'59"W    | 45.00  |
| L19        | N89°51'01"E    | 67.58  |
| L20        | N00°08'59"W    | 5.00   |

| Line Table |                |        |
|------------|----------------|--------|
| Line #     | Bearing        | Length |
| L21        | N89°51'01"E(R) | 64.00  |
| L22        | N89°51'01"E(R) | 32.00  |
| L23        | N89°51'01"E(R) | 32.00  |
| L24        | N00°08'59"W(R) | 5.00   |
| L25        | N89°51'01"E    | 24.38  |
| L26        | N87°08'59"W    | 87.07  |
| L27        | N03°51'43"E    | 31.34  |
| L28        | N84°33'18"W    | 26.32  |
| L29        | N09°58'16"E    | 61.01  |



DETAIL "7C"  
NTS

FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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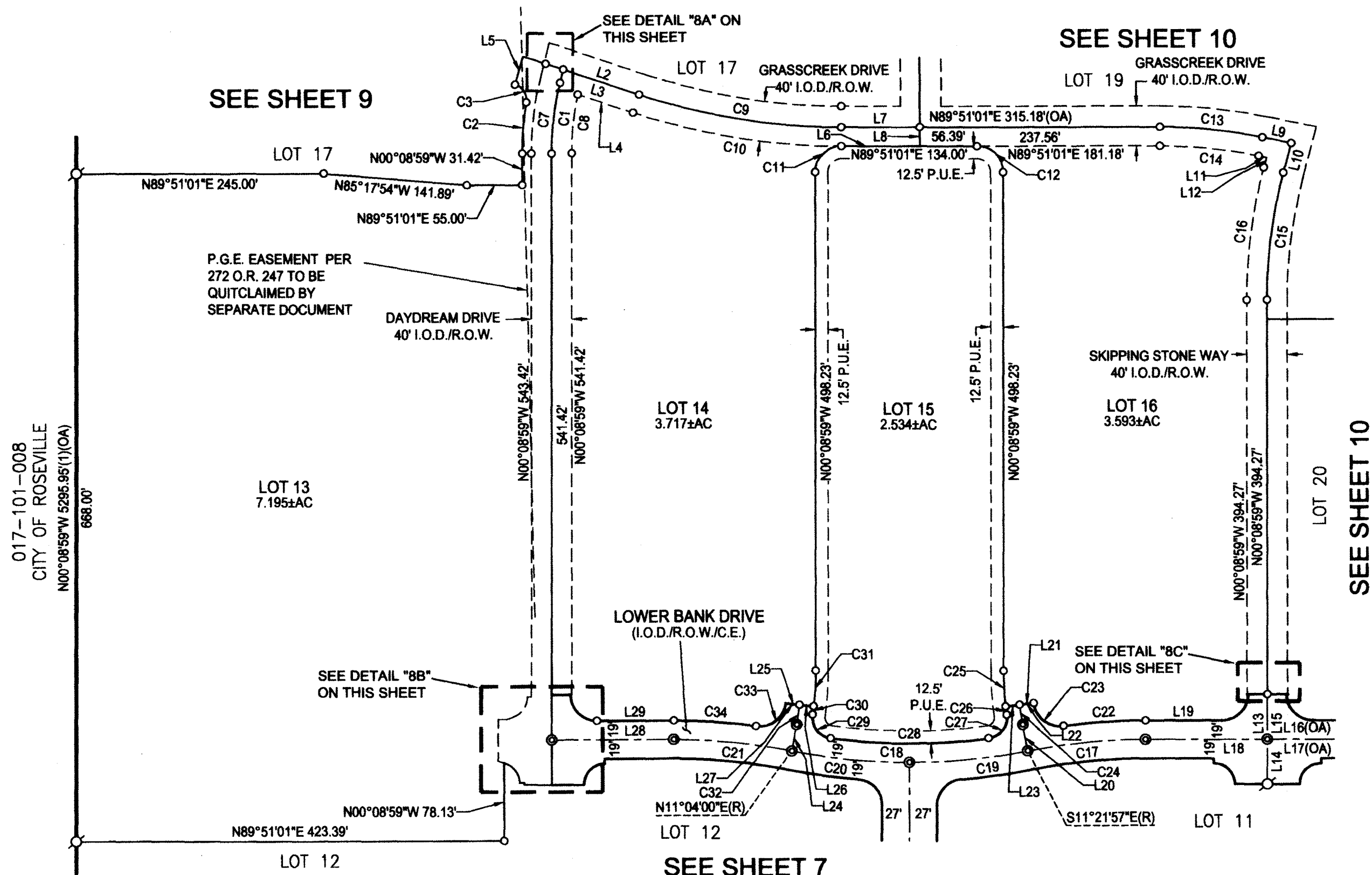
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SHEET 7 OF 15 18431.RST

SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND

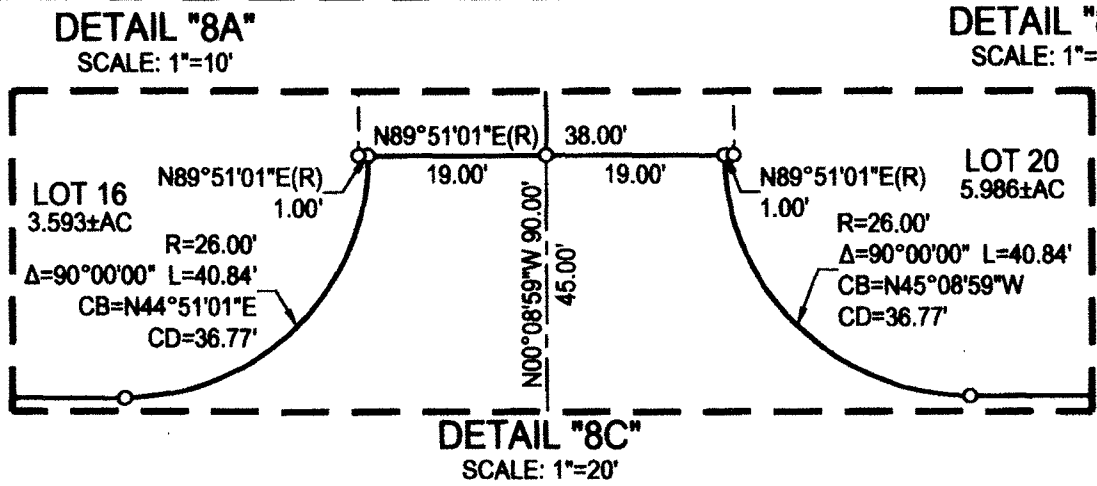
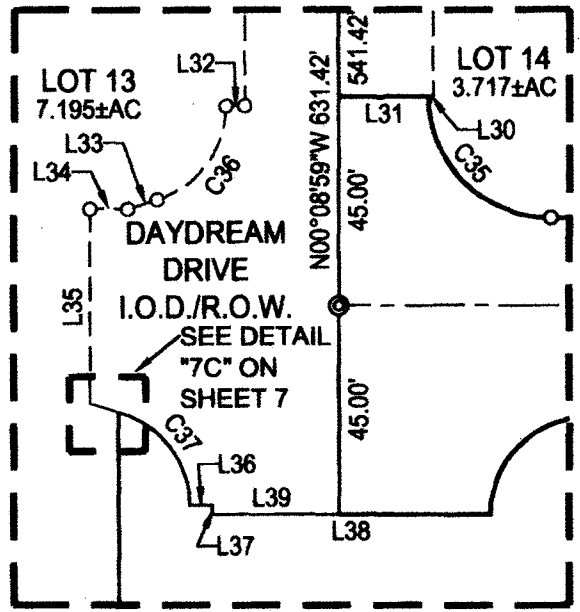
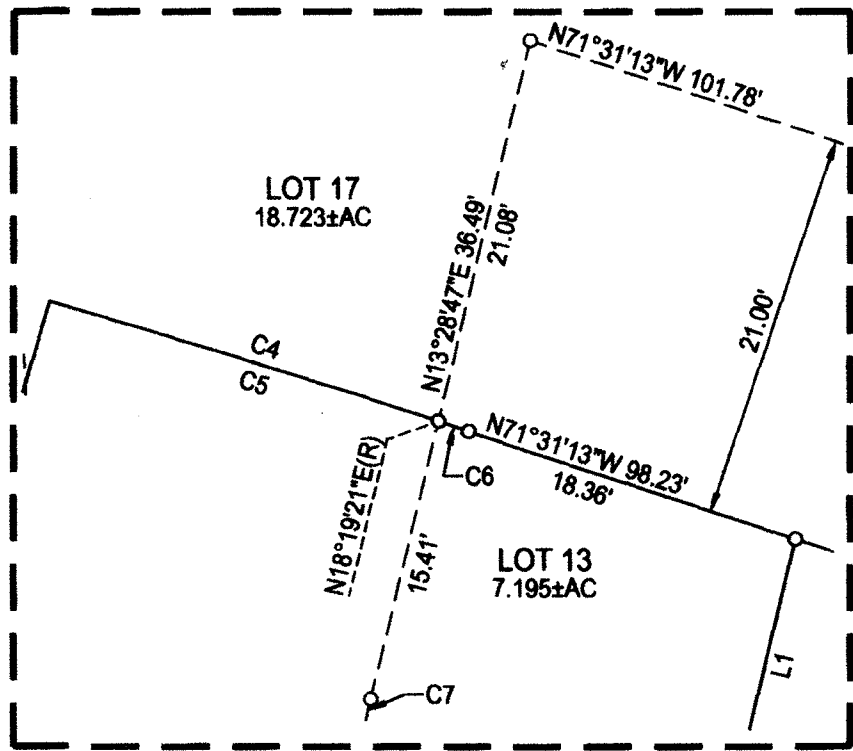




| Line Table |                |        |
|------------|----------------|--------|
| Line #     | Bearing        | Length |
| L1         | N13°28'47"E    | 13.66' |
| L2         | N71°31'13"W    | 98.23' |
| L3         | N71°31'13"W    | 79.87' |
| L4         | N71°31'13"W    | 58.04' |
| L5         | N16°20'12"E(R) | 29.00' |
| L6         | N89°51'01"E    | 77.61' |
| L7         | N89°51'01"E    | 77.61' |
| L8         | N00°08'59"W    | 19.00' |
| L9         | N78°25'28"W    | 28.98' |
| L10        | N14°34'32"E    | 30.45' |
| L11        | N78°25'28"W    | 7.96'  |
| L12        | N14°34'32"E    | 10.37' |
| L13        | N00°08'59"W    | 90.00' |
| L14        | N00°08'59"W    | 45.00' |
| L15        | N00°08'59"W    | 45.00' |

| Line Table |                |         |
|------------|----------------|---------|
| Line #     | Bearing        | Length  |
| L16        | N89°51'01"E    | 347.88' |
| L17        | N89°51'01"E    | 227.29' |
| L18        | N89°51'01"E    | 120.58' |
| L19        | N89°51'01"E    | 75.58'  |
| L20        | N10°29'21"W    | 26.95'  |
| L21        | N83°20'20"E(R) | 28.00'  |
| L22        | N83°20'20"E(R) | 14.00'  |
| L23        | N83°20'20"E(R) | 14.00'  |
| L24        | N10°11'24"E    | 26.95'  |
| L25        | N83°38'17"W(R) | 28.00'  |
| L26        | N83°38'17"W(R) | 14.00'  |
| L27        | N83°38'17"W(R) | 14.00'  |
| L28        | N89°51'01"E    | 120.58' |
| L29        | N89°51'01"E    | 75.58'  |
| L30        | N89°51'01"E(R) | 1.00'   |

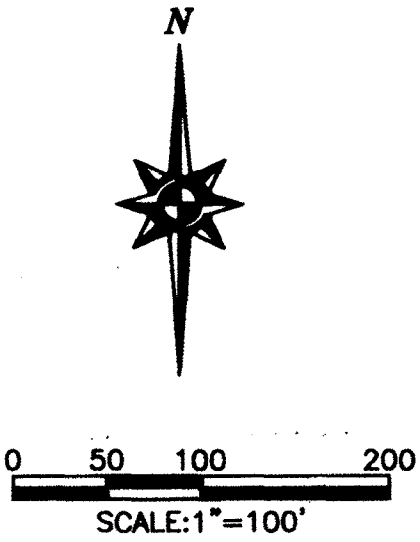
| Line Table |                |        |
|------------|----------------|--------|
| Line #     | Bearing        | Length |
| L31        | N89°51'01"E(R) | 19.00' |
| L32        | N89°51'01"E(R) | 4.00'  |
| L33        | N72°30'32"E    | 6.56'  |
| L34        | N89°51'01"E    | 8.00'  |
| L35        | N00°08'59"W    | 42.00' |
| L36        | N89°51'01"E(R) | 5.00'  |
| L37        | N00°08'59"W    | 2.00'  |
| L38        | N89°51'01"E    | 59.00' |
| L39        | N89°51'01"E    | 27.00' |



| Curve Table |         |           |         |               |              |
|-------------|---------|-----------|---------|---------------|--------------|
| Curve #     | Radius  | Delta     | Length  | Chord Bearing | Chord Length |
| C1          | 300.00' | 13°37'45" | 71.36'  | N06°39'54"E   | 71.19'       |
| C2          | 329.00' | 08°57'35" | 51.45'  | N04°19'49"E   | 51.40'       |
| C3          | 16.00'  | 82°28'24" | 23.03'  | N32°25'36"W   | 21.09'       |
| C4          | 625.00' | 02°08'34" | 23.38'  | N72°35'31"W   | 23.37'       |
| C5          | 625.00' | 01°59'09" | 21.66'  | N72°40'13"W   | 21.66'       |
| C6          | 625.00' | 00°09'26" | 1.72'   | N71°35'56"W   | 1.72'        |
| C7          | 320.00' | 13°37'45" | 76.12'  | N06°39'54"E   | 75.94'       |
| C8          | 280.00' | 12°09'40" | 59.43'  | N05°55'51"E   | 59.32'       |
| C9          | 625.00' | 18°37'45" | 203.21' | N80°50'06"W   | 202.32'      |
| C10         | 644.00' | 18°37'45" | 209.39' | N80°50'06"W   | 208.47'      |
| C11         | 26.00'  | 90°00'00" | 40.84'  | N44°51'01"E   | 36.77'       |
| C12         | 26.00'  | 90°00'00" | 40.84'  | N45°08'59"W   | 36.77'       |
| C13         | 500.00' | 11°43'31" | 102.32' | N84°17'13"W   | 102.14'      |
| C14         | 481.00' | 11°43'31" | 98.43'  | N84°17'13"W   | 98.26'       |
| C15         | 500.00' | 14°43'31" | 128.50' | N07°12'47"E   | 128.15'      |

| Curve Table |         |           |         |               |              |
|-------------|---------|-----------|---------|---------------|--------------|
| Curve #     | Radius  | Delta     | Length  | Chord Bearing | Chord Length |
| C16         | 520.00' | 14°43'31" | 133.64' | N07°12'47"E   | 133.27'      |
| C17         | 600.00' | 11°12'59" | 117.46' | N84°14'32"E   | 117.27'      |
| C18         | 600.00' | 22°25'58" | 234.91' | N89°51'01"E   | 233.42'      |
| C19         | 600.00' | 11°12'59" | 117.46' | N84°14'32"E   | 117.27'      |
| C20         | 600.00' | 11°12'59" | 117.46' | N84°32'29"W   | 117.27'      |
| C21         | 600.00' | 11°12'59" | 117.46' | N84°32'29"W   | 117.27'      |
| C22         | 619.00' | 07°32'57" | 81.56'  | N86°04'33"E   | 81.50'       |
| C23         | 26.00'  | 91°02'16" | 41.31'  | N52°10'48"W   | 37.10'       |
| C24         | 300.00' | 03°49'41" | 20.04'  | N08°34'31"W   | 20.04'       |
| C25         | 314.00' | 06°30'42" | 35.69'  | N03°24'19"W   | 35.67'       |
| C26         | 314.00' | 01°30'26" | 8.26'   | N07°24'53"W   | 8.26'        |
| C27         | 21.00'  | 90°17'38" | 33.09'  | N36°58'42"E   | 29.77'       |
| C28         | 581.00' | 15°27'01" | 156.67' | N89°51'01"E   | 156.20'      |
| C29         | 21.00'  | 90°17'38" | 33.09'  | N37°16'39"W   | 29.77'       |
| C30         | 314.00' | 01°30'26" | 8.26'   | N07°06'56"E   | 8.26'        |

| Curve Table |         |           |        |               |              |
|-------------|---------|-----------|--------|---------------|--------------|
| Curve #     | Radius  | Delta     | Length | Chord Bearing | Chord Length |
| C31         | 314.00' | 06°30'42" | 35.69' | N03°06'22"E   | 35.67'       |
| C32         | 300.00' | 03°49'41" | 20.04' | N08°16'34"E   | 20.04'       |
| C33         | 26.00'  | 91°02'16" | 41.31' | N51°52'51"E   | 37.10'       |
| C34         | 619.00' | 07°32'57" | 81.56' | N86°22'30"W   | 81.50'       |
| C35         | 26.00'  | 90°00'00" | 40.84' | N45°08'59"W   | 36.77'       |
| C36         | 21.00'  | 72°39'31" | 26.63' | N36°10'47"E   | 24.88'       |
| C37         | 21.00'  | 72°39'31" | 26.63' | N36°28'44"W   | 24.88'       |



FINAL MAP OF  
**CREEKVIEW - PHASE 1**  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

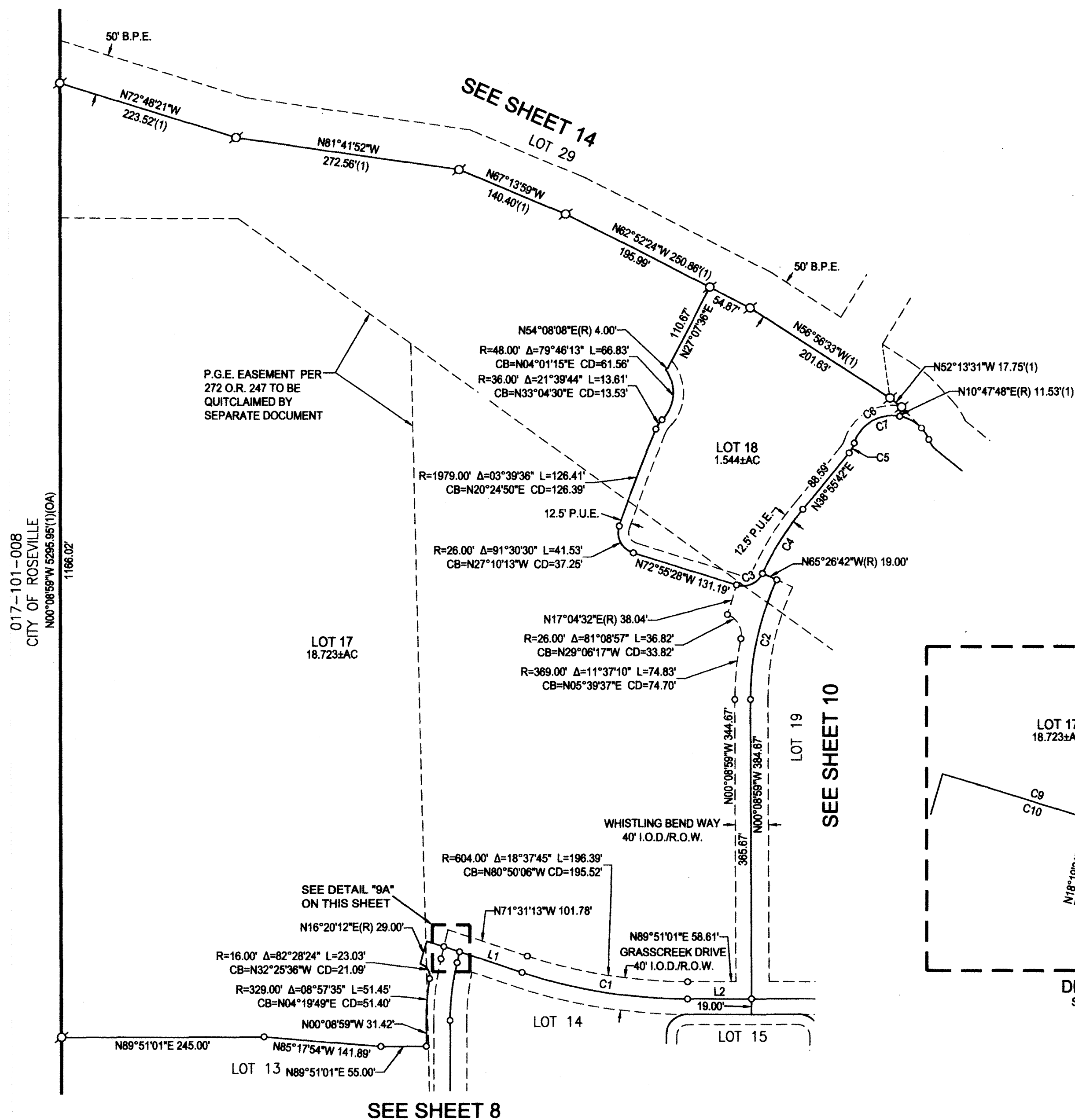
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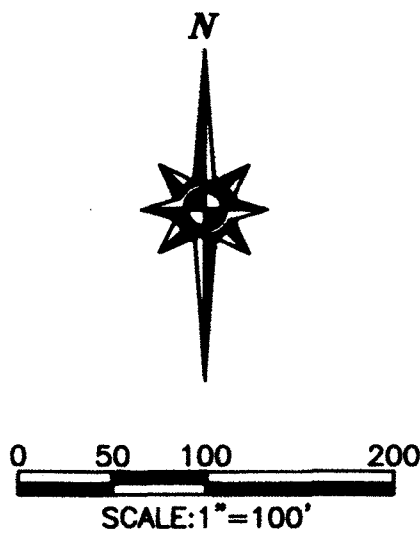
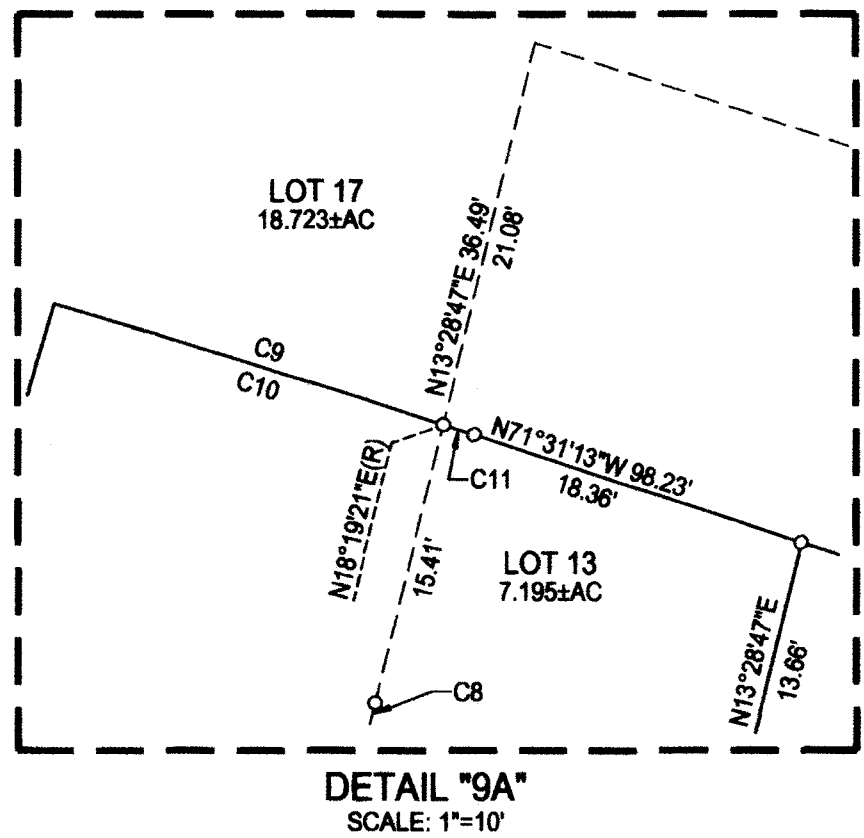
SHEET 8 OF 15 18431.RST

SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND



| Line Table |             |        |
|------------|-------------|--------|
| Line #     | Bearing     | Length |
| L1         | N71°31'13"W | 98.23' |
| L2         | N89°51'01"E | 77.61' |

| Curve Table |         |            |         |               |              |
|-------------|---------|------------|---------|---------------|--------------|
| Curve #     | Radius  | Delta      | Length  | Chord Bearing | Chord Length |
| C1          | 625.00' | 18°37'45"  | 203.21' | N80°50'06"W   | 202.32'      |
| C2          | 350.00' | 24°42'16"  | 150.91' | N12°12'09"E   | 149.74'      |
| C3          | 26.00'  | 82°31'14"  | 37.45'  | N65°48'55"E   | 34.29'       |
| C4          | 369.00' | 14°22'25"  | 92.57'  | N31°44'30"E   | 92.33'       |
| C5          | 36.00'  | 21°47'12"  | 13.69'  | N28°02'06"E   | 13.61'       |
| C6          | 48.00'  | 83°39'18"  | 70.08'  | N58°58'09"E   | 64.02'       |
| C7          | 48.00'  | 140°01'45" | 117.31' | N87°09'23"E   | 90.22'       |
| C8          | 320.00' | 13°37'45"  | 76.12'  | N06°39'54"E   | 75.94'       |
| C9          | 625.00' | 02°08'34"  | 23.38'  | N72°35'31"W   | 23.37'       |
| C10         | 625.00' | 01°59'09"  | 21.66'  | N72°40'13"W   | 21.66'       |
| C11         | 625.00' | 00°09'26"  | 1.72'   | N71°35'56"W   | 1.72'        |



FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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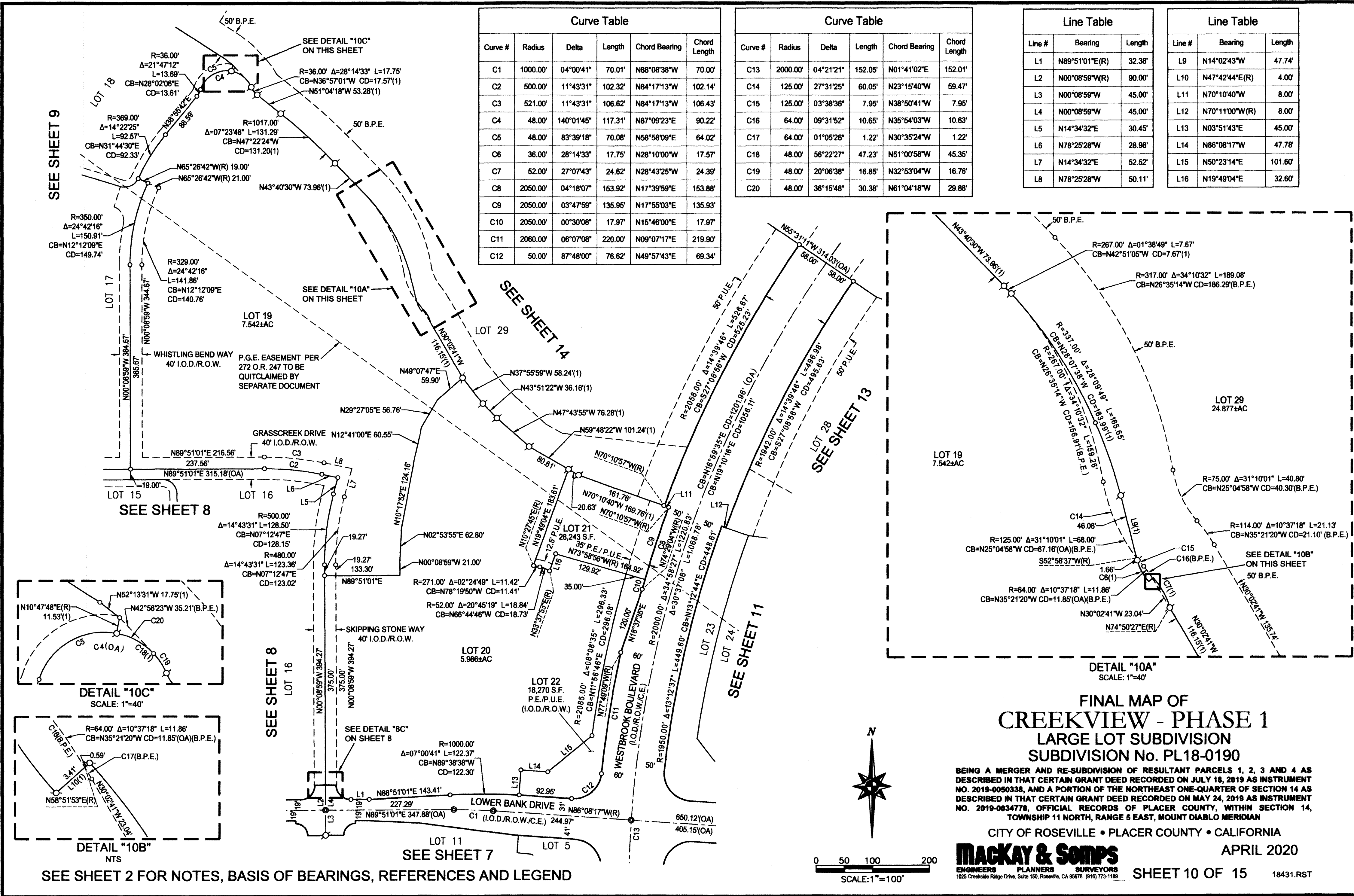
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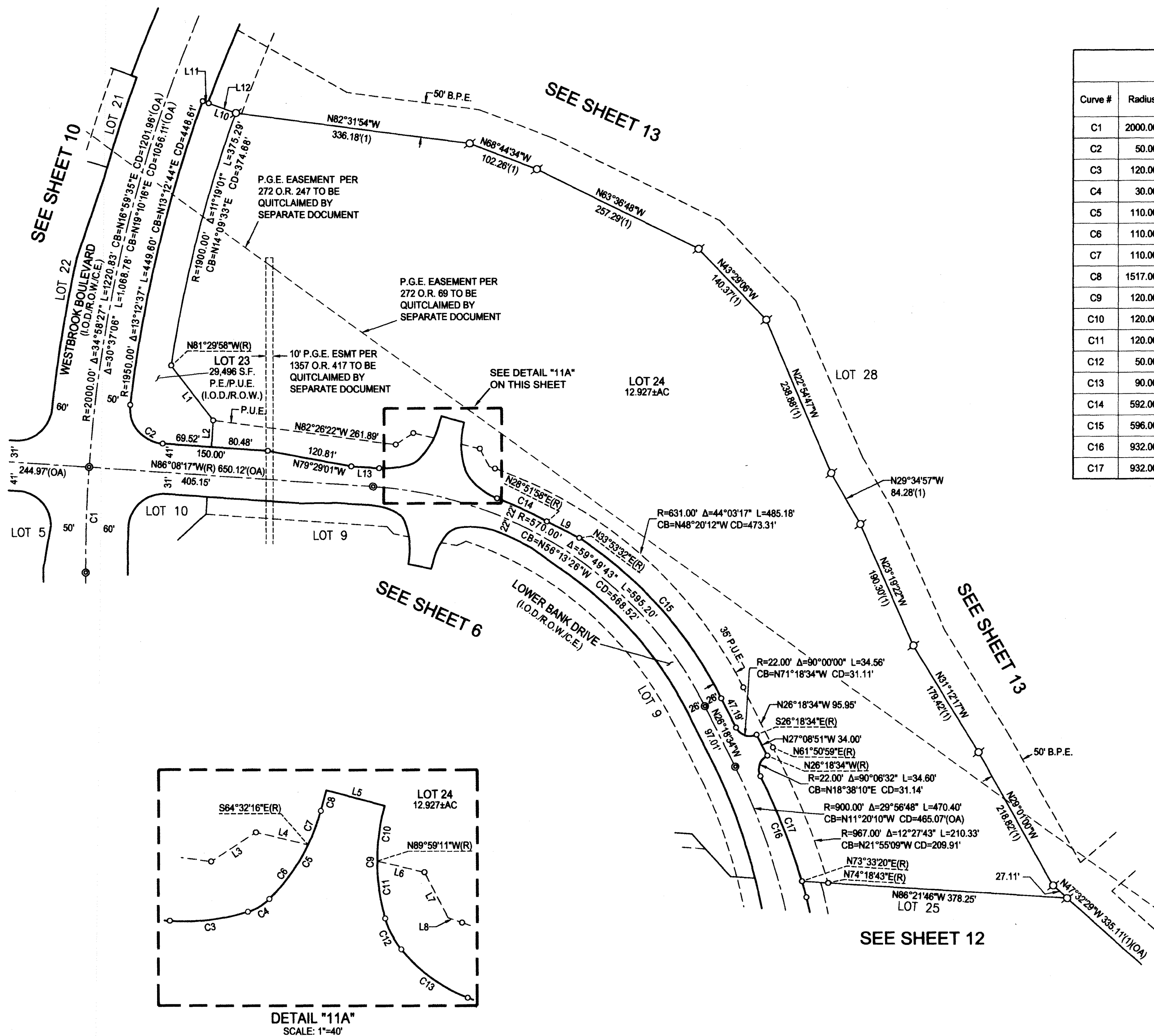
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SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND

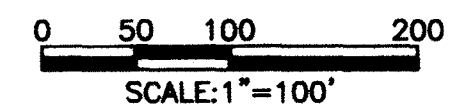






| Curve Table |          |           |         |               |              |
|-------------|----------|-----------|---------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length  | Chord Bearing | Chord Length |
| C1          | 2000.00' | 04°21'21" | 152.05' | N01°41'02"E   | 152.01'      |
| C2          | 50.00'   | 92°44'43" | 80.94'  | N39°45'56"W   | 72.38'       |
| C3          | 120.00'  | 21°17'00" | 44.58'  | N83°13'13"E   | 44.32'       |
| C4          | 30.00'   | 27°13'19" | 14.25'  | N58°58'03"E   | 14.12'       |
| C5          | 110.00'  | 30°36'46" | 58.77'  | N30°03'01"E   | 58.08'       |
| C6          | 110.00'  | 19°53'39" | 38.19'  | N35°24'34"E   | 38.00'       |
| C7          | 110.00'  | 10°43'07" | 20.58'  | N20°06'11"E   | 20.55'       |
| C8          | 1517.00' | 00°27'46" | 12.25'  | N14°58'31"E   | 12.25'       |
| C9          | 120.00'  | 31°00'23" | 64.94'  | N00°17'47"W   | 64.15'       |
| C10         | 120.00'  | 15°11'35" | 31.82'  | N07°36'36"E   | 31.73'       |
| C11         | 120.00'  | 15°48'48" | 33.12'  | N07°53'35"W   | 33.01'       |
| C12         | 50.00'   | 22°51'29" | 19.95'  | N27°13'43"W   | 19.82'       |
| C13         | 90.00'   | 30°01'24" | 47.16'  | N53°40'10"W   | 46.62'       |
| C14         | 592.00'  | 07°32'50" | 77.98'  | N64°54'27"W   | 77.92'       |
| C15         | 596.00'  | 29°47'54" | 309.97' | N41°12'31"W   | 306.49'      |
| C16         | 932.00'  | 11°26'35" | 186.14' | N20°41'49"W   | 185.83'      |
| C17         | 932.00'  | 09°58'28" | 162.24' | N21°25'53"W   | 162.04'      |

| Line Table |                 |        |
|------------|-----------------|--------|
| Line #     | Bearing         | Length |
| L1         | N37°29'50"W     | 99.09' |
| L2         | N03°51'43"E     | 38.28' |
| L3         | N56°35'24"E     | 30.20' |
| L4         | N76°37'47"W     | 30.42' |
| L5         | N74°47'36"W (R) | 34.00' |
| L6         | N76°37'47"W     | 27.44' |
| L7         | N27°13'29"W     | 29.19' |
| L8         | N70°21'51"W     | 8.41'  |
| L9         | N63°00'28"W     | 52.24' |
| L10        | N70°11'00"W (R) | 50.00' |
| L11        | N70°11'00"W (R) | 8.00'  |
| L12        | N70°11'00"W (R) | 42.00' |
| L13        | N86°08'17"W     | 39.88' |



FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

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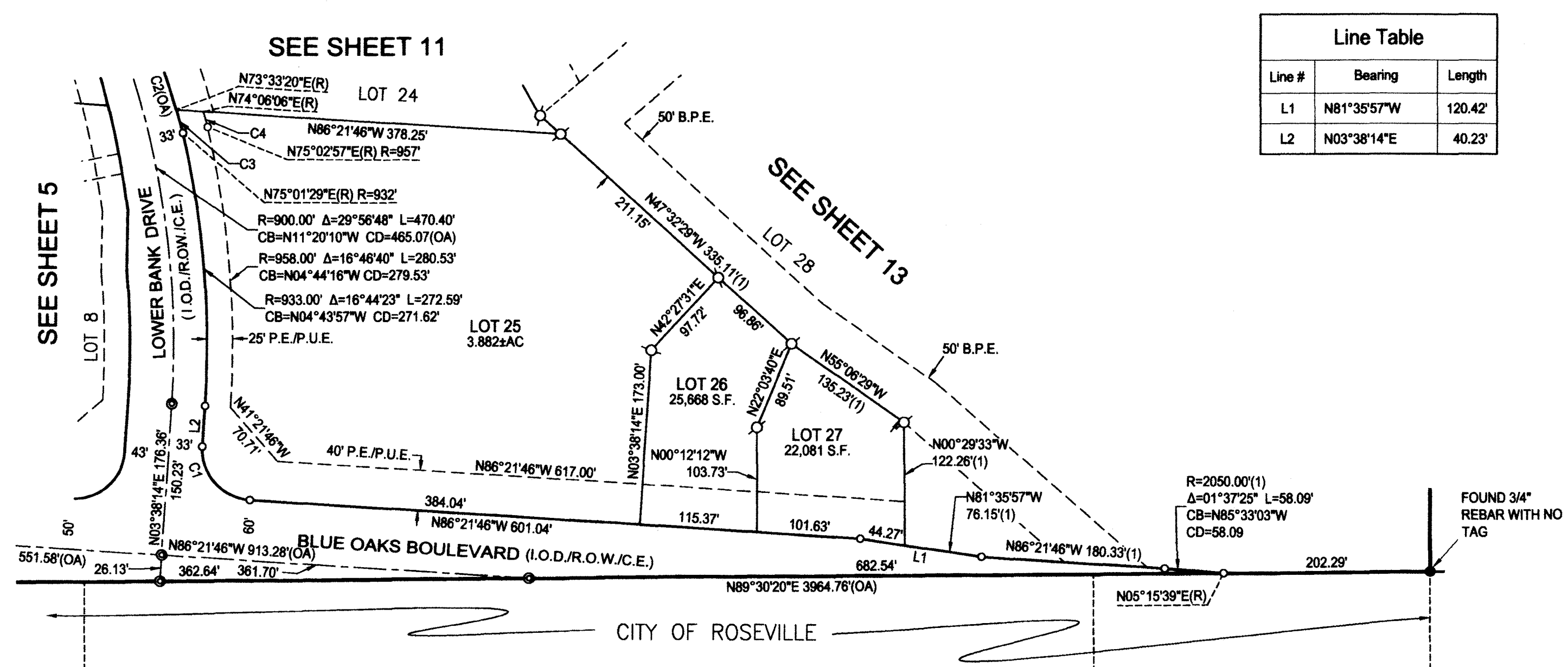
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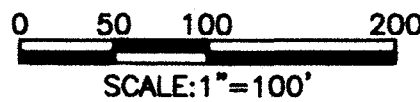
SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND





| Line Table |             |         |
|------------|-------------|---------|
| Line #     | Bearing     | Length  |
| L1         | N81°35'57"W | 120.42' |
| L2         | N03°38'14"E | 40.23'  |

| Curve Table |         |           |         |               |              |
|-------------|---------|-----------|---------|---------------|--------------|
| Curve #     | Radius  | Delta     | Length  | Chord Bearing | Chord Length |
| C1          | 50.00'  | 90°00'00" | 78.54'  | N41°21'46"W   | 70.71'       |
| C2          | 932.00' | 11°26'35" | 186.14' | N20°41'49"W   | 185.83'      |
| C3          | 932.00' | 01°28'09" | 23.90'  | N15°42'36"W   | 23.90'       |
| C4          | 957.00' | 00°56'51" | 15.82'  | N15°25'28"W   | 15.82'       |



SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND

FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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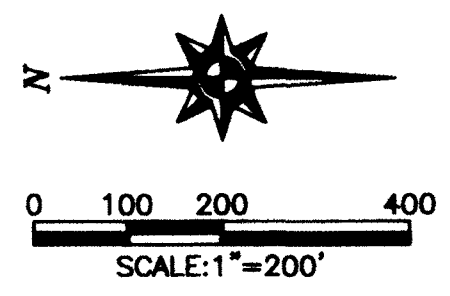
APRIL 2020

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| Line Table |                |         |
|------------|----------------|---------|
| Line #     | Bearing        | Length  |
| L1         | N70°10'40"W    | 8.00'   |
| L2         | N70°11'00"W(R) | 8.00'   |
| L3         | N70°11'00"W(R) | 42.00'  |
| L4         | N81°35'57"W    | 76.15'  |
| L5         | N86°21'46"W    | 180.33' |
| L6         | N55°31'11"W(R) | 58.00'  |
| L7         | N55°31'11"W(R) | 58.00'  |
| L8         | N60°09'22"W    | 180.06' |

| Curve Table |          |           |          |               |              |
|-------------|----------|-----------|----------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length   | Chord Bearing | Chord Length |
| C1          | 2050.00' | 01°37'25" | 58.09'   | N85°33'03"W   | 58.09'       |
| C2          | 1942.00' | 14°39'46" | 496.98'  | N27°08'56"E   | 495.63'      |
| C3          | 2000.00' | 30°37'06" | 1068.78' | N19°10'16"E   | 1056.11'     |
| C4          | 2000.00' | 34°58'27" | 1220.83' | N16°59'35"E   | 1201.96'     |
| C5          | 2058.00' | 14°39'46" | 526.67'  | N27°08'56"E   | 525.23'      |
| C6          | 1942.00' | 11°19'50" | 384.04'  | N28°48'54"E   | 383.42'      |
| C7          | 1942.00' | 03°19'56" | 112.94'  | N21°29'01"E   | 112.92'      |
| C8          | 230.00'  | 05°30'19" | 22.10'   | N52°05'09"E   | 22.09'       |
| C9          | 170.00'  | 16°44'48" | 49.69'   | N57°42'23"E   | 49.51'       |



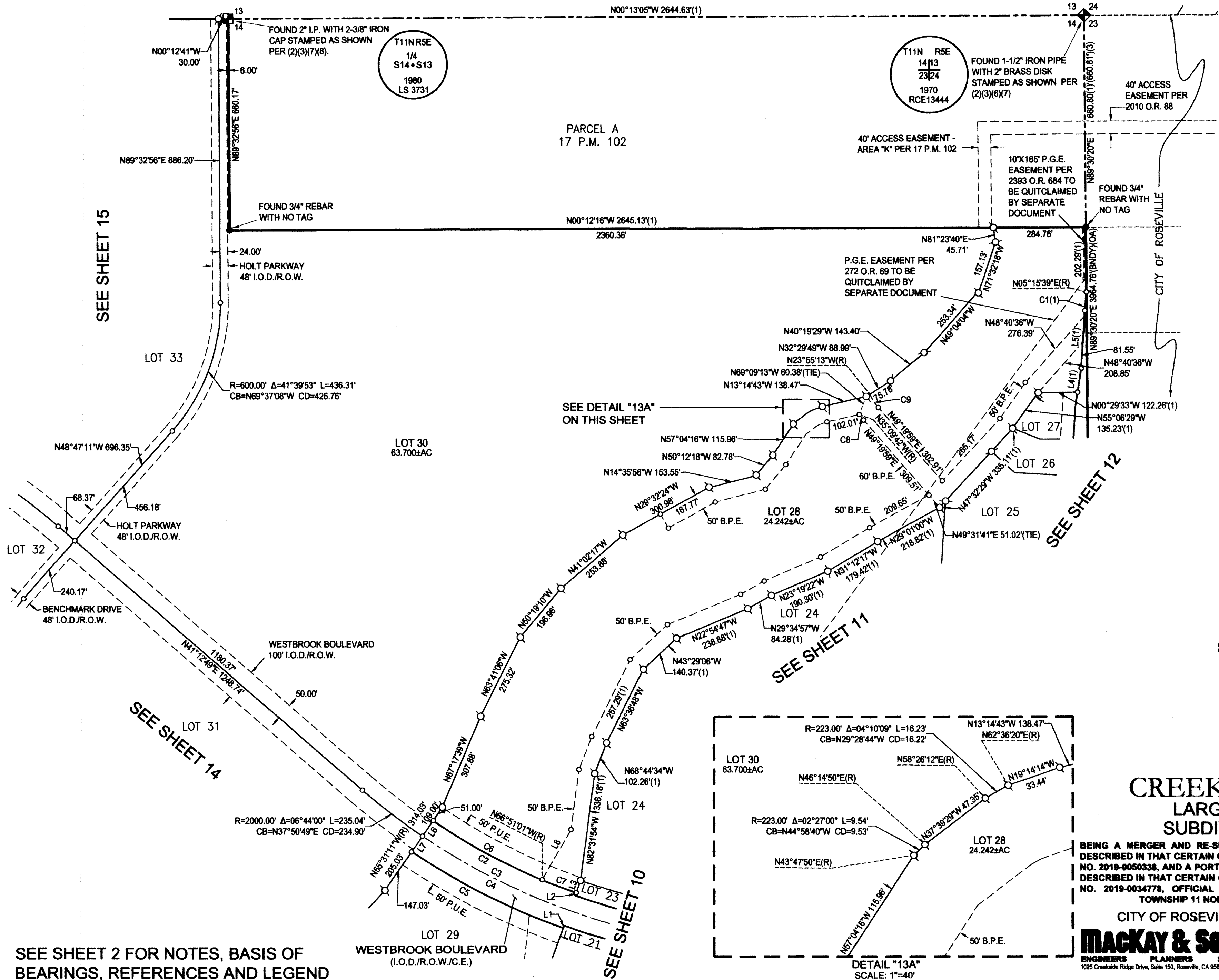
FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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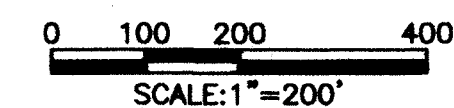


SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND

| Curve Table |          |           |          |               |              |
|-------------|----------|-----------|----------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length   | Chord Bearing | Chord Length |
| C1          | 2058.00' | 14°39'46" | 526.67'  | S27°08'56"W   | 525.23'      |
| C2          | 2000.00' | 34°58'27" | 1220.83' | N16°59'35"E   | 1201.96'     |
| C3          | 2000.00' | 30°37'06" | 1068.78' | N19°10'16"E   | 1056.11'     |
| C4          | 1942.00' | 14°39'46" | 496.98'  | S27°08'56"W   | 495.63'      |
| C5          | 1017.00' | 07°23'48" | 131.29'  | N47°22'24"W   | 131.20'      |
| C6          | 36.00'   | 28°14'33" | 17.75'   | N36°57'01"W   | 17.57'       |
| C7          | 48.00'   | 56°22'27" | 47.23'   | N51°00'58"W   | 45.35'       |
| C8          | 48.00'   | 36°15'48" | 30.38'   | N61°04'18"W   | 29.86'       |

| Curve Table |          |           |         |               |              |
|-------------|----------|-----------|---------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length  | Chord Bearing | Chord Length |
| C9          | 48.00'   | 20°06'38" | 16.85'  | N32°53'04"W   | 16.76'       |
| C10         | 96.00'   | 17°58'37" | 30.75'  | N33°57'04"W   | 30.62'       |
| C11         | 2058.00' | 03°08'08" | 112.63' | N21°23'07"E   | 112.61'      |
| C12         | 2058.00' | 11°31'38" | 414.04' | N28°43'00"E   | 413.34'      |

| Line Table |                 |         |
|------------|-----------------|---------|
| Line #     | Bearing         | Length  |
| L1         | N55°31'11"W (R) | 58.00'  |
| L2         | N55°31'11"W (R) | 58.00'  |
| L3         | N70°10'40"W     | 8.00'   |
| L4         | N70°10'40"W     | 161.76' |
| L5         | N59°48'22"W     | 101.24' |
| L6         | N47°43'55"W     | 76.28'  |
| L7         | N43°51'22"W     | 36.16'  |
| L8         | N37°55'59"W     | 58.24'  |
| L9         | N30°02'41"W     | 116.15' |
| L10        | N42°56'23"W     | 35.21'  |



**FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190**

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

CITY OF ROSEVILLE • PLACER COUNTY • CALIFORNIA

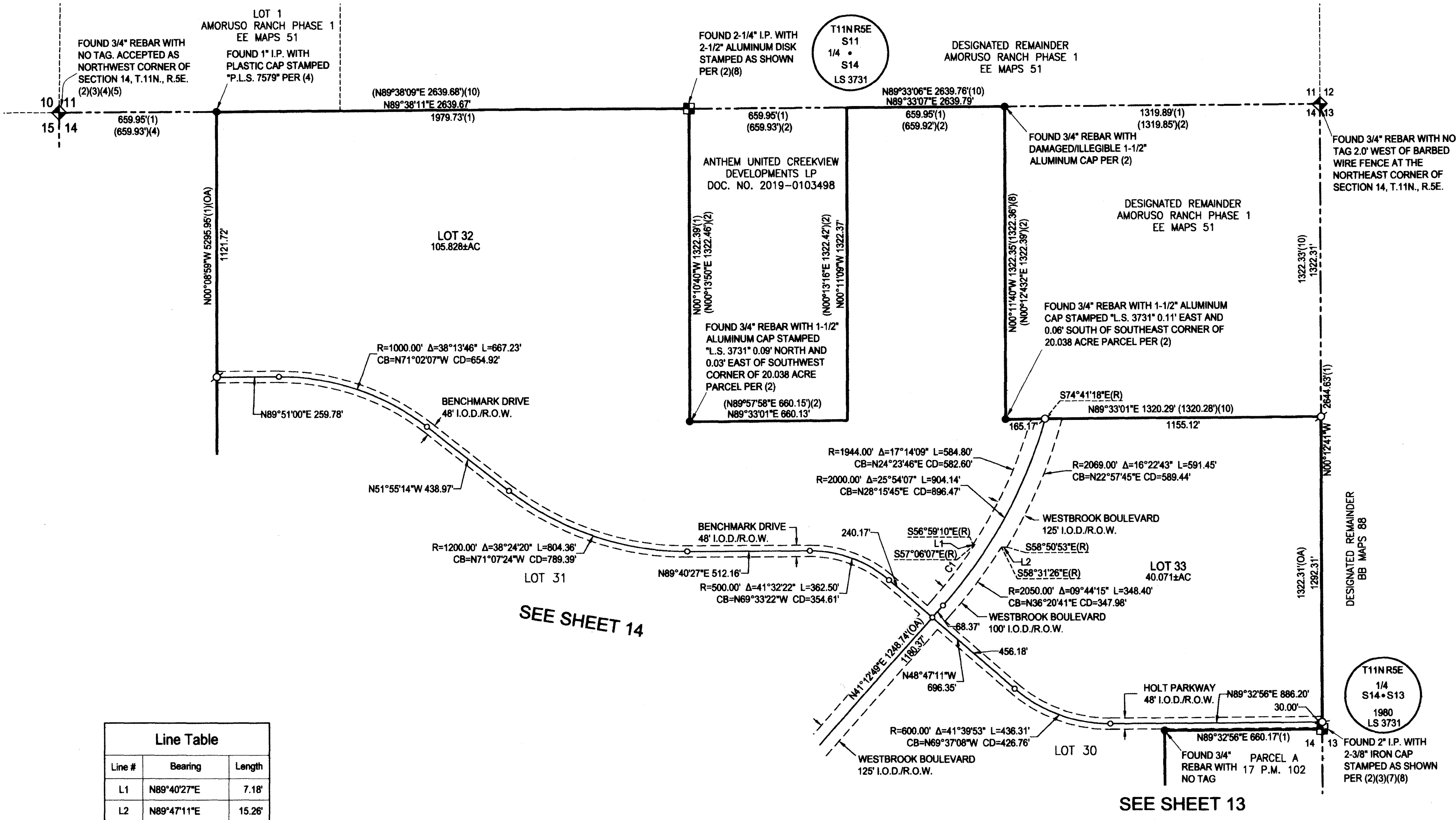
**MACKAY & SOMPS**  
ENGINEERS PLANNERS SURVEYORS  
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1188

APRIL 2020

SHEET 14 OF 15 18431.RST

SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND





SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND

**FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190**

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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**Mackay & Somp**  
ENGINEERS PLANNERS SURVEYORS  
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189

APRIL 2020

SHEET 15 OF 15 18431.RST



## COUNCIL COMMUNICATION

**CC #: 0978**

**File #: 0400-04-09-1**

**Title:** Creekview, Blue Oaks Boulevard - Segment 3 - Notice of Completion

**Contact:** Ignacio Vizcarra 916-744-5578 ivizcarra@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 7.14.**

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council adopt the attached resolution accepting Creekview, Blue Oaks Boulevard - Segment 3, CWJ #190044, as complete and authorizing the City Engineer to execute the Notice of Completion.

### BACKGROUND

The Engineering Division has made a final inspection of the above project and has found the roadway infrastructure work complete in accordance with the improvement plans and City Specifications.

### FISCAL IMPACT

The actions requested as part of this action have no impact to the City's General Fund. Construction costs were paid by the developer.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a Notice of Completion meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Ignacio Vizcarra, Construction Inspector

Mike Isom, Development Services Director



---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-358

Creekview Blue Oaks Segment 3 NOC.

Creekview BlueOaks BL Segment 3 Exhibit A.

Creekview Phase 1 Final Map



RESOLUTION NO. 20-358

RESOLUTION OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS Creekview Blue Oaks Boulevard- Segment 3 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING A PORTION OF THOSE RESPECTIVE DEDICATIONS OFFERED ON THE RECORDED MAPS OF "THE FINAL MAP OF CREEKVIEW PHASE 1 LARGE LOT SUBDIVISION. SUBDIVISION NO. PL18-0190." BE IT RESOLVED by the Council of the City of Roseville as follows:

1. The "Notice of Completion" on file in the City Clerk's Department relative to that public work known as the Creekview Blue Oaks Boulevard- Segment 3 is hereby approved and the public work accepted.
2. A portion of the right-of-way and easements located adjacent thereto as offered for dedication on The Final Map of Creekview Phase 1, Large Lot Subdivision, Subdivision NO. PL18-0190, recorded in Book EE of Maps, Page 97, in the office of the recorder of Placer County, is hereby accepted by the City in part as said dedications relates to the improvement plan set known as Creekview Blue Oaks Boulevard- Segment 3. The remaining offers of dedication will be accepted at a later date as improvements are approved and accepted.
3. The City Engineer is hereby authorized and directed to execute said Notice on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
CITY CLERK

RECORDING REQUESTED BY AND WHEN  
RECORDED MAIL TO:

CITY CLERK  
CITY OF ROSEVILLE  
311 VERNON STREET  
ROSEVILLE, CA 95678

Exempt from recording fees  
Pursuant to Gov't Code §27383

---

**NOTICE OF COMPLETION**

NOTICE IS HEREBY GIVEN that the public work of improvement known as the \_\_\_\_\_ Project was completed and accepted by the City of Roseville on \_\_\_\_\_. The location is situated in the City of Roseville, County of Placer, State of California and is indicated on the attached map, marked as Exhibit "A" and incorporated herein by this reference. The real property herein described is owned by the City of Roseville, 311 Vernon Street, Roseville CA 95678.

The direct/general contractor on said project was \_\_\_\_\_.

The surety on said project was \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_  
City of Roseville  
Owner

ATTEST:

\_\_\_\_\_  
Sonia Orozco, City Clerk

State of California    )  
County of Placer        )

I, \_\_\_\_\_, being first duly sworn, depose and say: I am the \_\_\_\_\_ of the City of Roseville, a municipal corporation in the State of California, owner of the property described in the above Notice. I am duly authorized to make this verification for and on behalf of the City of Roseville. I have read the Notice of Completion and know its contents and the facts stated therein are true.

\_\_\_\_\_

City of Roseville

|                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

State of California    )  
County of Placer        )

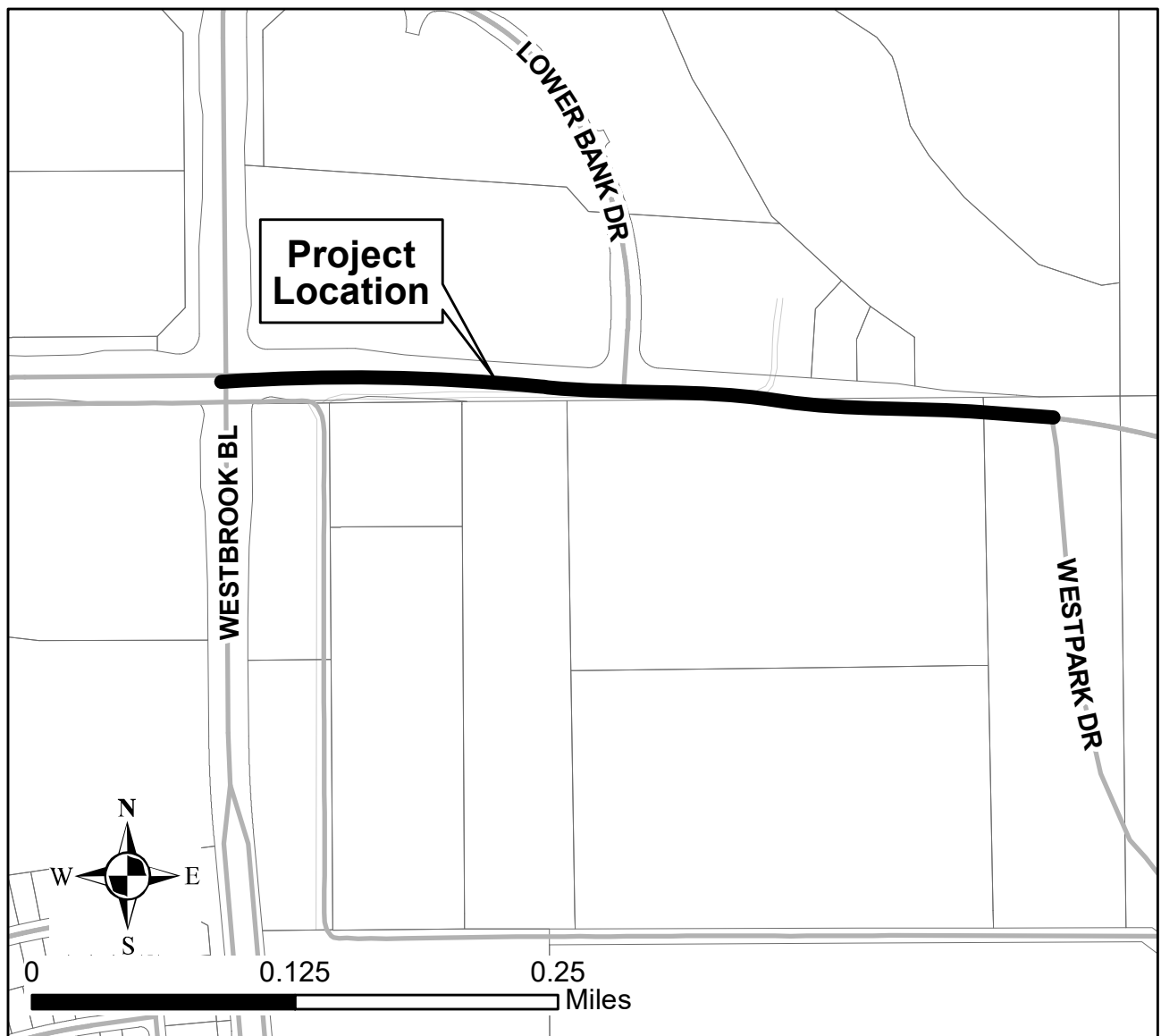
Subscribed and sworn to (or affirmed) before  
me on this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_, \_\_\_\_\_  
proved to me on the basis of satisfactory  
evidence to be the person(s) who appeared  
before me.

*Place Notary Seal and/or Stamp Above*

\_\_\_\_\_  
*Signature of Notary Public*

# EXHIBIT A

## City of Roseville Creekview Blue Oaks Boulevard - Segment 3



**OWNER'S STATEMENT**

THE UNDERSIGNED HEREBY CERTIFY THAT THEY ARE THE ONLY PERSONS HAVING ANY RECORD TITLE INTEREST IN THE REAL PROPERTY INCLUDED WITHIN THE SUBDIVISION SHOWN UPON THIS FINAL MAP OF "CREEKVIEW - PHASE 1 LARGE LOT SUBDIVISION" AND THEY HEREBY CONSENT TO THE PREPARATION AND RECORDATION OF THIS FINAL MAP AND HEREBY OFFER FOR DEDICATION AND DO HEREBY DEDICATE FOR SPECIFIC PURPOSES THE FOLLOWING:

THE REAL PROPERTY DESCRIBED BELOW IS IRREVOCABLY OFFERED FOR DEDICATION AS AN EASEMENT FOR PUBLIC PURPOSES:

- (A) PUBLIC EASEMENTS FOR THE INSTALLATION AND MAINTENANCE OF, BUT NOT LIMITED TO ELECTROLIERS, WATER AND GAS PIPES, SEWER AND DRAINAGE PIPES, AND FOR UNDERGROUND WIRE AND CONDUITS FOR ELECTRIC, TELEPHONE AND TELEVISION SERVICES AND TRAFFIC CONTROL APPURTENANCES TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER, UNDER AND ACROSS ALL THOSE AREAS SHOWN HEREON AS IOD/ROW (IRREVOCABLE OFFER OF DEDICATION/RIGHT OF WAY) AND THOSE STRIPS OF LAND LYING CONTIGUOUS TO THE RIGHT-OF-WAY AS SHOWN HEREON AND DESIGNATED "P.U.E." (PUBLIC UTILITY EASEMENT).
- (B) A PUBLIC EASEMENT FOR PEDESTRIAN / BICYCLE ACCESS AND THE INSTALLATION, REPAIR, REMOVAL OR REPLACEMENT OF LANDSCAPING TOGETHER WITH ANY AND ALL APPURTENANCES THERETO ON, OVER, UNDER AND ACROSS LOTS 4, 5, 6, 7, 10, 22 AND 23, AND THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "PASEO EASEMENT" (P.E.).
- (C) A PUBLIC EASEMENT FOR THE INGRESS AND EGRESS OF EMERGENCY VEHICLES, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER AND ACROSS THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED EMERGENCY VEHICLE ACCESS EASEMENT (E.V.A.E.).
- (D) A PUBLIC EASEMENT FOR THE INSTALLATION AND MAINTENANCE OF A BUS SHELTER TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER AND ACROSS THAT STRIP OF LAND SHOWN HEREON AND DESIGNATED "BUS SHELTER EASEMENT" (B.S.E.).
- (E) A PUBLIC EASEMENT FOR PEDESTRIAN AND BICYCLES ACCESS AND THE INSTALLATION AND MAINTENANCE OF THE BIKE PATH, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER AND ACROSS THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "BIKE PATH EASEMENT" (B.P.E.).
- (F) A PUBLIC EASEMENT FOR INGRESS AND EGRESS FOR THE PURPOSE OF CONSTRUCTION OF PUBLIC IMPROVEMENTS AND ANY AND ALL APPURTENANCES THERETO RELATED TO A STANDARD CITY OF ROSEVILLE PUBLIC STREET ON, OVER, UNDER, AND ACROSS BLUE OAKS BOULEVARD, WESTBROOK BOULEVARD, LOWER BANK DRIVE AND CLOUD DANCE DRIVE SHOWN HEREON AND DESIGNATED "CONSTRUCTION EASEMENT" (C.E.).

THE REAL PROPERTY DESCRIBED BELOW IS IRREVOCABLY OFFERED FOR DEDICATION IN FEE FOR PUBLIC PURPOSES:

- (A) AS PUBLIC RIGHT-OF-WAY BLUE OAKS BOULEVARD, BENCHMARK DRIVE, CLOUD DANCE DRIVE, DAYDREAM DRIVE, GRASSCREEK DRIVE, HOLT PARKWAY, LOWER BANK DRIVE, SKIPPING STONE WAY, WESTBROOK BOULEVARD AND WHISTLING BEND WAY, AND ALL THOSE AREAS SHOWN HEREON AS IOD/ROW (IRREVOCABLE OFFER OF DEDICATION/RIGHT OF WAY).
- (B) LOTS 28 AND 29 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR PUBLIC OPEN SPACE PURPOSES.
- (C) LOTS 15 AND 18 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR PUBLIC PARK PURPOSES.
- (D) LOT 21 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR A SANITARY SEWER LIFT STATION SITE.
- (E) LOT 26 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR RECYCLING CENTER SITE.
- (F) LOT 27 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR WATER TREATMENT/WELL SITE.

ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP  
A WASHINGTON LIMITED PARTNERSHIP

BY: Brian Moore  
Vice President

**NOTARY'S ACKNOWLEDGMENT**

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA

COUNTY OF PLACER

ON April 15th, 2020 BEFORE ME, Renee C. Kelly, A NOTARY PUBLIC

PERSONALLY APPEARED - Brian Moore  
WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL.

Renee C. Kelly  
SIGNATURE PRINTED NAME

MY PRINCIPAL PLACE OF BUSINESS IS PLACER COUNTY

MY COMMISSION EXPIRES: 4/21/2021 MY COMMISSION NUMBER: 2192761

\* OF CALIFORNIA THAT THE -KK

**SUBDIVISION MAP ACT SECTION 66477.5 CERTIFICATE**

PURSUANT TO SECTION 66477.5 OF THE SUBDIVISION MAP ACT THE CITY OF ROSEVILLE SHALL RECONVEY LOTS 21, 26 AND 27 AS DEDICATED HEREON, TO THE SUBDIVIDER NAMED BELOW IF THE CITY OF ROSEVILLE MAKES A DETERMINATION THAT THE SAME PUBLIC PURPOSE FOR WHICH THE PROPERTY WAS DEDICATED DOES NOT EXIST, OR THE PROPERTY OR ANY PORTION THEREOF IS NOT NEEDED FOR PUBLIC UTILITIES EXCEPT FOR ANY PORTION OF THE PROPERTY THAT IS REQUIRED FOR THE SAME PUBLIC PURPOSE OR PUBLIC UTILITIES.

SUBDIVIDER: ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP  
A WASHINGTON LIMITED PARTNERSHIP

ADDRESS: 3001 DOUGLAS BLVD., SUITE 200  
ROSEVILLE, CA 95661

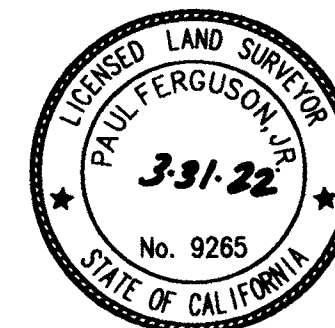
**SURVEYOR'S STATEMENT**

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, IN JANUARY, 2019, I HEREBY STATE THAT THE SURVEY IS TRUE AND COMPLETE AS SHOWN. THAT ALL THE MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED OR THAT THEY WILL BE SET IN THOSE POSITIONS BEFORE DECEMBER 31, 2022, AND THAT THE MONUMENTS ARE, OR WILL BE, SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED, AND THAT THIS FINAL MAP SUBSTANTIALLY CONFORMS TO THE CONDITIONALLY APPROVED TENTATIVE MAP.

MACKAY & SOMPS CIVIL ENGINEERS, INC.

BY: Paul Ferguson  
PAUL FERGUSON, JR., PLS 9265  
EXPIRATION DATE: MARCH 31, 2022

DATE: 4/13/20

**CITY ENGINEER'S STATEMENT**

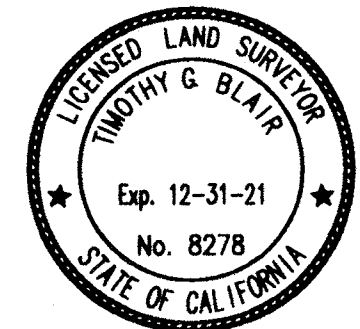
I HEREBY STATE THAT I HAVE EXAMINED THIS FINAL MAP OF "CREEKVIEW - PHASE 1 LARGE LOT SUBDIVISION" AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP ON FILE AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.

Marc Stout DATE: 4/16/20  
MARC STOUT, R.C.E. 69879  
CITY ENGINEER, CITY OF ROSEVILLE  
LICENSE EXPIRES: SEPTEMBER 30, 2020

I HEREBY STATE THAT I AM SATISFIED THIS FINAL MAP OF "CREEKVIEW - PHASE 1 LARGE LOT SUBDIVISION" IS TECHNICALLY CORRECT.

FOR MARC STOUT, CITY ENGINEER, CITY OF ROSEVILLE

Timothy G. Blair DATE: 4/16/20  
TIMOTHY G. BLAIR, PLS 8278  
EXPIRES DECEMBER 31, 2021

**CITY CLERK'S STATEMENT**

I HEREBY CERTIFY THAT THE CITY COUNCIL, CITY OF ROSEVILLE, HAS APPROVED THIS FINAL MAP OF "CREEKVIEW - PHASE 1 LARGE LOT SUBDIVISION", BUT REJECTS AT THIS TIME ON BEHALF OF THE PUBLIC, BUT RESERVES THE RIGHT TO ACCEPT AT A LATER DATE, ALL IRREVOCABLE OFFERS OF DEDICATION IN ACCORDANCE WITH THE TERMS OF THOSE OFFERS, AND HEREBY APPROVES THE ABANDONMENT OF THE EASEMENT LISTED HEREON WITHIN NOTE 3 ON SHEET 2.

Sonia Ornela  
CITY CLERK, CITY OF ROSEVILLE  
DATE: 4/16/2020 BY: \_\_\_\_\_  
ASSISTANT CITY CLERK

**RECORDER'S STATEMENT**

FILED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2020, AT \_\_\_\_\_ M. IN BOOK \_\_\_\_\_ OF MAPS, AT PAGE \_\_\_\_\_, IN THE OFFICE OF THE PLACER COUNTY RECORDER, AT THE REQUEST OF MACKAY & SOMPS CIVIL ENGINEERS, INC.

Ryan Reno DOCUMENT NO: 2020-CD51034  
RECORDER OF PLACER COUNTY  
STATE OF CALIFORNIA  
Deputy FEE: \$ 125.00

**FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190**

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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**MACKAY & SOMPS**  
ENGINEERS PLANNERS SURVEYORS  
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189

APRIL 2020

SHEET 1 OF 15 18431.RST

SEE SHEET 2 FOR TRUSTEE'S STATEMENT AND ACKNOWLEDGMENT



TRUSTEE'S STATEMENT

FIRST AMERICAN TITLE COMPANY, A NEBRASKA CORPORATION, AS TRUSTEE UNDER DEED OF TRUST RECORDED ON MAY 24, 2019, AS INSTRUMENT NO. 2019-34783, OFFICIAL RECORDS OF PLACER COUNTY, AGAINST THE LAND HEREIN SHOWN CONSENTS TO THE MAKING AND FILING OF THIS MAP.

BY: [Signature] - Robin Nieto  
Vice President

BY: \_\_\_\_\_  
\_\_\_\_\_

NOTARY'S ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA

COUNTY OF Placer

ON April 15, 2020 BEFORE ME, V. Murphy, A NOTARY PUBLIC

PERSONALLY APPEARED Robin Nieto  
WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/they EXECUTED THE SAME IN HIS/HER/their AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/their SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL.

[Signature] V. Murphy  
SIGNATURE PRINTED NAME

MY PRINCIPAL PLACE OF BUSINESS IS Placer COUNTY

MY COMMISSION EXPIRES: Dec. 29, 2022 MY COMMISSION NUMBER: 22609216

NOTES:

- ALL CURVES ARE DIMENSIONED WITH RADIUS, DELTA, ARC LENGTH, CHORD BEARING AND CHORD LENGTH. DISTANCES SHOWN HEREON ARE IN FEET AND DECIMALS THEREOF AND ARE "GROUND" DISTANCES. DUE TO ROUNDING, THE SUM OF INDIVIDUAL DIMENSIONS MAY NOT EQUAL THE OVERALL DIMENSION.
- TOTAL AREA FOR THIS SUBDIVISION IS 461.327± ACRES, CONSISTING OF 18 LARGE LOTS, 1 COMMERCIAL LOT, 7 LANDSCAPE LOTS, 2 PUBLIC PARK LOTS, 2 PUBLIC OPEN SPACE LOTS, 1 CITY SANITARY SEWER LIFT STATION LOT, 1 CITY RECYCLING CENTER LOT AND 1 CITY WATER TREATMENT/WELL LOT.
- PURSUANT TO GOVERNMENT CODE SECTION 66434(G), THE FOLLOWING PUBLIC EASEMENT IS HEREBY ABANDONED:
  - HIGHWAY EASEMENT DEED TO THE COUNTY OF PLACER RECORDED IN BOOK 3841, AT PAGE 544, O.R.P.C., LYING WITHIN LOTS 6 AND 7, AND BLUE OAKS BOULEVARD.
- THIS PROPERTY IS SUBJECT TO AN EASEMENT FOR INGRESS, EGRESS AND UTILITY PURPOSES AND INCIDENTAL PURPOSES RECORDED ON SEPTEMBER 14, 1981 AS INSTRUMENT NO. 35702, IN BOOK 2431, AT PAGE 645, O.R.
- THIS PROPERTY IS SUBJECT TO THE PROVISIONS OF A REPORT OF A MINOR SUBDIVISION, SUBDIVISIONS NO. P-75146, FOR THE PAYMENT OF FEES TO RELIEVE OVERCROWDING OF SCHOOL SERVING THE AREA RECORD ON MARCH 5, 1990 IN BOOK 3841, AT PAGE 538, O.R.
- THIS PROPERTY IS SUBJECT TO THE THE TERMS AND PROVISIONS CONTAINED IN THAT CERTAIN DOCUMENT ENTITLED "DEVELOPMENT AGREEMENT BY AND BETWEEN THE CITY OF ROSEVILLE AND GRANITE BAY INVESTORS II, LLC, PHILLIPS ROAD 160 INVESTORS LIMITED PARTNERSHIP, PHILLIPS ROAD LAND, LLC, J & KD ENTERPRISES, LLC, SOULE INVESTMENTS, LLC, BENNETT WEST ROSEVILLE, LLC, DECOU WEST ROSEVILLE, LLC, BLUE OAKS - ROSEVILLE, LP AND CHUANG RELATIVE TO THE CREEKVIEW SPECIFIC PLAN" RECORDED ON NOVEMBER 28, 2012 AS INSTRUMENT NO. 2012-0113752, O.R. AND THE SUBSEQUENT ASSIGNMENTS OF DEVELOPMENT AGREEMENT AS FOLLOWS:
  - THAT DOCUMENT ENTITLED "ASSIGNMENT OF DEVELOPMENT AGREEMENT" FROM CHUANG FAMILY PARTNERSHIP, A CALIFORNIA PARTNERSHIP, FELIX CHUANG AND MARK CHUANG TO ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, A WASHINGTON LIMITED PARTNERSHIP, RECORDED ON MARCH 13, 2019 AS INSTRUMENT NO. 2019-0015249. O.R.
  - THAT DOCUMENT ENTITLED "ASSIGNMENT OF DEVELOPMENT AGREEMENT" FROM PHILLIPS ROAD 160 INVESTORS, A CALIFORNIA LIMITED PARTNERSHIP, TO ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, A WASHINGTON LIMITED PARTNERSHIP, RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0015249. O.R.
  - THAT DOCUMENT ENTITLED "ASSIGNMENT OF DEVELOPMENT AGREEMENT" FROM PHILLIPS ROAD LAND, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, SOULE INVESTMENTS, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, AND J & KED ENTERPRISES, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, TO ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, A WASHINGTON LIMITED PARTNERSHIP, RECORDED ON MARCH 13, 2019 AS INSTRUMENT NO. 2019-0034780 O.R.
  - THAT DOCUMENT ENTITLED "ASSIGNMENT OF DEVELOPMENT AGREEMENT" FROM BENNETT WEST ROSEVILLE, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, AND DECOU WEST ROSEVILLE, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, TO ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, A WASHINGTON LIMITED PARTNERSHIP, RECORDED ON MARCH 13, 2019 AS INSTRUMENT NO. 2019-0034781 O.R.
  - THAT DOCUMENT ENTITLED "ASSIGNMENT OF DEVELOPMENT AGREEMENT" FROM BLUE OAKS-ROSEVILLE, LP, A WASHINGTON LIMITED PARTNERSHIP, TO ANTHEM UNITED CREEKVIEW DEVELOPMENTS LIMITED PARTNERSHIP, A WASHINGTON LIMITED PARTNERSHIP, RECORDED ON MARCH 13, 2019 AS INSTRUMENT NO. 2019-0034782 O.R.
- THIS PROPERTY IS SUBJECT TO THAT DOCUMENT ENTITLED "ASSIGNMENT OF LEASES, RENTS AND PURCHASE AGREEMENTS" RECORDED MAY 24, 2019 AS INSTRUMENT NO. 2019-0034784, O.R.

BASIS OF BEARINGS:

THE BASIS OF BEARINGS FOR THIS MAP IS N 89°30'20" E AS SHOWN ON THE SOUTH LINE OF SECTION 14 PER THAT CERTAIN FINAL MAP ENTITLED "WESTPARK - PHASE 4 LARGE LOT SUBDIVISION" FILED FOR RECORD ON AUGUST 16, 2013 IN BOOK CC OF MAPS, AT PAGE 53, PLACER COUNTY RECORDS.

REFERENCES:

- DOC.# 2019-0050337 (LLA)
- 9 R.S. 56
- 17 P.M. 102
- 18 R.S. 15
- 18 R.S. 64
- BB MAPS 88
- CC MAPS 53
- EE MAPS 51

LEGEND:

- DIMENSION POINT
- FOUND MONUMENT AS NOTED
- ◆ FOUND SECTION CORNER AS NOTED
- FOUND QUARTER CORNER AS NOTED
- ⌀ SET 5/8" REBAR WITH PLASTIC CAP STAMPED "LS 9265"
- ⊙ SET COPPERWELD SURVEY MONUMENT WITH CENTER PUNCH IN MONUMENT WELL STAMPED "LS 9265"
- AC. ACRES
- BNDY BOUNDARY
- B.P.E. BIKE PATH EASEMENT
- B.S.E. BUS SHELTER EASEMENT
- C.E. CONSTRUCTION EASEMENT
- ESMT EASEMENT
- E.V.A.E. EMERGENCY VAEHICLE ACCESS EASEMENT
- FD FOUND
- IOD/ROW IRREVOCABLE OFFER OF DEDICATION/RIGHT-OF-WAY
- I.P. IRON PIPE
- LLA LOT LINE ADJUSTMENT
- OD OUTSIDE DIAMETER
- (OA) OVERALL
- O.R. OFFICIAL RECORDS OF PLACER COUNTY
- P.E. PASEO EASEMENT
- PGE PACIFIC GAS AND ELECTRIC COMPANY
- P.M. PARCEL MAP
- P.U.E. PUBLIC UTILITY EASEMENT
- R.S. RECORD OF SURVEY
- (R) RADIAL BEARING
- S.F. SQUARE FEET
- (X) SHEET INDEX
- BOUNDARY
- LOT LINE
- ADJACENT PROPERTY
- RIGHT-OF-WAY
- EASEMENT/I.O.D.
- EASEMENT/I.O.D.

FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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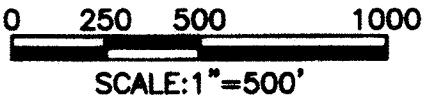
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SHEET 2 OF 15 18431.RST



| LARGE LOT # | L.T.M. PLAN # | S.L.T.M. PLAN # |
|-------------|---------------|-----------------|
| 1           | C-41          | C-41            |
| 2           | C-42          | C-42            |
| 3           | C-25          | C-25            |
| 4           | LC-1          | LC-1            |
| 5           | LC-2          | LC-2            |
| 6           | LC-10         | LC-10           |
| 7           | LC-11         | LC-11           |
| 8           | C-70          | C-70            |
| 9           | C-17          | C-17            |
| 10          | LC-12         | LC-12           |
| 11          | C-24          | C-24            |
| 12          | C-23          | C-23            |
| 13          | C-13          | C-13            |
| 14          | C-14          | C-14            |
| 15          | C-63          | C-63            |
| 16          | C-15          | C-15            |
| 17          | C-12          | C-12            |
| 18          | C-62          | C-62            |
| 19          | C-11          | C-11            |
| 20          | C-10          | C-10            |
| 21          | C-82          | C-82            |
| 22          | LC-3          | LC-3            |
| 23          | LC-4          | LC-4            |
| 24          | C-16          | C-16            |
| 25          | C-43          | C-43            |
| 26          | C-83          | C-83            |
| 27          | C-84          | C-84            |
| 28          | C-54          | C-54            |
| 29          | C-53          | C-53            |
| 30          | -             | -               |
| 31          | -             | -               |
| 32          | -             | -               |
| 33          | -             | -               |



FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

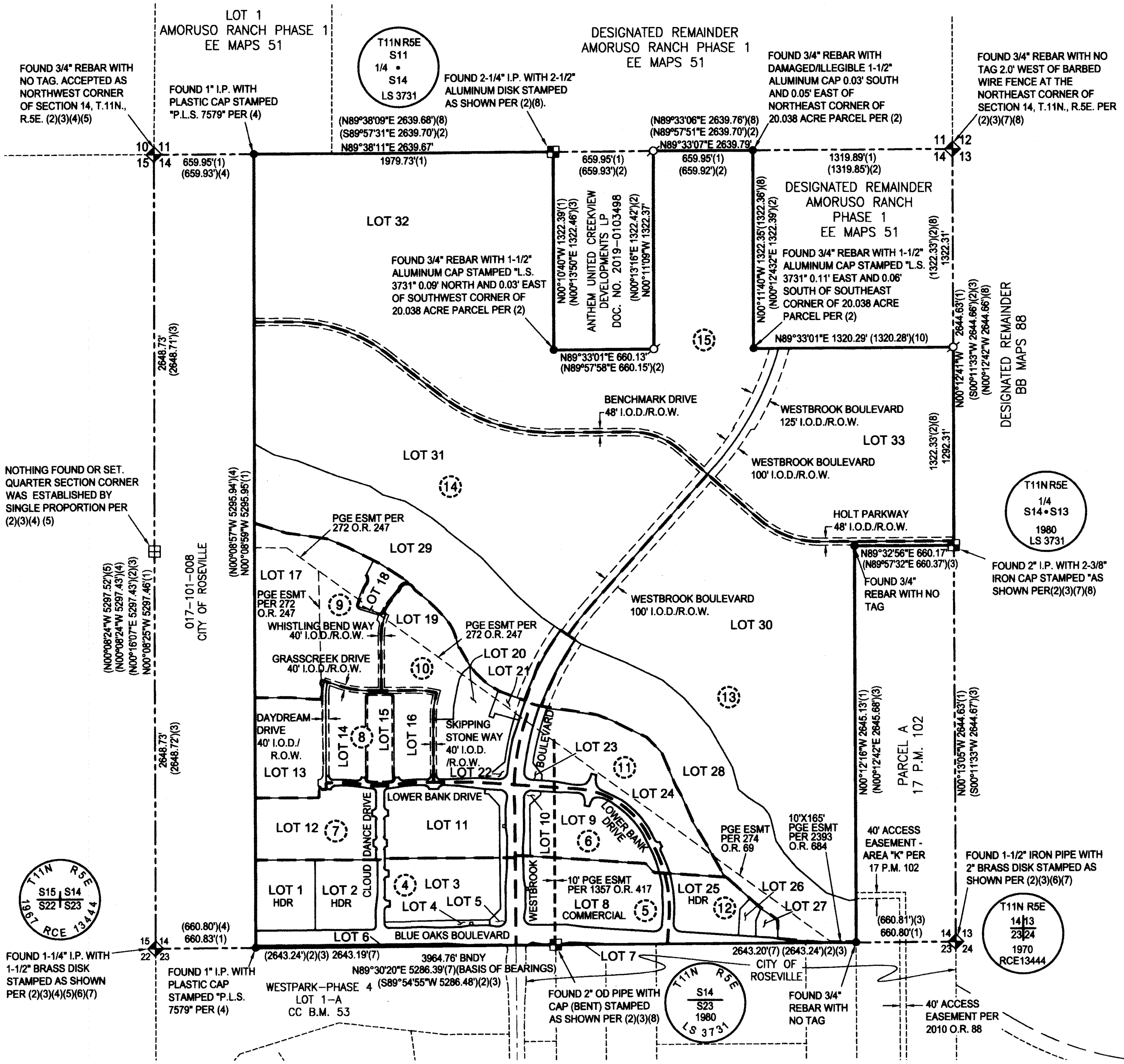
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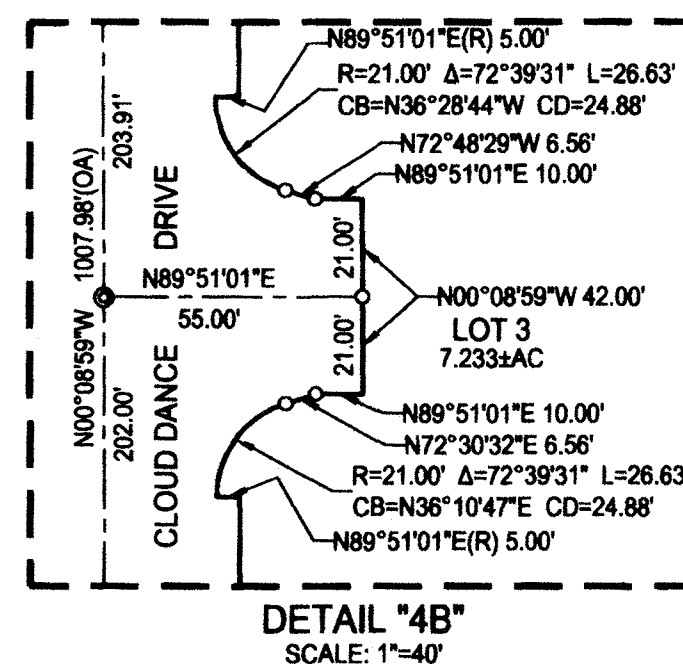
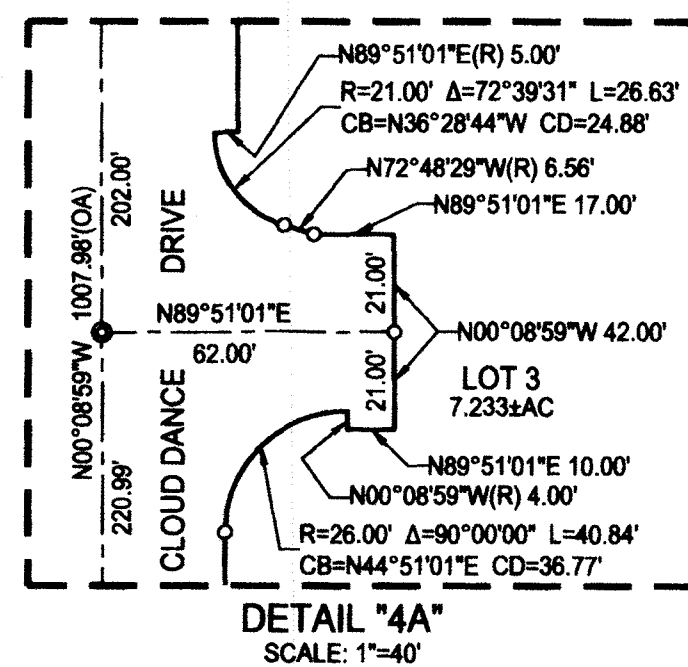
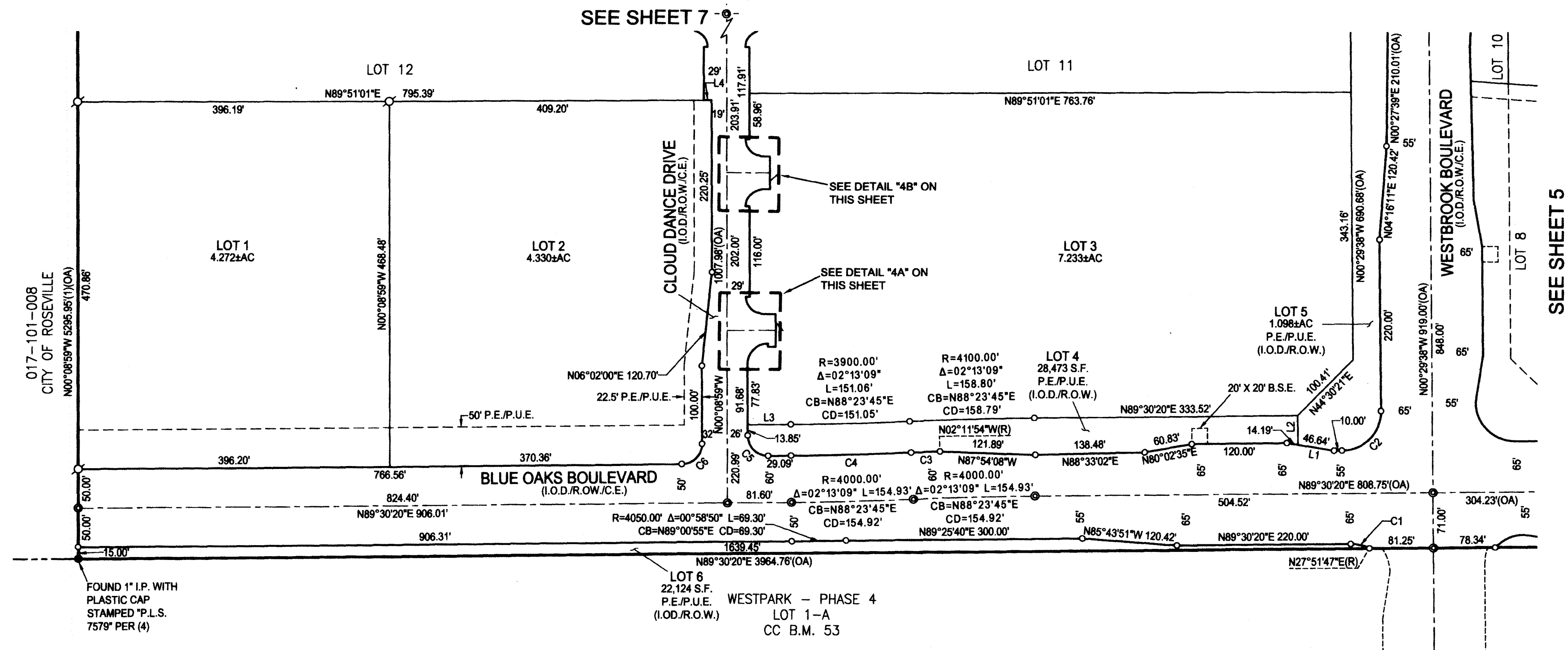
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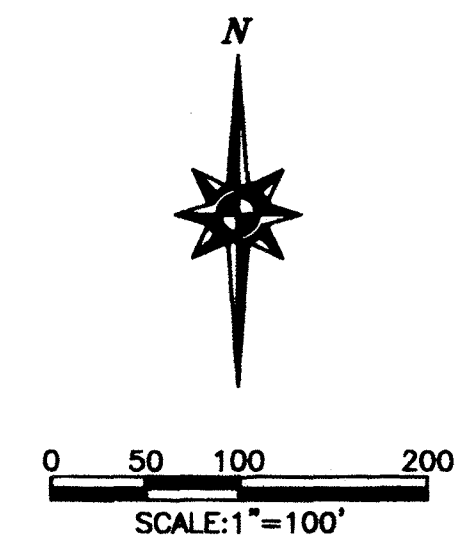
SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND





| Line Table |             |        |
|------------|-------------|--------|
| Line #     | Bearing     | Length |
| L1         | N81°01'56"W | 60.83' |
| L2         | N00°29'40"W | 37.33' |
| L3         | N89°30'20"E | 55.00' |
| L4         | N89°51'01"E | 10.00' |

| Curve Table |          |           |         |               |              |
|-------------|----------|-----------|---------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length  | Chord Bearing | Chord Length |
| C1          | 50.00'   | 28°21'27" | 24.75'  | N76°18'56"W   | 24.49'       |
| C2          | 50.00'   | 89°59'58" | 78.54'  | N44°30'21"E   | 70.71'       |
| C3          | 4060.00' | 00°30'56" | 36.52'  | N87°32'39"E   | 36.52'       |
| C4          | 3940.00' | 02°13'09" | 152.61' | N88°23'45"E   | 152.60'      |
| C5          | 26.00'   | 90°20'42" | 41.00'  | N45°19'19"W   | 36.88'       |
| C6          | 26.00'   | 89°39'18" | 40.68'  | N44°40'41"E   | 36.66'       |



FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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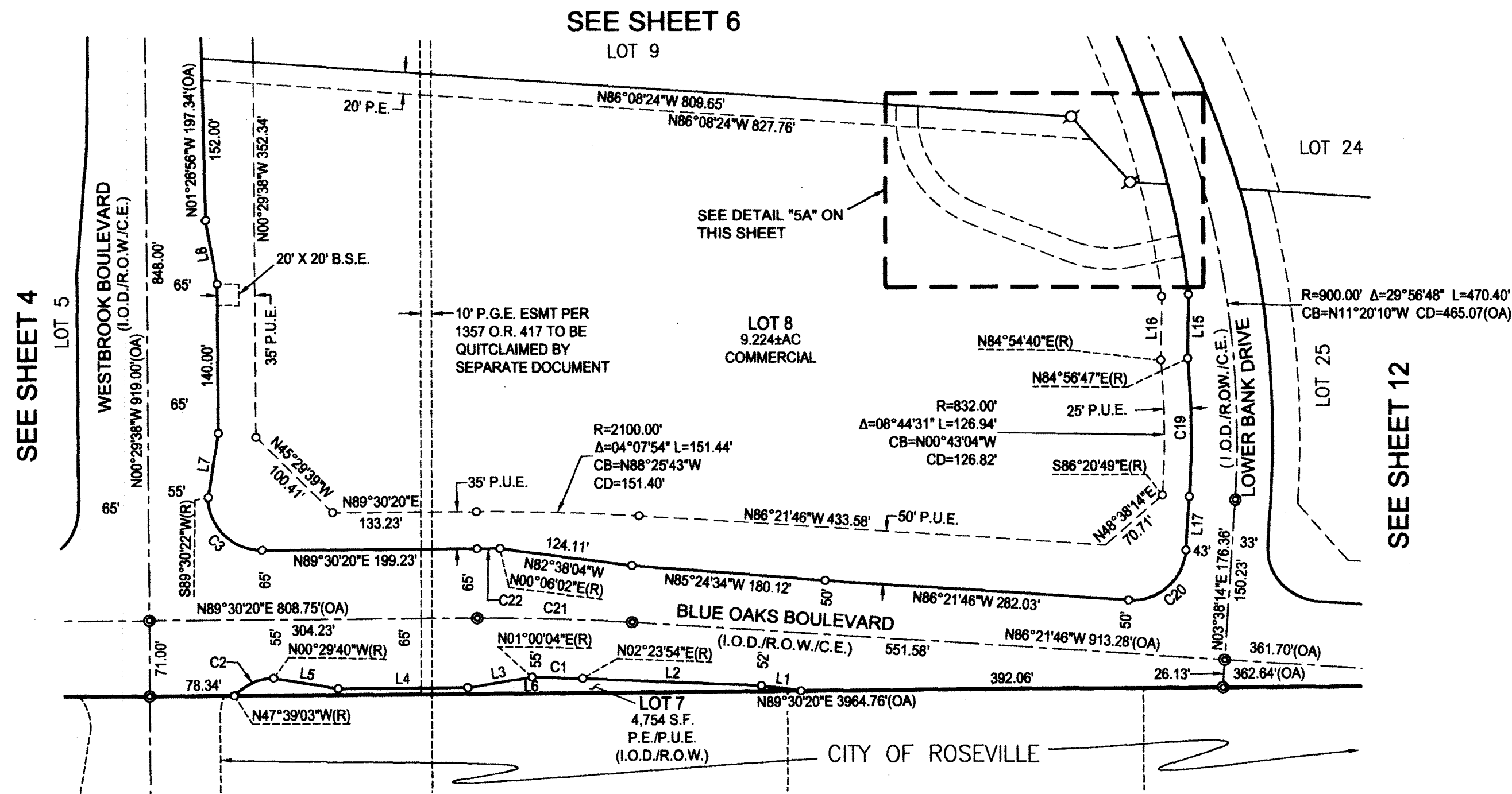
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SHEET 4 OF 15 18431.RST

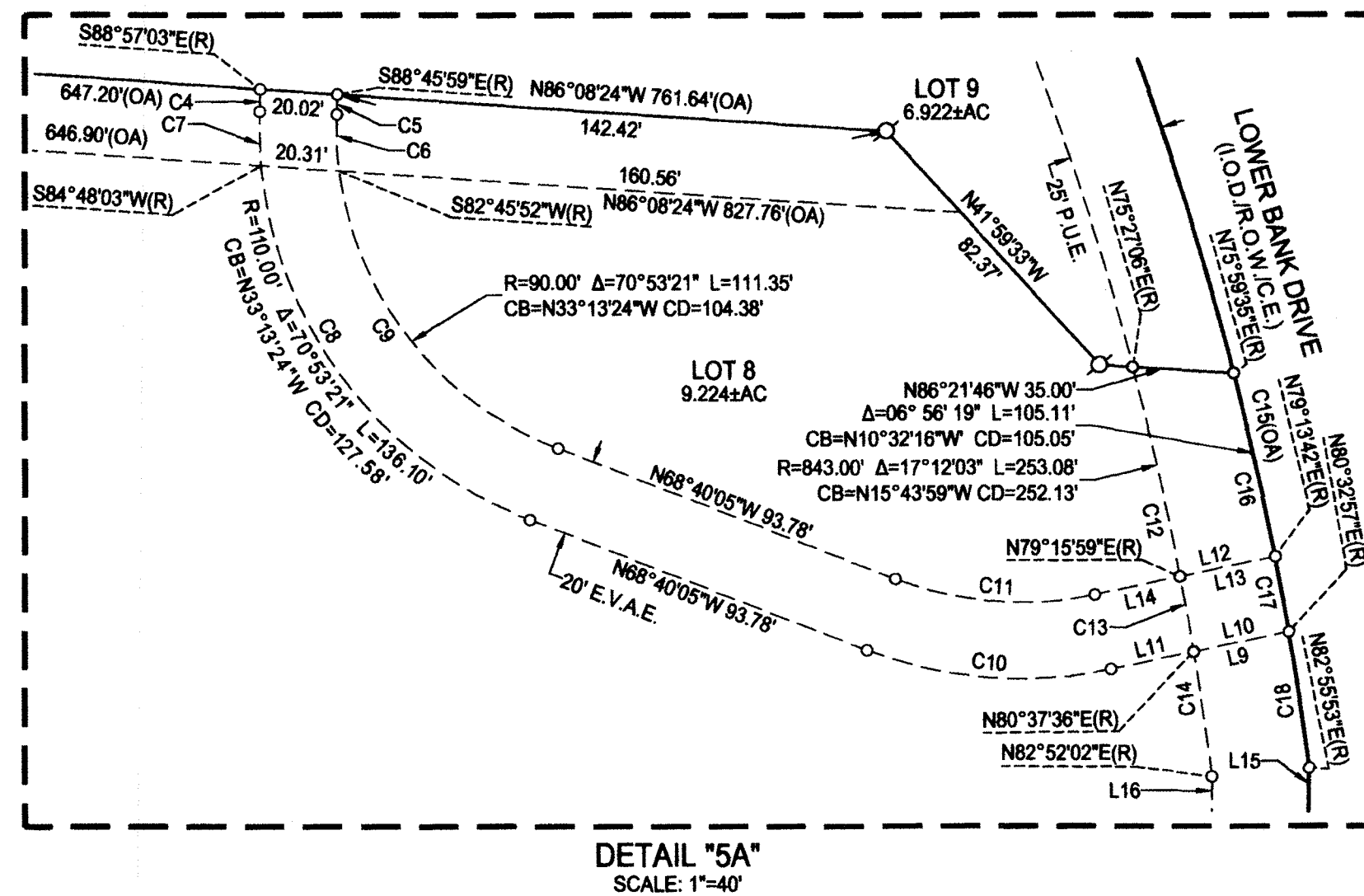
SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND





| Line Table |             |        |
|------------|-------------|--------|
| Line #     | Bearing     | Length |
| L1         | N82°29'17"W | 37.05  |
| L2         | N87°36'06"W | 165.67 |
| L3         | N80°39'36"E | 60.72  |
| L4         | N89°30'20"E | 120.00 |
| L5         | N81°01'56"W | 60.83  |
| L6         | N89°30'20"E | 526.20 |
| L7         | N08°58'06"E | 60.83  |
| L8         | N10°15'56"W | 60.88  |
| L9         | N77°56'30"E | 47.09  |
| L10        | N77°56'30"E | 25.03  |
| L11        | N77°56'30"E | 22.06  |
| L12        | N77°56'30"E | 47.77  |
| L13        | N77°56'30"E | 25.00  |
| L14        | N77°56'30"E | 22.77  |
| L15        | N00°46'21"E | 80.00  |
| L16        | N00°47'55"E | 59.56  |
| L17        | N03°38'14"E | 50.23  |

| Curve Table |          |           |         |               |              |
|-------------|----------|-----------|---------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length  | Chord Bearing | Chord Length |
| C1          | 1945.00' | 01°23'50" | 47.43'  | N88°18'01"W   | 47.43'       |
| C2          | 50.00'   | 47°09'23" | 41.15'  | N65°55'38"E   | 40.00'       |
| C3          | 50.00'   | 90°00'02" | 78.54'  | N45°29'39"W   | 70.71'       |
| C4          | 285.00'  | 01°10'19" | 5.83'   | N01°38'07"E   | 5.83'        |
| C5          | 305.00'  | 00°59'15" | 5.26'   | N01°43'39"E   | 5.26'        |
| C6          | 90.00'   | 09°27'24" | 14.85'  | N02°30'26"W   | 14.84'       |
| C7          | 110.00'  | 07°25'14" | 14.25'  | N01°29'21"W   | 14.24'       |
| C8          | 110.00'  | 63°28'07" | 121.85' | N36°56'01"W   | 115.72'      |
| C9          | 90.00'   | 61°25'57" | 96.50'  | N37°57'06"W   | 91.94'       |
| C10         | 110.00'  | 33°23'25" | 64.10'  | N85°21'47"W   | 63.20'       |
| C11         | 90.00'   | 33°23'25" | 52.45'  | N85°21'47"W   | 51.71'       |
| C12         | 843.00'  | 03°48'53" | 56.13'  | N12°38'27"W   | 56.12'       |
| C13         | 843.00'  | 01°21'37" | 20.01'  | N10°03'12"W   | 20.01'       |
| C14         | 843.00'  | 02°14'27" | 32.97'  | N08°15'11"W   | 32.97'       |
| C15         | 868.00'  | 17°17'37" | 261.99' | N15°42'55"W   | 261.00'      |
| C16         | 868.00'  | 03°14'07" | 49.01'  | N12°23'22"W   | 49.01'       |
| C17         | 868.00'  | 01°19'15" | 20.01'  | N10°06'40"W   | 20.01'       |
| C18         | 868.00'  | 02°22'57" | 36.09'  | N08°15'34"W   | 36.09'       |
| C19         | 857.00'  | 08°41'28" | 130.00' | N00°42'30"W   | 129.87'      |
| C20         | 50.00'   | 90°00'00" | 78.54'  | N48°38'14"E   | 70.71'       |
| C21         | 2000.00' | 04°07'54" | 144.23' | N88°25'43"W   | 144.19'      |
| C22         | 2065.00' | 00°35'42" | 21.45'  | N89°48'11"E   | 21.45'       |



SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND



FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

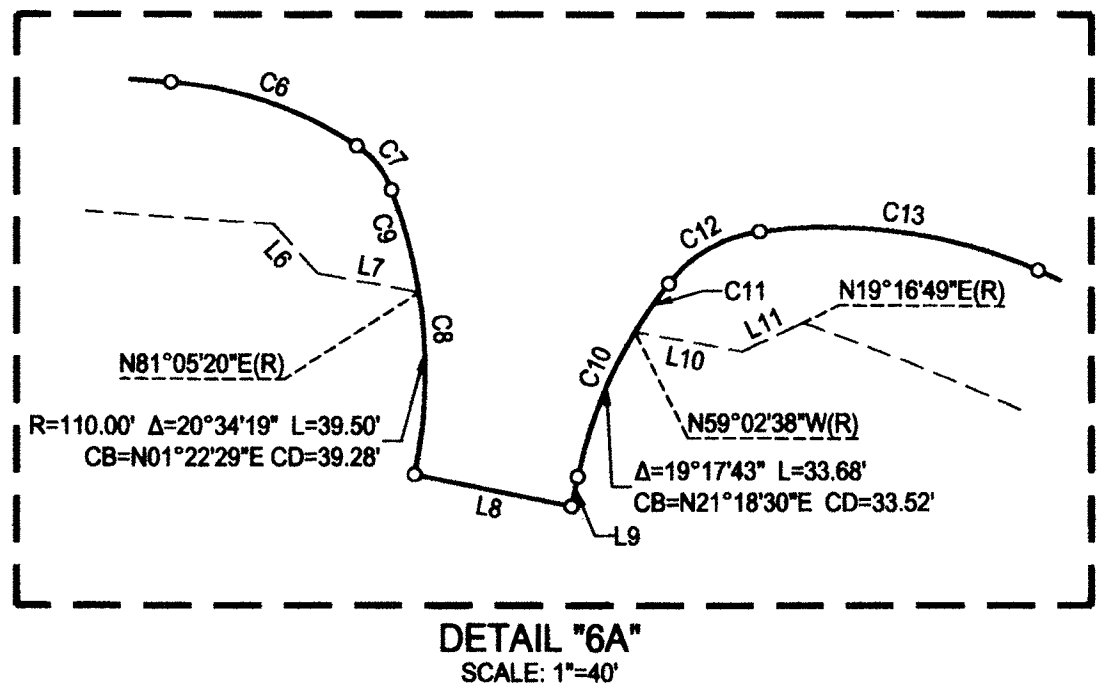
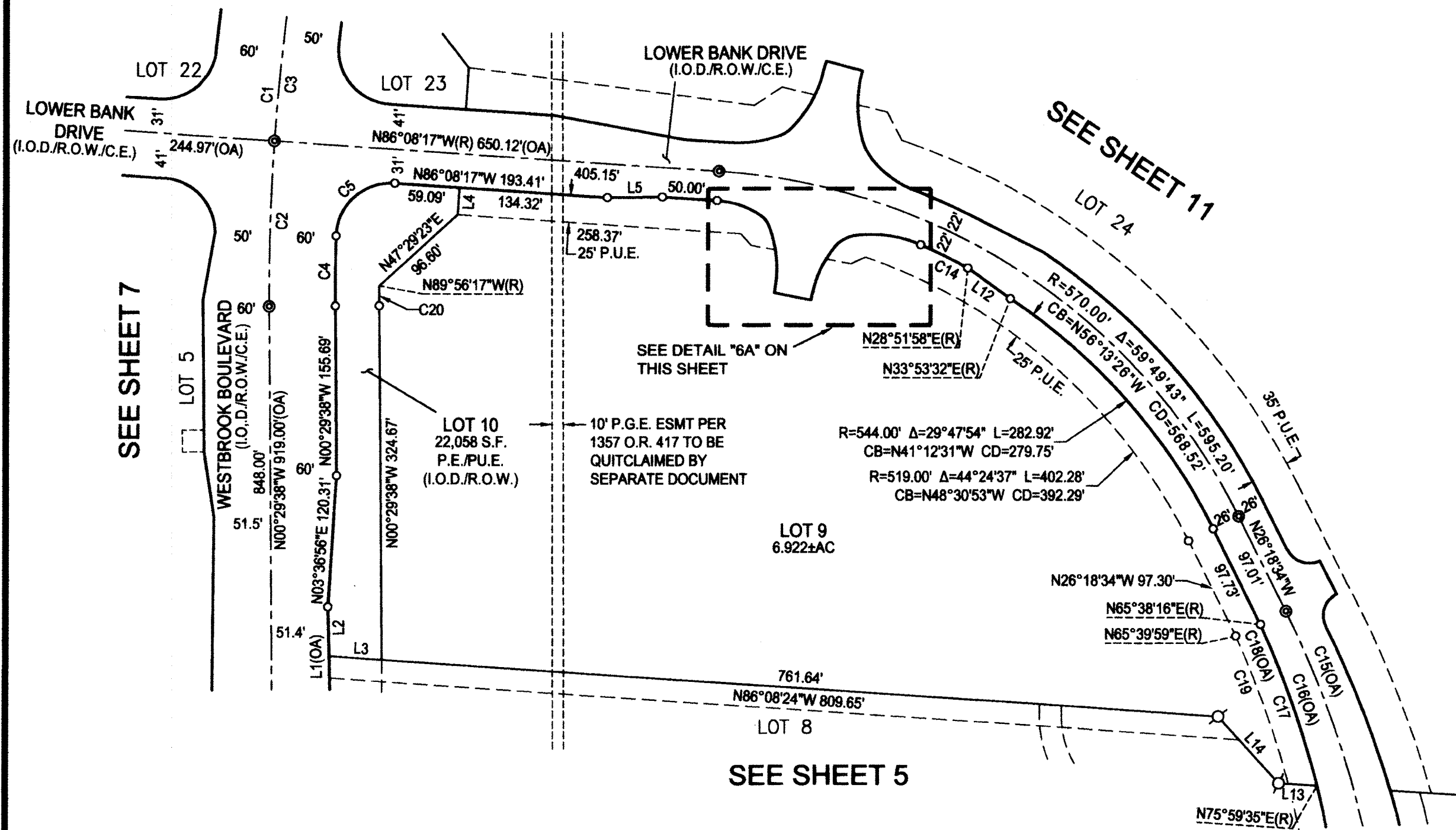
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SHEET 5 OF 15 18431.RST



| Line Table |                |         |
|------------|----------------|---------|
| Line #     | Bearing        | Length  |
| L1         | N01°26'56"W    | 197.34' |
| L2         | N01°26'56"W    | 45.34'  |
| L3         | N86°08'24"W    | 48.00'  |
| L4         | N03°51'43"E    | 25.00'  |
| L5         | N89°17'17"E    | 50.16'  |
| L6         | N41°08'17"W    | 14.14'  |
| L7         | N79°27'57"W    | 22.03'  |
| L8         | N78°20'22"W(R) | 34.00'  |
| L9         | N11°39'38"E    | 6.52'   |
| L10        | N79°27'57"W    | 23.35'  |
| L11        | N64°38'11"E    | 14.36'  |
| L12        | N53°50'59"W    | 48.05'  |
| L13        | N86°21'46"W    | 35.00'  |
| L14        | N41°59'33"W    | 82.37'  |

| Curve Table |          |           |          |               |              |
|-------------|----------|-----------|----------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length   | Chord Bearing | Chord Length |
| C1          | 2000.00' | 34°58'27" | 1220.83' | N16°59'35"E   | 1201.96'     |
| C2          | 2000.00' | 04°21'21" | 152.05'  | N01°41'02"E   | 152.01'      |
| C3          | 2000.00' | 30°37'06" | 1068.78' | N19°10'16"E   | 1056.11'     |
| C4          | 1940.00' | 01°53'58" | 64.32'   | N00°27'21"E   | 64.32'       |
| C5          | 50.00'   | 92°27'23" | 80.68'   | N47°38'02"E   | 72.21'       |
| C6          | 80.00'   | 30°28'00" | 42.54'   | N70°54'17"W   | 42.04'       |
| C7          | 20.00'   | 34°50'33" | 12.16'   | N38°15'00"W   | 11.98'       |
| C8          | 110.00'  | 32°29'22" | 62.38'   | N04°35'03"W   | 61.54'       |
| C9          | 110.00'  | 11°55'03" | 22.88'   | N14°52'12"W   | 22.84'       |
| C10         | 100.00'  | 26°34'24" | 46.38'   | N24°56'50"E   | 45.96'       |
| C11         | 100.00'  | 07°16'41" | 12.70'   | N34°35'42"E   | 12.69'       |
| C12         | 30.00'   | 43°59'00" | 23.03'   | N60°13'33"E   | 22.47'       |
| C13         | 110.00'  | 31°37'22" | 60.71'   | N81°58'16"W   | 59.94'       |
| C14         | 548.00'  | 05°01'33" | 48.07'   | N63°38'48"W   | 48.05'       |
| C15         | 900.00'  | 29°56'48" | 470.40'  | N11°20'10"W   | 465.07'      |
| C16         | 868.00'  | 17°17'37" | 261.99'  | N15°42'55"W   | 261.00'      |
| C17         | 868.00'  | 10°21'19" | 156.88'  | N19°11'04"W   | 156.66'      |
| C18         | 843.00'  | 17°12'03" | 253.08'  | N15°43'59"W   | 252.13'      |
| C19         | 843.00'  | 09°47'07" | 143.97'  | N19°26'27"W   | 143.80'      |
| C20         | 1900.00' | 00°33'21" | 18.43'   | N00°12'58"W   | 18.43'       |

FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

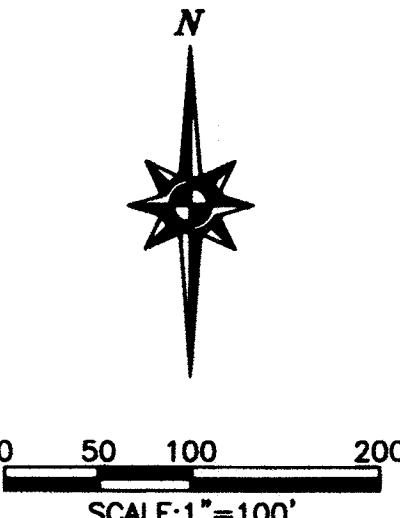
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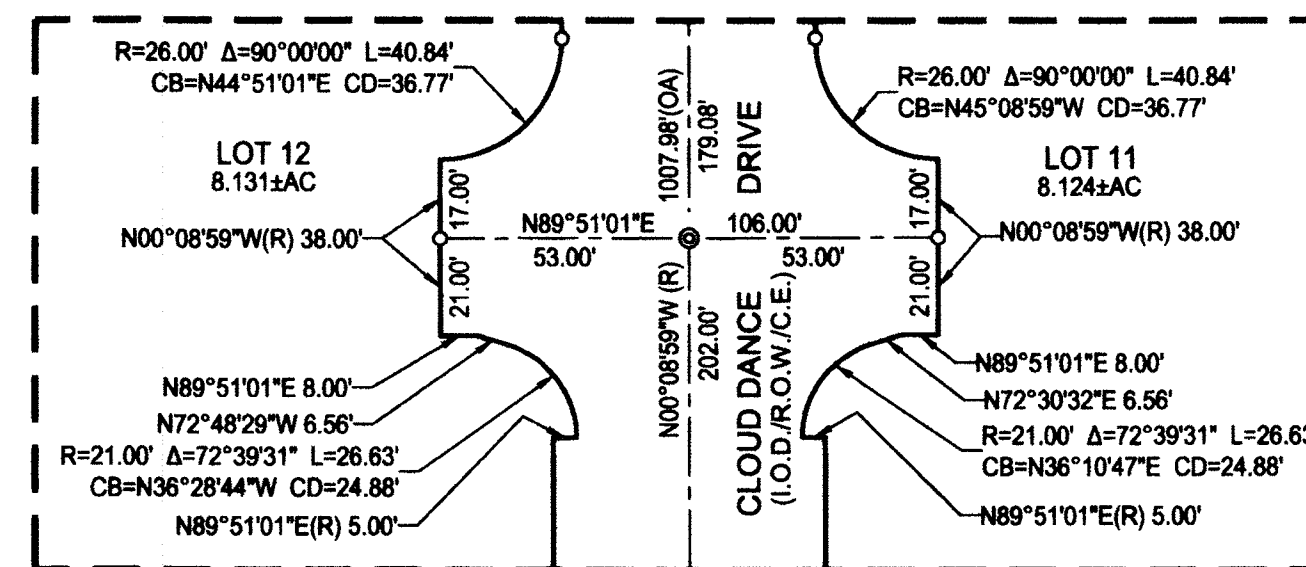
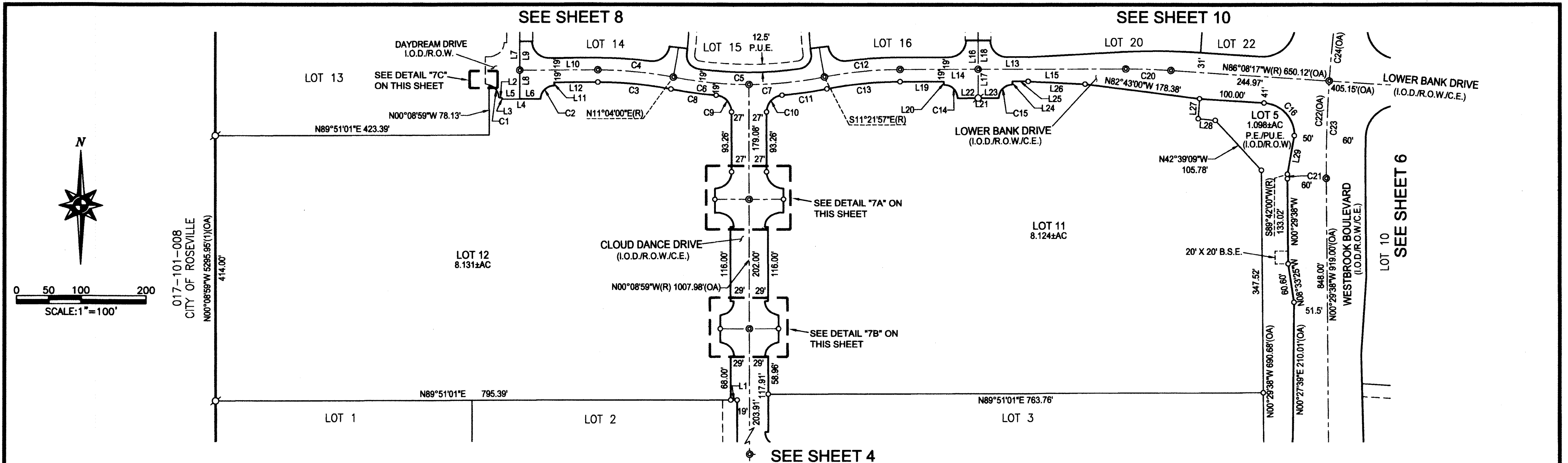
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SHEET 6 OF 15 18431.RST

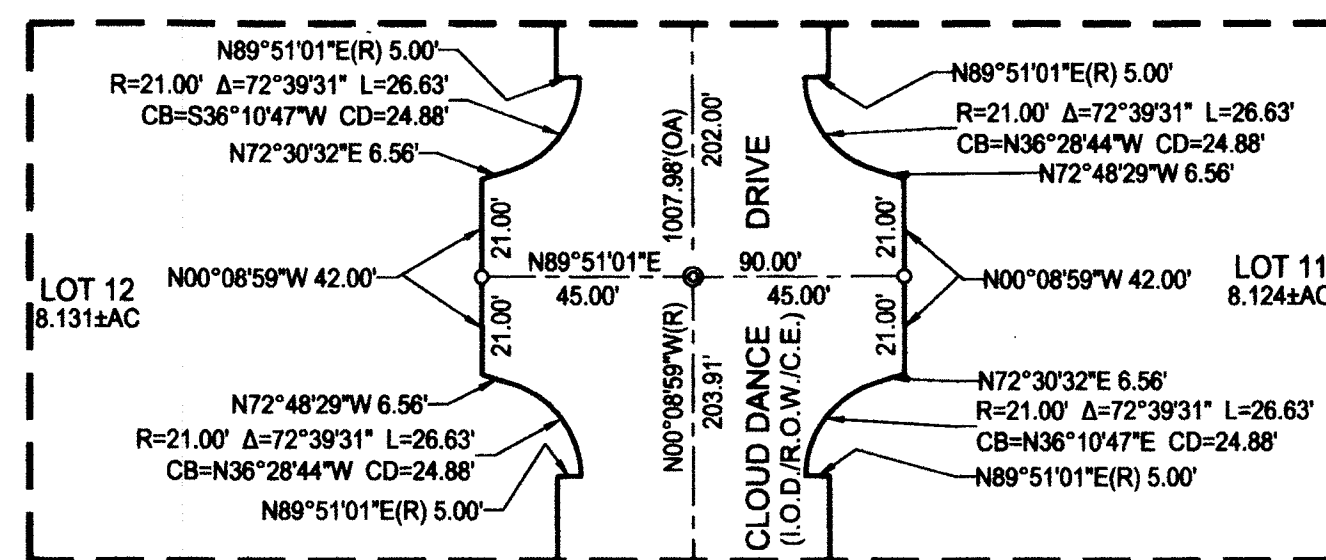
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**DETAIL "7A"**  
SCALE: 1"=40'

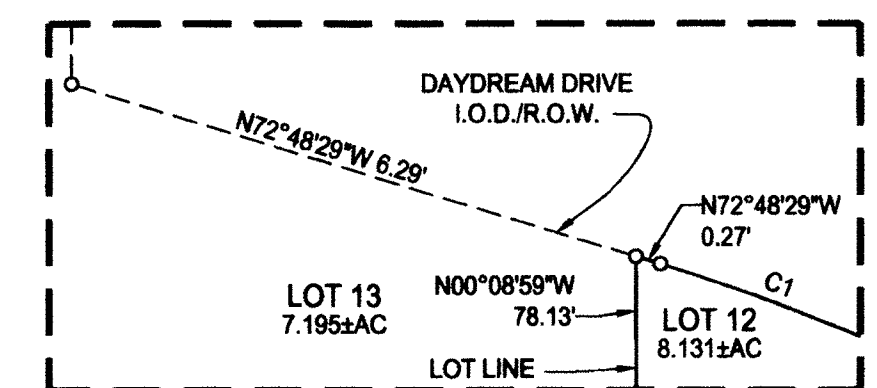


**DETAIL "7B"**  
SCALE: 1"=40'

| Curve Table |          |           |          |               |              |
|-------------|----------|-----------|----------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length   | Chord Bearing | Chord Length |
| C1          | 21.00'   | 72°39'31" | 26.63'   | N36°28'44"W   | 24.88'       |
| C2          | 21.00'   | 90°00'00" | 32.99'   | N44°51'01"E   | 29.70'       |
| C3          | 581.00'  | 11°12'59" | 113.74'  | N84°32'29"W   | 113.56'      |
| C4          | 600.00'  | 11°12'59" | 117.46'  | N84°32'29"W   | 117.27'      |
| C5          | 600.00'  | 22°25'58" | 234.91'  | N89°51'01"E   | 233.42'      |
| C6          | 600.00'  | 11°12'59" | 117.46'  | N84°32'29"W   | 117.27'      |
| C7          | 600.00'  | 11°12'59" | 117.46'  | N84°14'32"E   | 117.27'      |
| C8          | 619.00'  | 06°30'11" | 70.26'   | N82°11'05"W   | 70.22'       |
| C9          | 26.00'   | 85°17'12" | 38.70'   | N42°47'35"W   | 35.23'       |
| C10         | 26.00'   | 85°17'12" | 38.70'   | N42°29'37"E   | 35.23'       |
| C11         | 619.00'  | 06°30'11" | 70.26'   | N81°53'08"E   | 70.22'       |
| C12         | 600.00'  | 11°12'59" | 117.46'  | N84°14'32"E   | 117.27'      |
| C13         | 581.00'  | 11°12'59" | 113.74'  | N84°14'32"E   | 113.56'      |
| C14         | 21.00'   | 90°00'00" | 32.99'   | N45°08'59"W   | 29.70'       |
| C15         | 21.00'   | 90°00'00" | 32.99'   | N44°51'01"E   | 29.70'       |
| C16         | 50.00'   | 87°30'59" | 76.37'   | N42°22'48"W   | 69.16'       |
| C20         | 1000.00' | 04°00'41" | 70.01'   | N88°08'38"W   | 70.00'       |
| C21         | 2060.00' | 00°11'39" | 6.98'    | N00°23'49"W   | 6.98'        |
| C22         | 2000.00' | 34°58'27" | 1220.83' | N16°59'35"E   | 1201.96'     |
| C23         | 2000.00' | 04°21'21" | 152.05'  | N01°41'02"E   | 152.01'      |
| C24         | 2000.00' | 30°37'06" | 1068.78' | N19°10'16"E   | 1056.11'     |

| Line Table |                |        |
|------------|----------------|--------|
| Line #     | Bearing        | Length |
| L1         | N89°51'01"E    | 10.00  |
| L2         | N89°51'01"E(R) | 5.00   |
| L3         | N00°08'59"W    | 2.00   |
| L4         | N89°51'01"E(R) | 59.00  |
| L5         | N89°51'01"E    | 27.00  |
| L6         | N89°51'01"E(R) | 32.00  |
| L7         | N00°08'59"W    | 631.42 |
| L8         | N00°08'59"W    | 45.00  |
| L9         | N00°08'59"W    | 45.00  |
| L10        | N89°51'01"E(R) | 120.58 |
| L11        | N00°08'59"W    | 5.00   |
| L12        | N89°51'01"E    | 67.58  |
| L13        | N89°51'01"E    | 347.88 |
| L14        | N89°51'01"E    | 120.58 |
| L15        | N89°51'01"E    | 227.29 |
| L16        | N00°08'59"W    | 90.00  |
| L17        | N00°08'59"W    | 45.00  |
| L18        | N00°08'59"W    | 45.00  |
| L19        | N89°51'01"E    | 67.58  |
| L20        | N00°08'59"W    | 5.00   |

| Line Table |                |        |
|------------|----------------|--------|
| Line #     | Bearing        | Length |
| L21        | N89°51'01"E(R) | 64.00  |
| L22        | N89°51'01"E(R) | 32.00  |
| L23        | N89°51'01"E(R) | 32.00  |
| L24        | N00°08'59"W(R) | 5.00   |
| L25        | N89°51'01"E    | 24.38  |
| L26        | N87°08'59"W    | 87.07  |
| L27        | N03°51'43"E    | 31.34  |
| L28        | N84°33'18"W    | 26.32  |
| L29        | N09°58'16"E    | 61.01  |



DETAIL "7C"  
NTS

FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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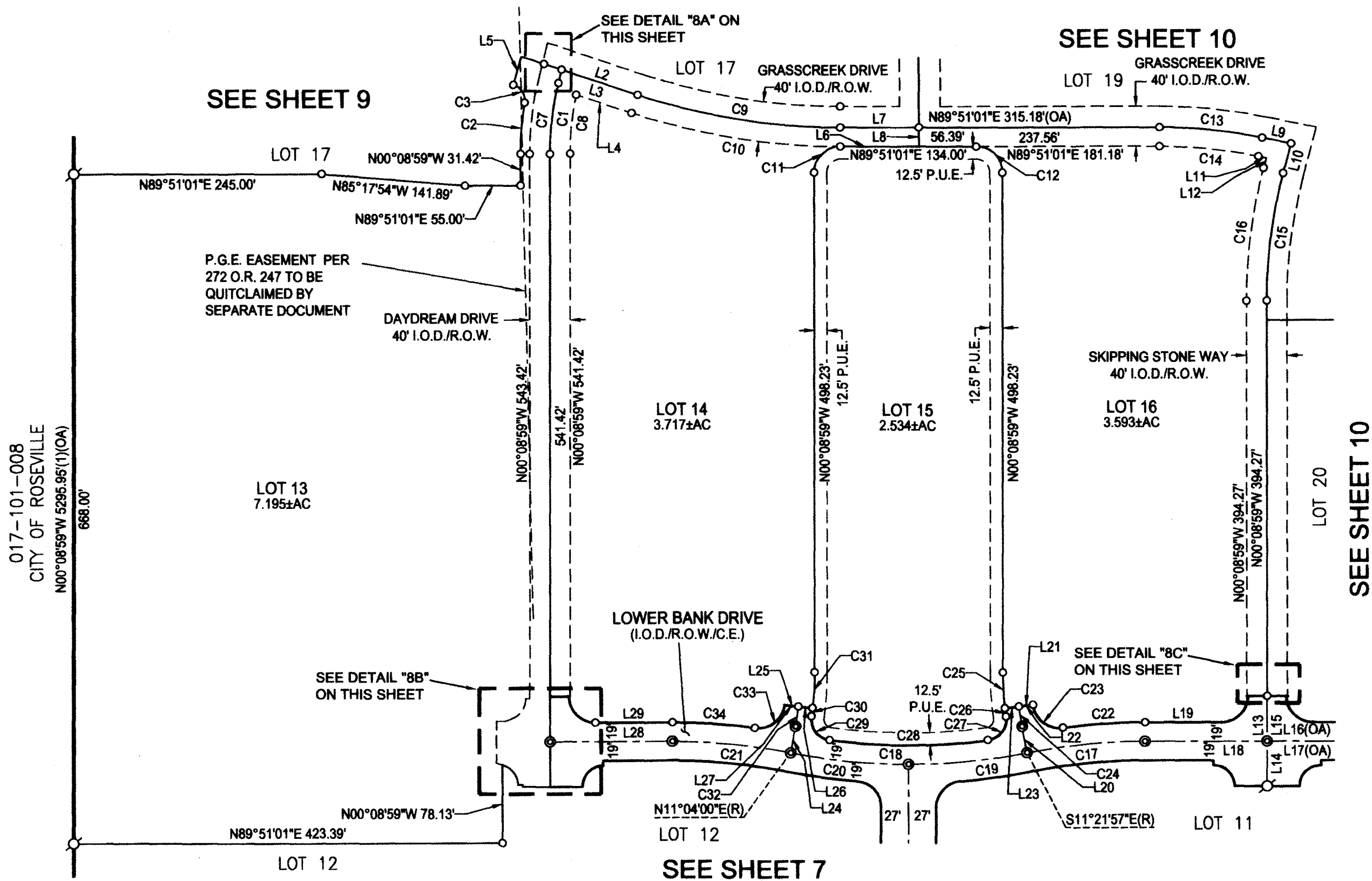
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APRIL 2020

SHEET 7 OF 15 18431.RST

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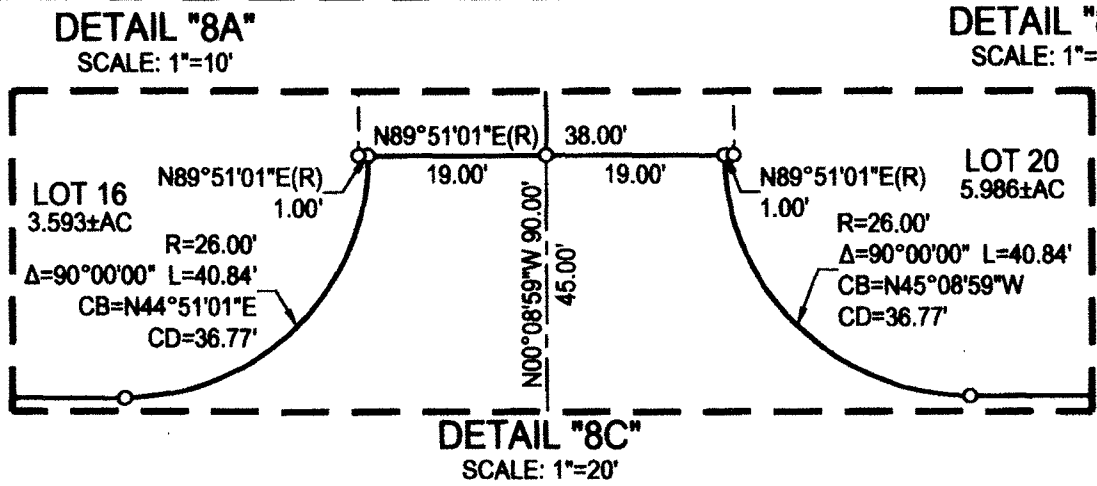
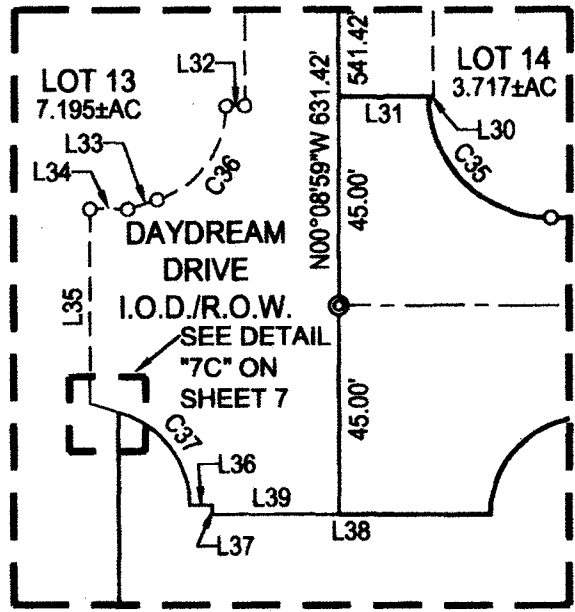
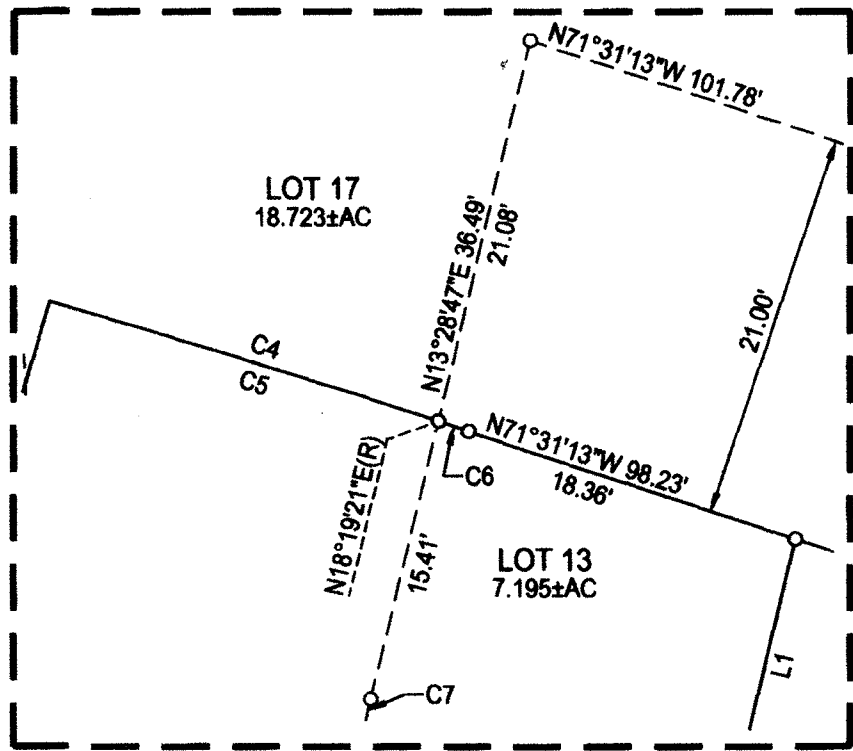




| Line Table |                |        |
|------------|----------------|--------|
| Line #     | Bearing        | Length |
| L1         | N13°28'47"E    | 13.66' |
| L2         | N71°31'13"W    | 98.23' |
| L3         | N71°31'13"W    | 79.87' |
| L4         | N71°31'13"W    | 58.04' |
| L5         | N16°20'12"E(R) | 29.00' |
| L6         | N89°51'01"E    | 77.61' |
| L7         | N89°51'01"E    | 77.61' |
| L8         | N00°08'59"W    | 19.00' |
| L9         | N78°25'28"W    | 28.98' |
| L10        | N14°34'32"E    | 30.45' |
| L11        | N78°25'28"W    | 7.96'  |
| L12        | N14°34'32"E    | 10.37' |
| L13        | N00°08'59"W    | 90.00' |
| L14        | N00°08'59"W    | 45.00' |
| L15        | N00°08'59"W    | 45.00' |

| Line Table |                |         |
|------------|----------------|---------|
| Line #     | Bearing        | Length  |
| L16        | N89°51'01"E    | 347.88' |
| L17        | N89°51'01"E    | 227.29' |
| L18        | N89°51'01"E    | 120.58' |
| L19        | N89°51'01"E    | 75.58'  |
| L20        | N10°29'21"W    | 26.95'  |
| L21        | N83°20'20"E(R) | 28.00'  |
| L22        | N83°20'20"E(R) | 14.00'  |
| L23        | N83°20'20"E(R) | 14.00'  |
| L24        | N10°11'24"E    | 26.95'  |
| L25        | N83°38'17"W(R) | 28.00'  |
| L26        | N83°38'17"W(R) | 14.00'  |
| L27        | N83°38'17"W(R) | 14.00'  |
| L28        | N89°51'01"E    | 120.58' |
| L29        | N89°51'01"E    | 75.58'  |
| L30        | N89°51'01"E(R) | 1.00'   |

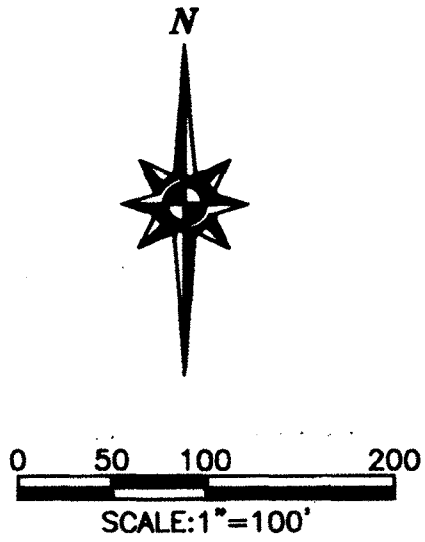
| Line Table |                |        |
|------------|----------------|--------|
| Line #     | Bearing        | Length |
| L31        | N89°51'01"E(R) | 19.00' |
| L32        | N89°51'01"E(R) | 4.00'  |
| L33        | N72°30'32"E    | 6.56'  |
| L34        | N89°51'01"E    | 8.00'  |
| L35        | N00°08'59"W    | 42.00' |
| L36        | N89°51'01"E(R) | 5.00'  |
| L37        | N00°08'59"W    | 2.00'  |
| L38        | N89°51'01"E    | 59.00' |
| L39        | N89°51'01"E    | 27.00' |



| Curve Table |         |           |         |               |              |
|-------------|---------|-----------|---------|---------------|--------------|
| Curve #     | Radius  | Delta     | Length  | Chord Bearing | Chord Length |
| C1          | 300.00' | 13°37'45" | 71.36'  | N06°39'54"E   | 71.19'       |
| C2          | 329.00' | 08°57'35" | 51.45'  | N04°19'49"E   | 51.40'       |
| C3          | 16.00'  | 82°28'24" | 23.03'  | N32°25'36"W   | 21.09'       |
| C4          | 625.00' | 02°08'34" | 23.38'  | N72°35'31"W   | 23.37'       |
| C5          | 625.00' | 01°59'09" | 21.66'  | N72°40'13"W   | 21.66'       |
| C6          | 625.00' | 00°09'26" | 1.72'   | N71°35'56"W   | 1.72'        |
| C7          | 320.00' | 13°37'45" | 76.12'  | N06°39'54"E   | 75.94'       |
| C8          | 280.00' | 12°09'40" | 59.43'  | N05°55'51"E   | 59.32'       |
| C9          | 625.00' | 18°37'45" | 203.21' | N80°50'06"W   | 202.32'      |
| C10         | 644.00' | 18°37'45" | 209.39' | N80°50'06"W   | 208.47'      |
| C11         | 26.00'  | 90°00'00" | 40.84'  | N44°51'01"E   | 36.77'       |
| C12         | 26.00'  | 90°00'00" | 40.84'  | N45°08'59"W   | 36.77'       |
| C13         | 500.00' | 11°43'31" | 102.32' | N84°17'13"W   | 102.14'      |
| C14         | 481.00' | 11°43'31" | 98.43'  | N84°17'13"W   | 98.26'       |
| C15         | 500.00' | 14°43'31" | 128.50' | N07°12'47"E   | 128.15'      |

| Curve Table |         |           |         |               |              |
|-------------|---------|-----------|---------|---------------|--------------|
| Curve #     | Radius  | Delta     | Length  | Chord Bearing | Chord Length |
| C16         | 520.00' | 14°43'31" | 133.64' | N07°12'47"E   | 133.27'      |
| C17         | 600.00' | 11°12'59" | 117.46' | N84°14'32"E   | 117.27'      |
| C18         | 600.00' | 22°25'58" | 234.91' | N89°51'01"E   | 233.42'      |
| C19         | 600.00' | 11°12'59" | 117.46' | N84°14'32"E   | 117.27'      |
| C20         | 600.00' | 11°12'59" | 117.46' | N84°32'29"W   | 117.27'      |
| C21         | 600.00' | 11°12'59" | 117.46' | N84°32'29"W   | 117.27'      |
| C22         | 619.00' | 07°32'57" | 81.56'  | N86°04'33"E   | 81.50'       |
| C23         | 26.00'  | 91°02'16" | 41.31'  | N52°10'48"W   | 37.10'       |
| C24         | 300.00' | 03°49'41" | 20.04'  | N08°34'31"W   | 20.04'       |
| C25         | 314.00' | 06°30'42" | 35.69'  | N03°24'19"W   | 35.67'       |
| C26         | 314.00' | 01°30'26" | 8.26'   | N07°24'53"W   | 8.26'        |
| C27         | 21.00'  | 90°17'38" | 33.09'  | N36°58'42"E   | 29.77'       |
| C28         | 581.00' | 15°27'01" | 156.67' | N89°51'01"E   | 156.20'      |
| C29         | 21.00'  | 90°17'38" | 33.09'  | N37°16'39"W   | 29.77'       |
| C30         | 314.00' | 01°30'26" | 8.26'   | N07°06'56"E   | 8.26'        |

| Curve Table |         |           |        |               |              |
|-------------|---------|-----------|--------|---------------|--------------|
| Curve #     | Radius  | Delta     | Length | Chord Bearing | Chord Length |
| C31         | 314.00' | 06°30'42" | 35.69' | N03°06'22"E   | 35.67'       |
| C32         | 300.00' | 03°49'41" | 20.04' | N08°16'34"E   | 20.04'       |
| C33         | 26.00'  | 91°02'16" | 41.31' | N51°52'51"E   | 37.10'       |
| C34         | 619.00' | 07°32'57" | 81.56' | N86°22'30"W   | 81.50'       |
| C35         | 26.00'  | 90°00'00" | 40.84' | N45°08'59"W   | 36.77'       |
| C36         | 21.00'  | 72°39'31" | 26.63' | N36°10'47"E   | 24.88'       |
| C37         | 21.00'  | 72°39'31" | 26.63' | N36°28'44"W   | 24.88'       |



FINAL MAP OF  
**CREEKVIEW - PHASE 1**  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

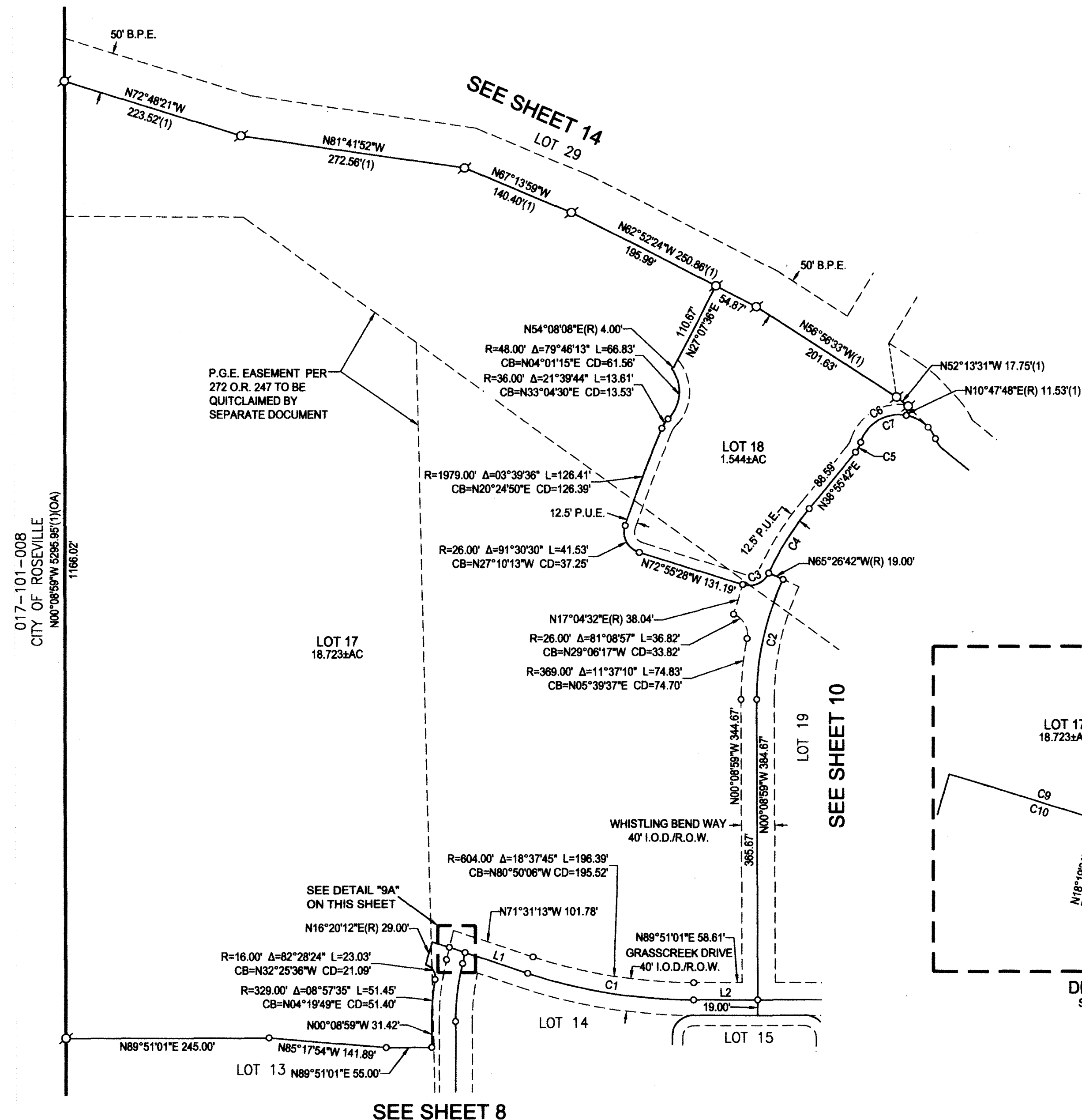
BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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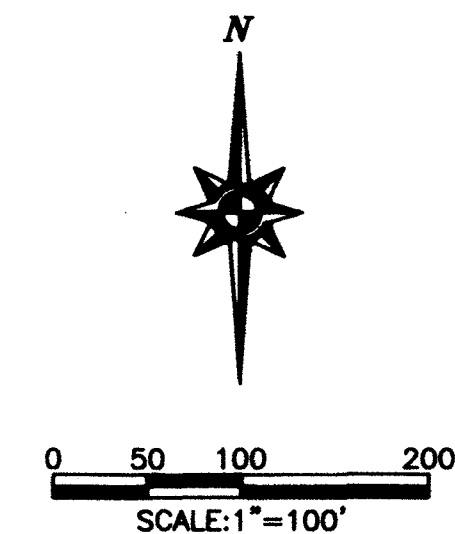
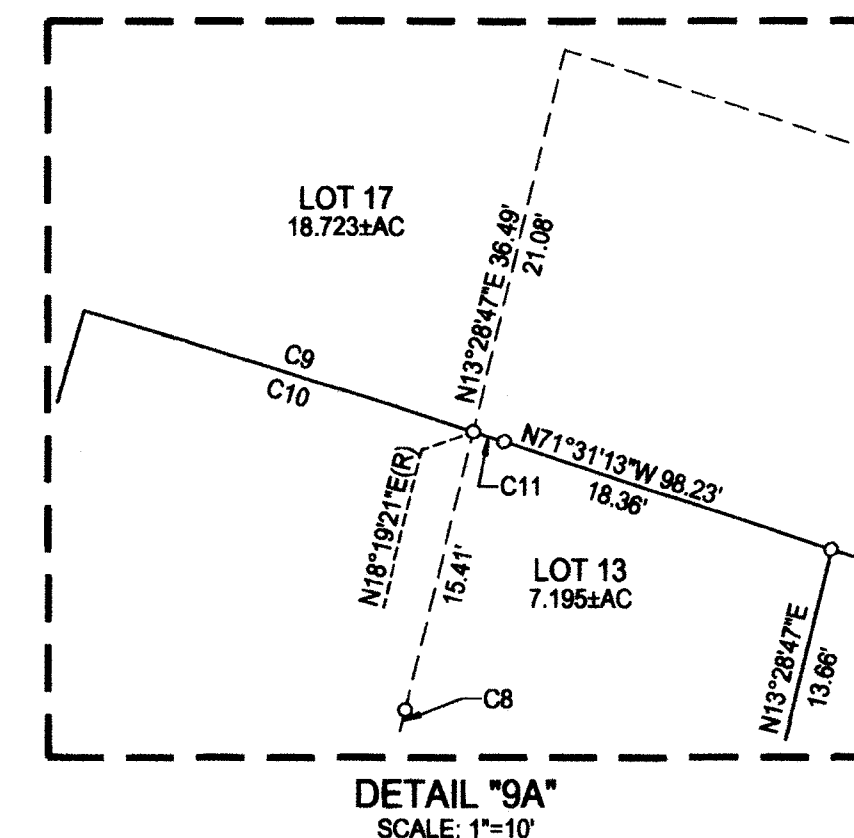
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SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND



| Line # | Bearing     | Length |
|--------|-------------|--------|
| L1     | N71°31'13"W | 98.2   |
| L2     | N89°51'01"E | 77.6   |

| Curve Table |         |            |         |               |              |
|-------------|---------|------------|---------|---------------|--------------|
| Curve #     | Radius  | Delta      | Length  | Chord Bearing | Chord Length |
| C1          | 625.00' | 18°37'45"  | 203.21' | N80°50'06"W   | 202.32'      |
| C2          | 350.00' | 24°42'16"  | 150.91' | N12°12'09"E   | 149.74'      |
| C3          | 26.00'  | 82°31'14"  | 37.45'  | N65°48'55"E   | 34.29'       |
| C4          | 369.00' | 14°22'25"  | 92.57'  | N31°44'30"E   | 92.33'       |
| C5          | 36.00'  | 21°47'12"  | 13.69'  | N28°02'06"E   | 13.61'       |
| C6          | 48.00'  | 83°39'18"  | 70.08'  | N58°58'09"E   | 64.02'       |
| C7          | 48.00'  | 140°01'45" | 117.31' | N87°09'23"E   | 90.22'       |
| C8          | 320.00' | 13°37'45"  | 76.12'  | N06°39'54"E   | 75.94'       |
| C9          | 625.00' | 02°08'34"  | 23.38'  | N72°35'31"W   | 23.37'       |
| C10         | 625.00' | 01°59'09"  | 21.66'  | N72°40'13"W   | 21.66'       |
| C11         | 625.00' | 00°09'26"  | 1.72'   | N71°35'56"W   | 1.72'        |



# FINAL MAP OF CREEKVIEW - PHASE 1 LARGE LOT SUBDIVISION SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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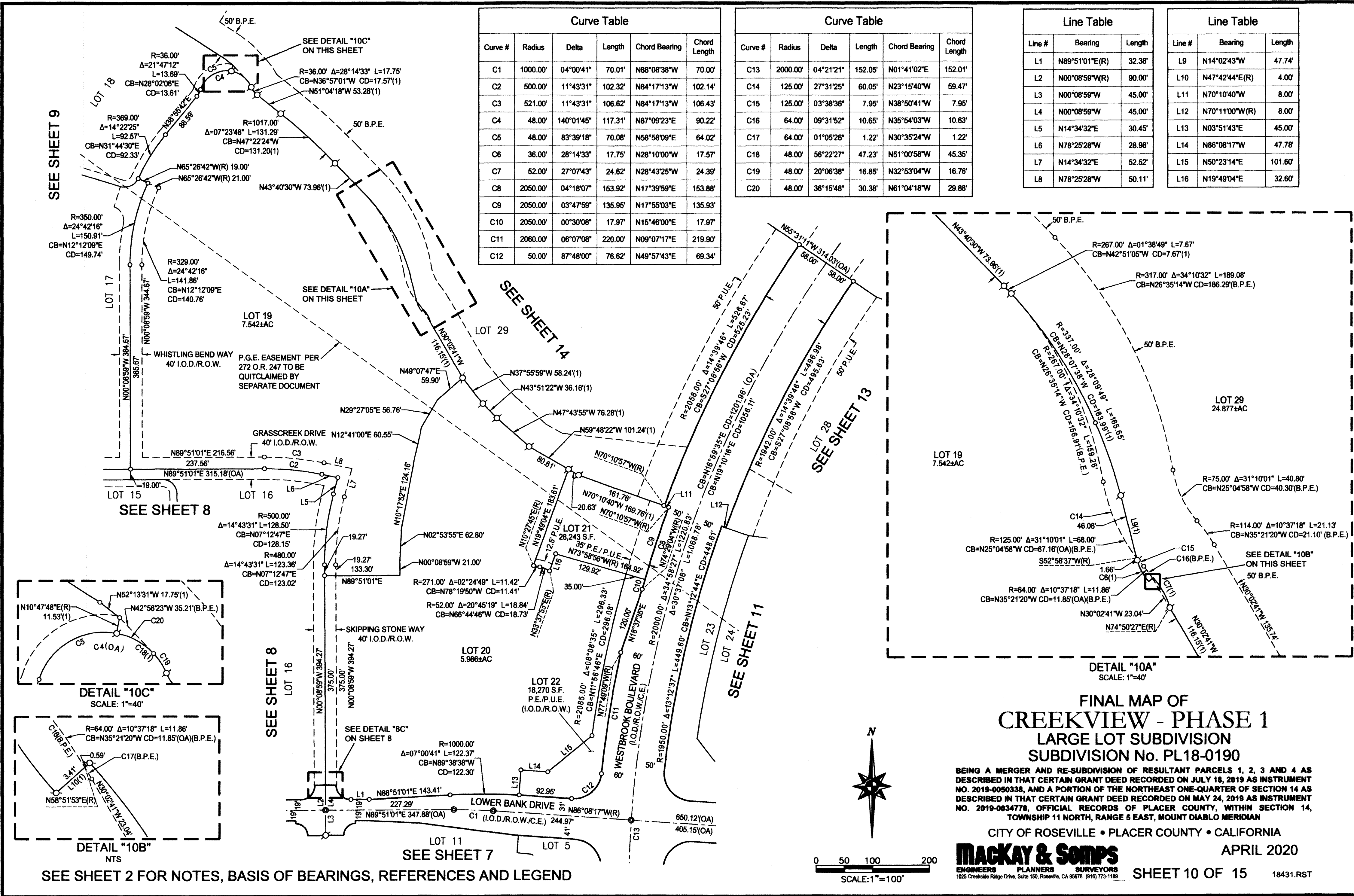
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SHEET 9 OF 15 18431.RST

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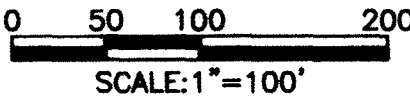
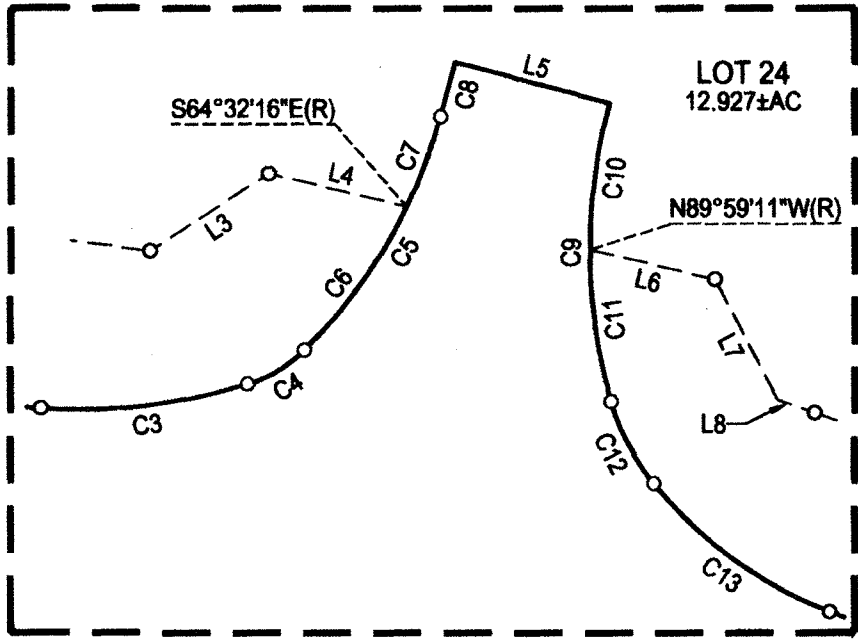
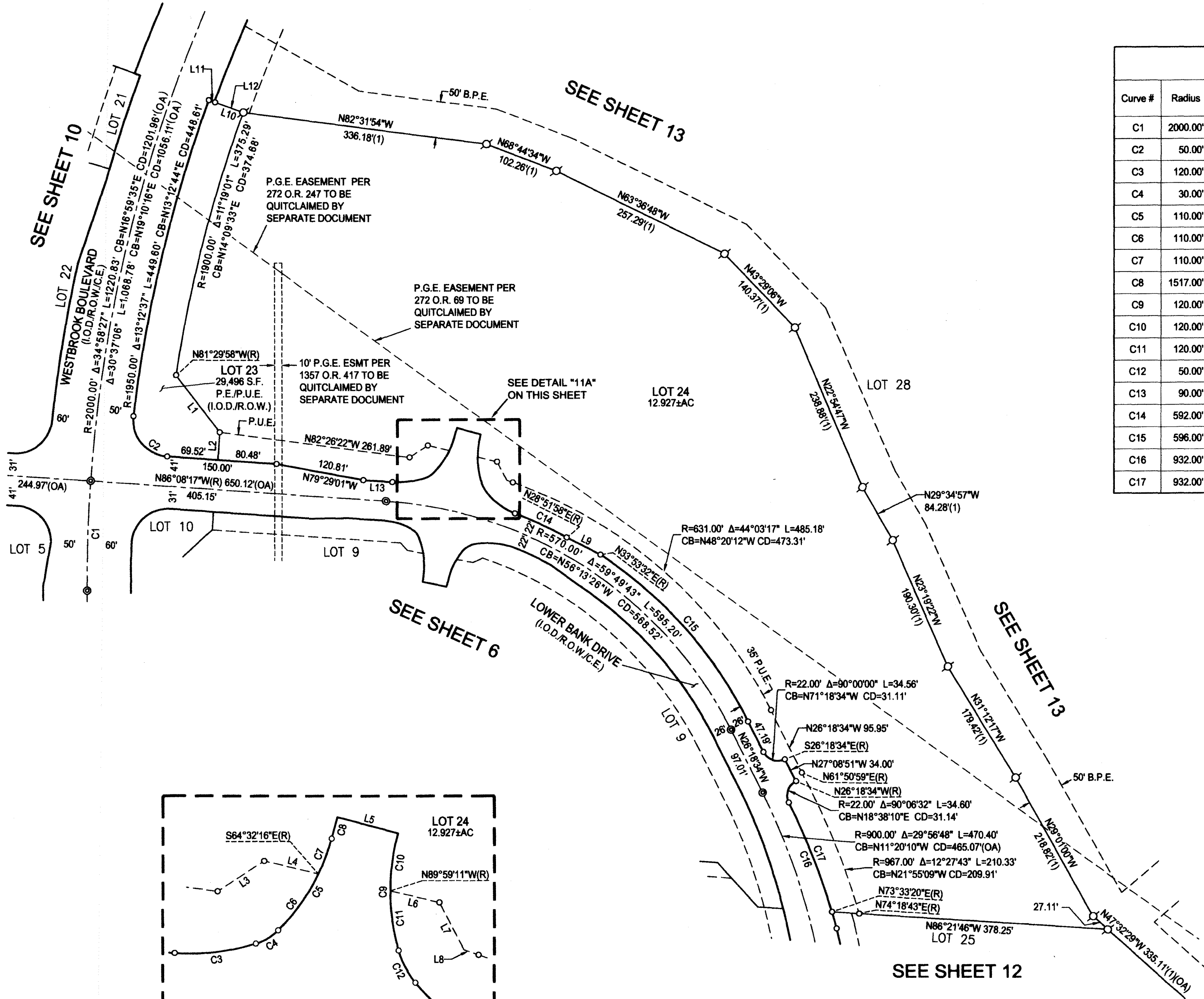






| Curve Table |          |           |         |               |              |
|-------------|----------|-----------|---------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length  | Chord Bearing | Chord Length |
| C1          | 2000.00' | 04°21'21" | 152.05' | N01°41'02"E   | 152.01'      |
| C2          | 50.00'   | 92°44'43" | 80.94'  | N39°45'56"W   | 72.38'       |
| C3          | 120.00'  | 21°17'00" | 44.58'  | N83°13'13"E   | 44.32'       |
| C4          | 30.00'   | 27°13'19" | 14.25'  | N58°58'03"E   | 14.12'       |
| C5          | 110.00'  | 30°36'46" | 58.77'  | N30°03'01"E   | 58.08'       |
| C6          | 110.00'  | 19°53'39" | 38.19'  | N35°24'34"E   | 38.00'       |
| C7          | 110.00'  | 10°43'07" | 20.58'  | N20°08'11"E   | 20.55'       |
| C8          | 1517.00' | 00°27'46" | 12.25'  | N14°58'31"E   | 12.25'       |
| C9          | 120.00'  | 31°00'23" | 64.94'  | N00°17'47"W   | 64.15'       |
| C10         | 120.00'  | 15°11'35" | 31.82'  | N07°36'36"E   | 31.73'       |
| C11         | 120.00'  | 15°48'48" | 33.12'  | N07°53'35"W   | 33.01'       |
| C12         | 50.00'   | 22°51'29" | 19.95'  | N27°13'43"W   | 19.82'       |
| C13         | 90.00'   | 30°01'24" | 47.16'  | N53°40'10"W   | 46.62'       |
| C14         | 592.00'  | 07°32'50" | 77.98'  | N64°54'27"W   | 77.92'       |
| C15         | 596.00'  | 29°47'54" | 309.97' | N41°12'31"W   | 306.49'      |
| C16         | 932.00'  | 11°26'35" | 186.14' | N20°41'49"W   | 185.83'      |
| C17         | 932.00'  | 09°58'26" | 162.24' | N21°25'53"W   | 162.04'      |

| Line Table |                |        |
|------------|----------------|--------|
| Line #     | Bearing        | Length |
| L1         | N37°29'50"W    | 99.09' |
| L2         | N03°51'43"E    | 38.28' |
| L3         | N56°35'24"E    | 30.20' |
| L4         | N76°37'47"W    | 30.42' |
| L5         | N74°47'36"W(R) | 34.00' |
| L6         | N76°37'47"W    | 27.44' |
| L7         | N27°13'29"W    | 29.19' |
| L8         | N70°21'51"W    | 8.41'  |
| L9         | N63°00'28"W    | 52.24' |
| L10        | N70°11'00"W(R) | 50.00' |
| L11        | N70°11'00"W(R) | 8.00'  |
| L12        | N70°11'00"W(R) | 42.00' |
| L13        | N86°08'17"W    | 39.88' |



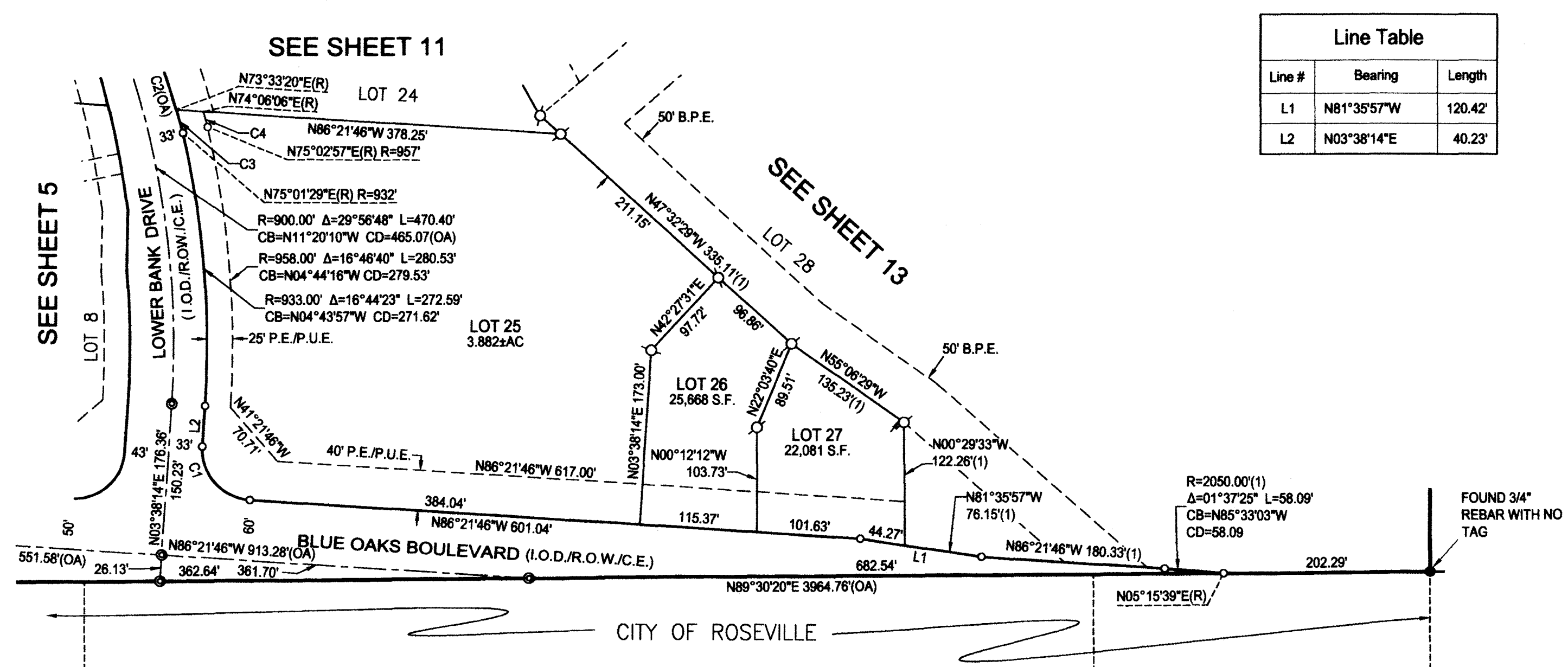
FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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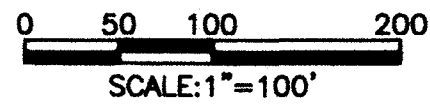
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| Line Table |             |         |
|------------|-------------|---------|
| Line #     | Bearing     | Length  |
| L1         | N81°35'57"W | 120.42' |
| L2         | N03°38'14"E | 40.23'  |

| Curve Table |         |           |         |               |              |
|-------------|---------|-----------|---------|---------------|--------------|
| Curve #     | Radius  | Delta     | Length  | Chord Bearing | Chord Length |
| C1          | 50.00'  | 90°00'00" | 78.54'  | N41°21'46"W   | 70.71'       |
| C2          | 932.00' | 11°26'35" | 186.14' | N20°41'49"W   | 185.83'      |
| C3          | 932.00' | 01°28'09" | 23.90'  | N15°42'36"W   | 23.90'       |
| C4          | 957.00' | 00°56'51" | 15.82'  | N15°25'28"W   | 15.82'       |



SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND

FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

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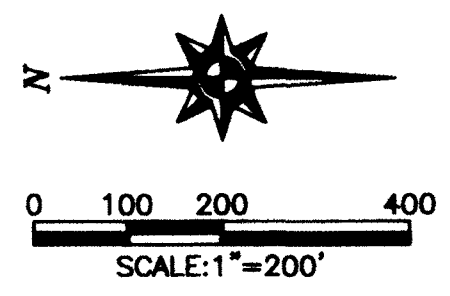
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| Line Table |                |         |
|------------|----------------|---------|
| Line #     | Bearing        | Length  |
| L1         | N70°10'40"W    | 8.00'   |
| L2         | N70°11'00"W(R) | 8.00'   |
| L3         | N70°11'00"W(R) | 42.00'  |
| L4         | N81°35'57"W    | 76.15'  |
| L5         | N86°21'46"W    | 180.33' |
| L6         | N55°31'11"W(R) | 58.00'  |
| L7         | N55°31'11"W(R) | 58.00'  |
| L8         | N60°09'22"W    | 180.06' |

| Curve Table |          |           |          |               |              |
|-------------|----------|-----------|----------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length   | Chord Bearing | Chord Length |
| C1          | 2050.00' | 01°37'25" | 58.09'   | N85°33'03"W   | 58.09'       |
| C2          | 1942.00' | 14°39'46" | 496.98'  | N27°08'56"E   | 495.63'      |
| C3          | 2000.00' | 30°37'06" | 1068.78' | N19°10'16"E   | 1056.11'     |
| C4          | 2000.00' | 34°58'27" | 1220.83' | N16°59'35"E   | 1201.96'     |
| C5          | 2058.00' | 14°39'46" | 526.67'  | N27°08'56"E   | 525.23'      |
| C6          | 1942.00' | 11°19'50" | 384.04'  | N28°48'54"E   | 383.42'      |
| C7          | 1942.00' | 03°19'56" | 112.94'  | N21°29'01"E   | 112.92'      |
| C8          | 230.00'  | 05°30'19" | 22.10'   | N52°05'09"E   | 22.09'       |
| C9          | 170.00'  | 16°44'48" | 49.69'   | N57°42'23"E   | 49.51'       |



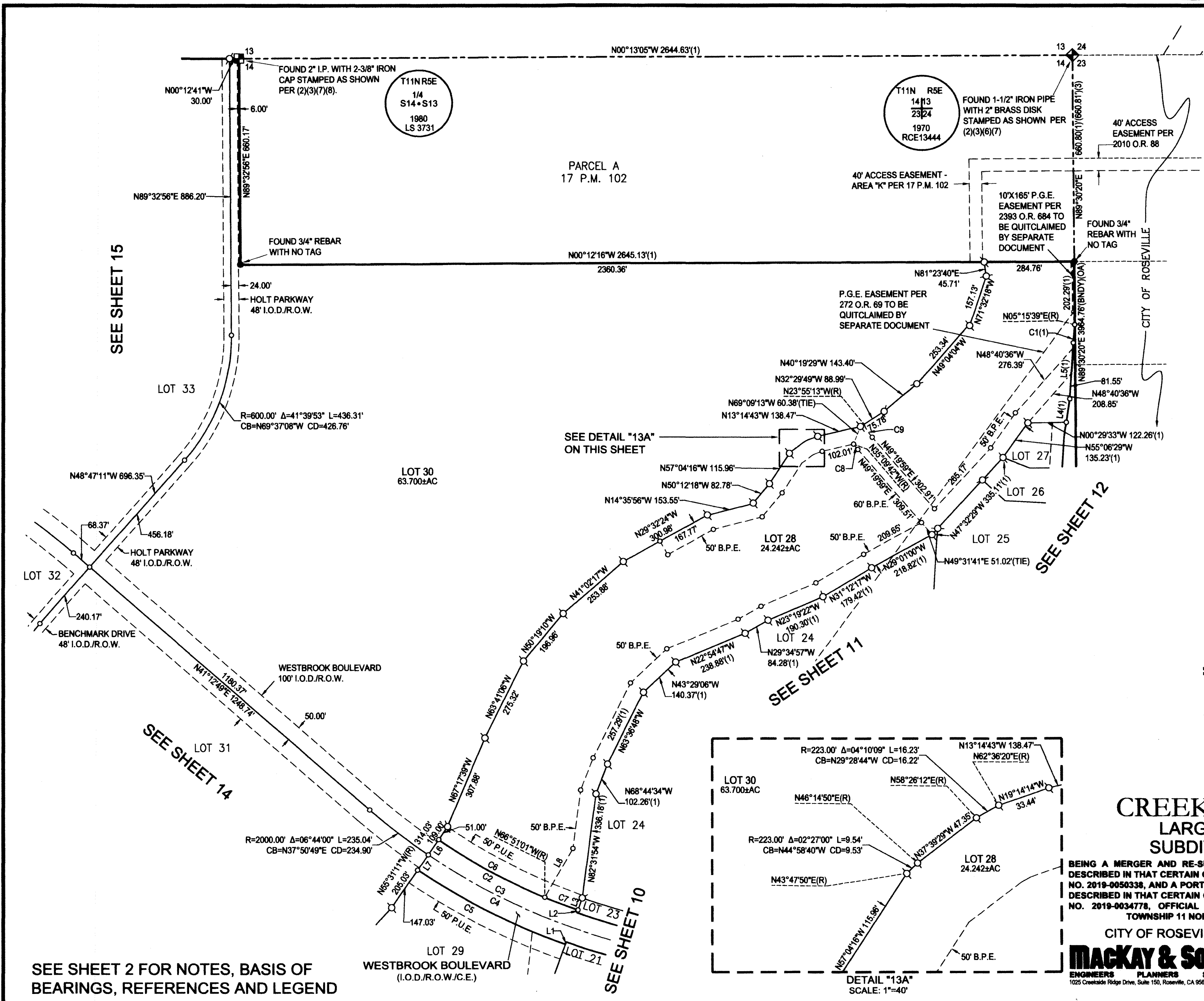
FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

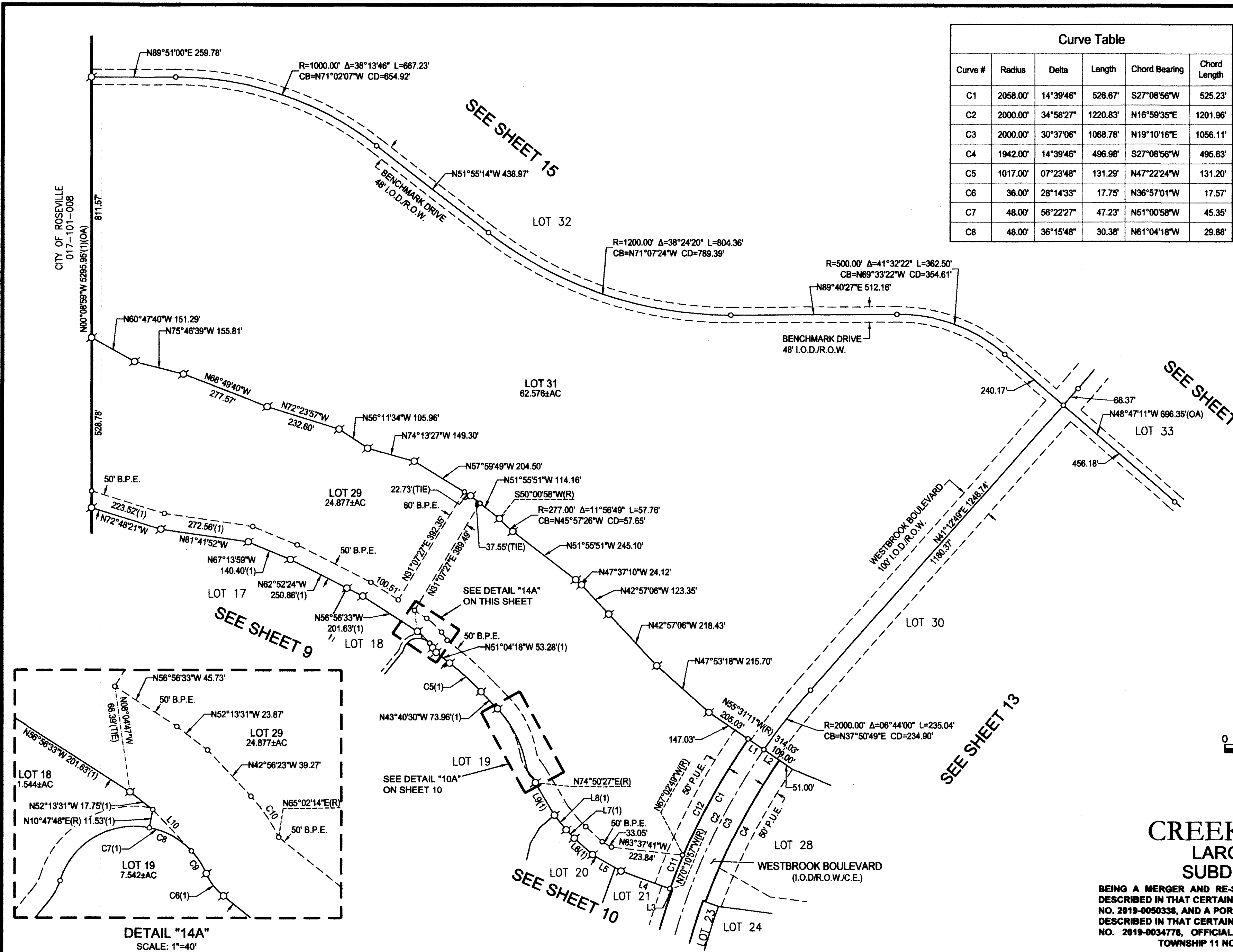
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**MACKAY & SOMPS**  
ENGINEERS PLANNERS SURVEYORS  
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189

APRIL 2020



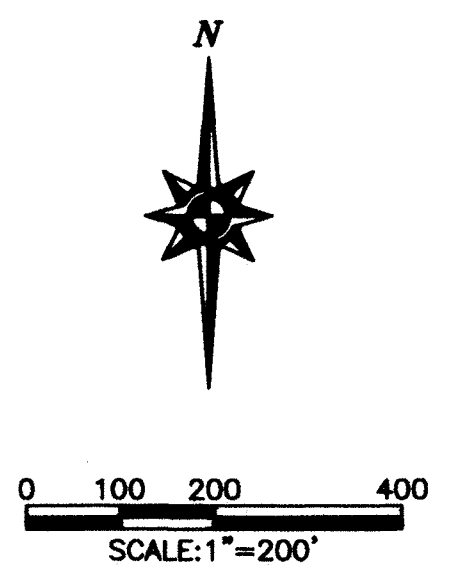
SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND



| Curve Table |          |           |          |               |              |
|-------------|----------|-----------|----------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length   | Chord Bearing | Chord Length |
| C1          | 2058.00' | 14°39'46" | 526.67'  | S27°08'56"W   | 525.23'      |
| C2          | 2000.00' | 34°58'27" | 1220.83' | N16°59'35"E   | 1201.96'     |
| C3          | 2000.00' | 30°37'06" | 1068.78' | N19°10'16"E   | 1056.11'     |
| C4          | 1942.00' | 14°39'46" | 496.98'  | S27°08'56"W   | 495.63'      |
| C5          | 1017.00' | 07°23'48" | 131.29'  | N47°22'24"W   | 131.20'      |
| C6          | 36.00'   | 28°14'33" | 17.75'   | N36°57'01"W   | 17.57'       |
| C7          | 48.00'   | 56°22'27" | 47.23'   | N51°00'58"W   | 45.35'       |
| C8          | 48.00'   | 36°15'48" | 30.38'   | N61°04'18"W   | 29.88'       |

| Curve Table |          |           |         |               |              |
|-------------|----------|-----------|---------|---------------|--------------|
| Curve #     | Radius   | Delta     | Length  | Chord Bearing | Chord Length |
| C9          | 48.00'   | 20°06'38" | 16.85'  | N32°53'04"W   | 16.76'       |
| C10         | 98.00'   | 17°58'37" | 30.75'  | N33°57'04"W   | 30.62'       |
| C11         | 2058.00' | 03°08'08" | 112.63' | N21°23'07"E   | 112.61'      |
| C12         | 2058.00' | 11°31'38" | 414.04' | N28°43'00"E   | 413.34'      |

| Line Table |                 |         |
|------------|-----------------|---------|
| Line #     | Bearing         | Length  |
| L1         | N55°31'11"W (R) | 58.00'  |
| L2         | N55°31'11"W (R) | 58.00'  |
| L3         | N70°10'40"W     | 8.00'   |
| L4         | N70°10'40"W     | 161.76' |
| L5         | N59°48'22"W     | 101.24' |
| L6         | N47°43'55"W     | 76.28'  |
| L7         | N43°51'22"W     | 36.16'  |
| L8         | N37°55'59"W     | 58.24'  |
| L9         | N30°02'41"W     | 116.15' |
| L10        | N42°56'23"W     | 35.21'  |



FINAL MAP OF  
CREEKVIEW - PHASE 1  
LARGE LOT SUBDIVISION  
SUBDIVISION No. PL18-0190

BEING A MERGER AND RE-SUBDIVISION OF RESULTANT PARCELS 1, 2, 3 AND 4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON JULY 18, 2019 AS INSTRUMENT NO. 2019-0050338, AND A PORTION OF THE NORTHEAST ONE-QUARTER OF SECTION 14 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON MAY 24, 2019 AS INSTRUMENT NO. 2019-0034778, OFFICIAL RECORDS OF PLACER COUNTY, WITHIN SECTION 14, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN

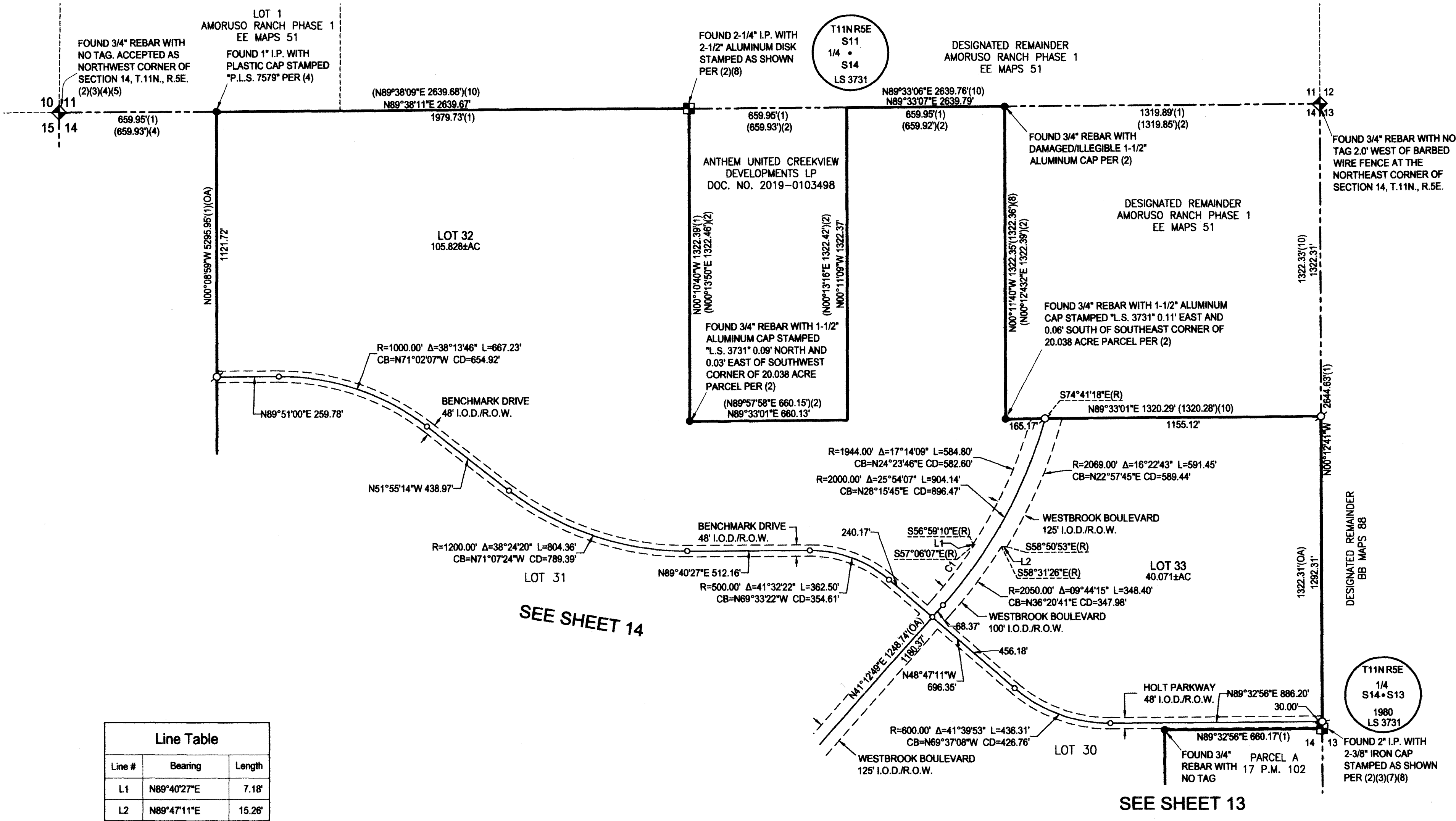
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**Mackay & Samps**  
ENGINEERS PLANNERS SURVEYORS  
1025 Creekside Ridge Drive, Suite 150, Roseville, CA 95678 (916) 773-1189

APRIL 2020

SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND





SEE SHEET 2 FOR NOTES, BASIS OF BEARINGS, REFERENCES AND LEGEND



## COUNCIL COMMUNICATION

CC #: 0983

File #: 0400-04-09-01

**Title:** Fiddymment Ranch Phase 2 Village F-11A1 - Notice of Completion

**Contact:** Darin Crockett 916-746-1324 dcrockett@roseville.ca.us

**Meeting Date:** 9/16/2020

**Item #:** 7.15.

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council adopt the attached resolution accepting Fiddymment Ranch Phase 2 Village F-11A1, CWJ#180142, as complete and authorizing the City Engineer to execute the Notice of Completion.

### BACKGROUND

The Engineering Division has made a final inspection of the above project and has found the roadway infrastructure work complete in accordance with the improvement plans and City specifications.

### FISCAL IMPACT

The actions requested as part of this action have no impact to the City's General Fund. Construction costs were paid by the developer.

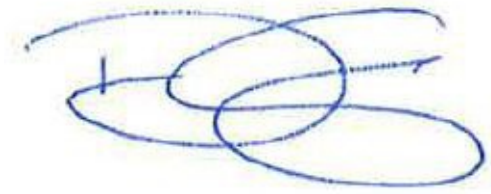
### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a Notice of Completion meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Darin Crockett, Construction Inspector

Mike Isom, Development Services Director

A handwritten signature in blue ink, consisting of several overlapping loops and a final horizontal stroke.

---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-361

NOC

Exhibit A

Final Map

RESOLUTION NO. 20-361

RESOLUTION OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS Fiddymment Ranch Phase 2 Village 11-AI PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING THE DEDICATIONS OFFERED ON THE RECORDED MAP OF THE SUBDMISION AS DESCRIBED BELOW.

BE IT RESOLVED by the Council of the City of Roseville as follows:

1. The "Notice of Completion" on file in the City Clerk's Department relative to that public work known as the Fiddymment Ranch Phase 2 Village 11-AI is hereby approved and the public work accepted.
2. Except for Lot B, all other rights of way and easements as offered on the final map of Fiddymment Ranch Phase 2 Village 11-AI recorded with Placer County Recorder's Office in Book EE of Maps, Page 75 is hereby accepted. Lot B offered for dedication on said map is not hereby accepted in fee as right of way and as a public utility easement,
4. The City Engineer is hereby authorized and directed to execute said Notice on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville, this\_\_\_ day of \_\_ \_ 2020, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
CITY CLERK

RECORDING REQUESTED BY AND WHEN  
RECORDED MAIL TO:

CITY CLERK  
CITY OF ROSEVILLE  
311 VERNON STREET  
ROSEVILLE, CA 95678

Exempt from recording fees  
Pursuant to Gov't Code §27383

---

**NOTICE OF COMPLETION**

NOTICE IS HEREBY GIVEN that the public work of improvement known as the \_\_\_\_\_ Project was completed and accepted by the City of Roseville on \_\_\_\_\_. The location is situated in the City of Roseville, County of Placer, State of California and is indicated on the attached map, marked as Exhibit "A" and incorporated herein by this reference. The real property herein described is owned by the City of Roseville, 311 Vernon Street, Roseville CA 95678.

The direct/general contractor on said project was \_\_\_\_\_.

The surety on said project was \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_  
City of Roseville  
Owner

ATTEST:

\_\_\_\_\_  
Sonia Orozco, City Clerk

State of California     )  
County of Placer        )

I, \_\_\_\_\_, being first duly sworn, depose and say: I am the \_\_\_\_\_ of the City of Roseville, a municipal corporation in the State of California, owner of the property described in the above Notice. I am duly authorized to make this verification for and on behalf of the City of Roseville. I have read the Notice of Completion and know its contents and the facts stated therein are true.

\_\_\_\_\_

City of Roseville

|                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

State of California     )  
County of Placer        )

Subscribed and sworn to (or affirmed) before  
me on this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_, \_\_\_\_\_  
proved to me on the basis of satisfactory  
evidence to be the person(s) who appeared  
before me.

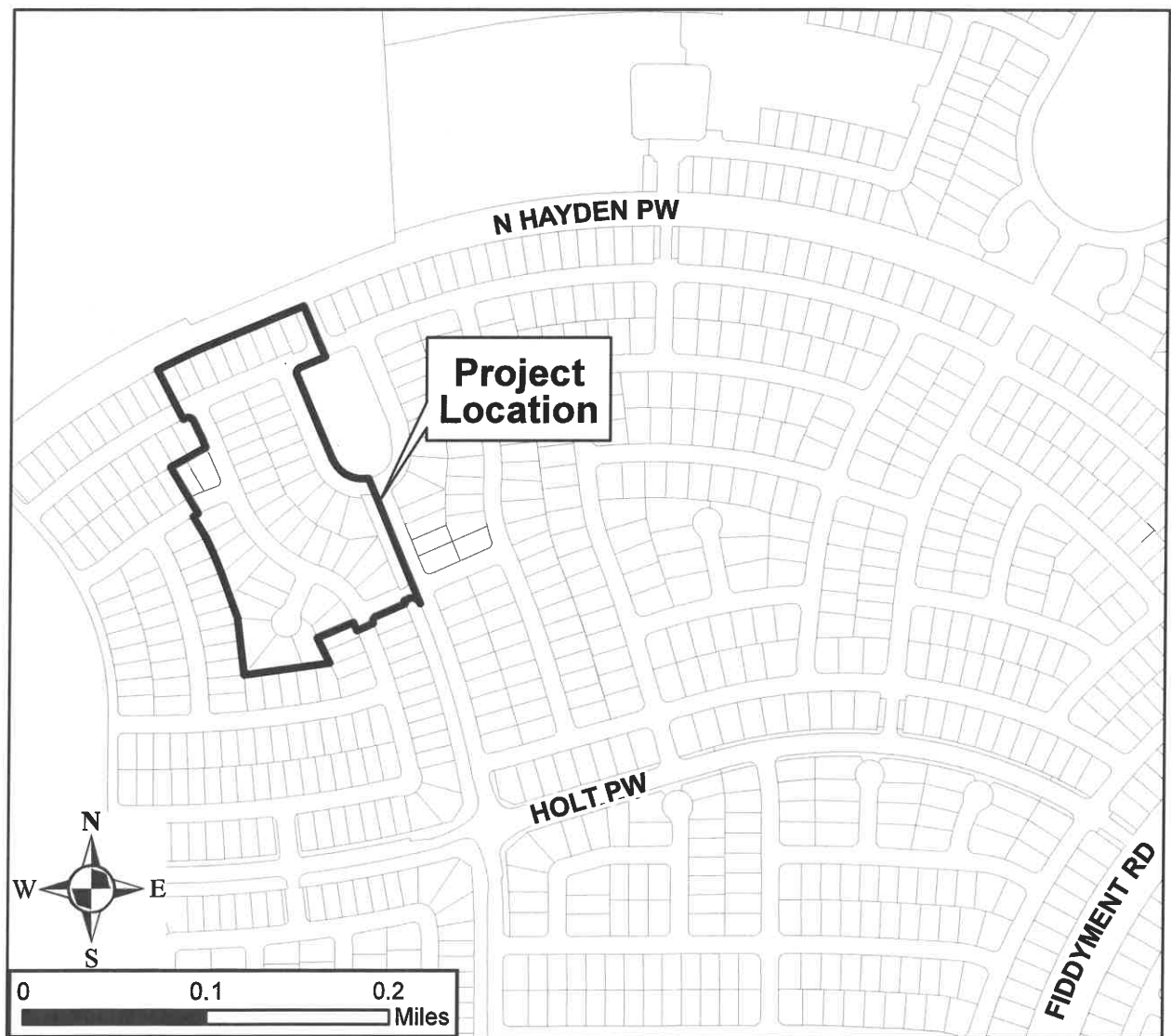
*Place Notary Seal and/or Stamp Above*

\_\_\_\_\_  
*Signature of Notary Public*



# EXHIBIT A

## City of Roseville Fiddymment Ranch Phase 2 Village F-11A1







BEING A SUBDIVISION OF LOT 7 AS SHOWN ON THE FINAL MAP OF SUBDIVISION NO. PL-0364, ENTITLED "FIDDYMENT RANCH PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "D" OF MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF SECTIONS 13 AND 24, T. 11 N., R. 5 E., M. 3 & 4.

FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
VILLAGE II-A1  
SUBDIVISION NO. PL-0438

| Chain | Run    | Distance | Chain | Run    | Distance |
|-------|--------|----------|-------|--------|----------|
| C1    | 100.00 | 100.00   | C1    | 100.00 | 100.00   |
| C2    | 100.00 | 100.00   | C2    | 100.00 | 100.00   |
| C3    | 100.00 | 100.00   | C3    | 100.00 | 100.00   |
| C4    | 100.00 | 100.00   | C4    | 100.00 | 100.00   |
| C5    | 100.00 | 100.00   | C5    | 100.00 | 100.00   |
| C6    | 100.00 | 100.00   | C6    | 100.00 | 100.00   |
| C7    | 100.00 | 100.00   | C7    | 100.00 | 100.00   |
| C8    | 100.00 | 100.00   | C8    | 100.00 | 100.00   |
| C9    | 100.00 | 100.00   | C9    | 100.00 | 100.00   |
| C10   | 100.00 | 100.00   | C10   | 100.00 | 100.00   |
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| C16   | 100.00 | 100.00   | C16   | 100.00 | 100.00   |
| C17   | 100.00 | 100.00   | C17   | 100.00 | 100.00   |
| C18   | 100.00 | 100.00   | C18   | 100.00 | 100.00   |
| C19   | 100.00 | 100.00   | C19   | 100.00 | 100.00   |
| C20   | 100.00 | 100.00   | C20   | 100.00 | 100.00   |
| C21   | 100.00 | 100.00   | C21   | 100.00 | 100.00   |
| C22   | 100.00 | 100.00   | C22   | 100.00 | 100.00   |
| C23   | 100.00 | 100.00   | C23   | 100.00 | 100.00   |
| C24   | 100.00 | 100.00   | C24   | 100.00 | 100.00   |
| C25   | 100.00 | 100.00   | C25   | 100.00 | 100.00   |
| C26   | 100.00 | 100.00   | C26   | 100.00 | 100.00   |
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| C30   | 100.00 | 100.00   | C30   | 100.00 | 100.00   |
| C31   | 100.00 | 100.00   | C31   | 100.00 | 100.00   |
| C32   | 100.00 | 100.00   | C32   | 100.00 | 100.00   |
| C33   | 100.00 | 100.00   | C33   | 100.00 | 100.00   |
| C34   | 100.00 | 100.00   | C34   | 100.00 | 100.00   |
| C35   | 100.00 | 100.00   | C35   | 100.00 | 100.00   |
| C36   | 100.00 | 100.00   | C36   | 100.00 | 100.00   |
| C37   | 100.00 | 100.00   | C37   | 100.00 | 100.00   |
| C38   | 100.00 | 100.00   | C38   | 100.00 | 100.00   |
| C39   | 100.00 | 100.00   | C39   | 100.00 | 100.00   |
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| C42   | 100.00 | 100.00   | C42   | 100.00 | 100.00   |
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| C76   | 100.00 | 100.00   | C76   | 100.00 | 100.00   |
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| C78   | 100.00 | 100.00   | C78   | 100.00 | 100.00   |
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| C80   | 100.00 | 100.00   | C80   | 100.00 | 100.00   |
| C81   | 100.00 | 100.00   | C81   | 100.00 | 100.00   |
| C82   | 100.00 | 100.00   | C82   | 100.00 | 100.00   |
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| C97   | 100.00 | 100.00   | C97   | 100.00 | 100.00   |
| C98   | 100.00 | 100.00   | C98   | 100.00 | 100.00   |
| C99   | 100.00 | 100.00   | C99   | 100.00 | 100.00   |
| C100  | 100.00 | 100.00   | C100  | 100.00 | 100.00   |

| Chain | Run    | Distance |
|-------|--------|----------|
| C1    | 100.00 | 100.00   |
| C2    | 100.00 | 100.00   |
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| C10   | 100.00 | 100.00   |
| C11   | 100.00 | 100.00   |
| C12   | 100.00 | 100.00   |
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| C81   | 100.00 | 100.00   |
| C82   | 100.00 | 100.00   |
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| C87   | 100.00 | 100.00   |
| C88   | 100.00 | 100.00   |
| C89   | 100.00 | 100.00   |
| C90   | 100.00 | 100.00   |
| C91   | 100.00 | 100.00   |
| C92   | 100.00 | 100.00   |
| C93   | 100.00 | 100.00   |
| C94   | 100.00 | 100.00   |
| C95   | 100.00 | 100.00   |
| C96   | 100.00 | 100.00   |
| C97   | 100.00 | 100.00   |
| C98   | 100.00 | 100.00   |
| C99   | 100.00 | 100.00   |
| C100  | 100.00 | 100.00   |

SEE SHEET 2 FOR BASIS OF BEARINGS, LEGEND, NOTES, AND REFERENCES.

BEING A SUBDIVISION OF LOT 7 AS SHOWN ON THE FINAL MAP OF SUBDIVISION NO. PL-0364, ENTITLED "FIDDYMENT RANCH PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "D" OF MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF SECTIONS 13 AND 24, T. 11 N., R. 5 E., M. 3 & 4.

FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
VILLAGE II-A1  
SUBDIVISION NO. PL-0438

|      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      |      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|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-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| 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0. |
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## COUNCIL COMMUNICATION

**CC #: 0984**

**File #: 0400-04-09-01**

**Title:** Fiddymment Ranch Phase 2 Village F-11A2 - Notice of Completion

**Contact:** Darin Crockett 916-746-1324 dcrockett@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 7.16.**

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council adopt the attached resolution accepting Fiddymment Ranch Phase 2 Village F-11A2, CWJ#180172, as complete and authorizing the City Engineer to execute the Notice of Completion.

### BACKGROUND

The Engineering Division has made a final inspection of the above project and has found the roadway infrastructure work complete in accordance with the improvement plans and City specifications.

### FISCAL IMPACT

The actions requested as part of this action have no impact to the City's General Fund. Construction costs were paid by the developer.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a Notice of Completion meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Darin Crockett, Construction Inspector

Mike Isom, Development Services Director



---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-363

NOC

Exhibit A

Final Map

RESOLUTION NO. 20-363

RESOLUTION OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS Fiddymment Ranch Phase 2 Village F-11A2 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING ALL DEDICATIONS OFFERED ON THE RECORDED MAP OF THE SUBDIVISION.

BE IT RESOLVED by the Council of the City of Roseville as follows:

1. The "Notice of Completion" on file in the City Clerk's Department relative to that public work known as the Fiddymment Ranch Phase 2 Village F-11A2 is hereby approved and the public work accepted.
2. All rights of way and easements as offered on the final map of recorded with Placer County Recorder's Office Book EE of Maps, Page 76 is hereby accepted.
3. The City Engineer is hereby authorized and directed to execute said Notice on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville, this\_\_\_\_ day of \_ \_ \_ \_ \_ , 20\_\_ , by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
CITY CLERK

RECORDING REQUESTED BY AND WHEN  
RECORDED MAIL TO:

CITY CLERK  
CITY OF ROSEVILLE  
311 VERNON STREET  
ROSEVILLE, CA 95678

Exempt from recording fees  
Pursuant to Gov't Code §27383

---

**NOTICE OF COMPLETION**

NOTICE IS HEREBY GIVEN that the public work of improvement known as the \_\_\_\_\_ Project was completed and accepted by the City of Roseville on \_\_\_\_\_. The location is situated in the City of Roseville, County of Placer, State of California and is indicated on the attached map, marked as Exhibit "A" and incorporated herein by this reference. The real property herein described is owned by the City of Roseville, 311 Vernon Street, Roseville CA 95678.

The direct/general contractor on said project was \_\_\_\_\_.

The surety on said project was \_\_\_\_\_.

\_\_\_\_\_

City of Roseville  
Owner

ATTEST:

\_\_\_\_\_  
Sonia Orozco, City Clerk



State of California    )  
County of Placer        )

I, \_\_\_\_\_, being first duly sworn, depose and say: I am the \_\_\_\_\_ of the City of Roseville, a municipal corporation in the State of California, owner of the property described in the above Notice. I am duly authorized to make this verification for and on behalf of the City of Roseville. I have read the Notice of Completion and know its contents and the facts stated therein are true.

\_\_\_\_\_

City of Roseville

|                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

State of California    )  
County of Placer        )

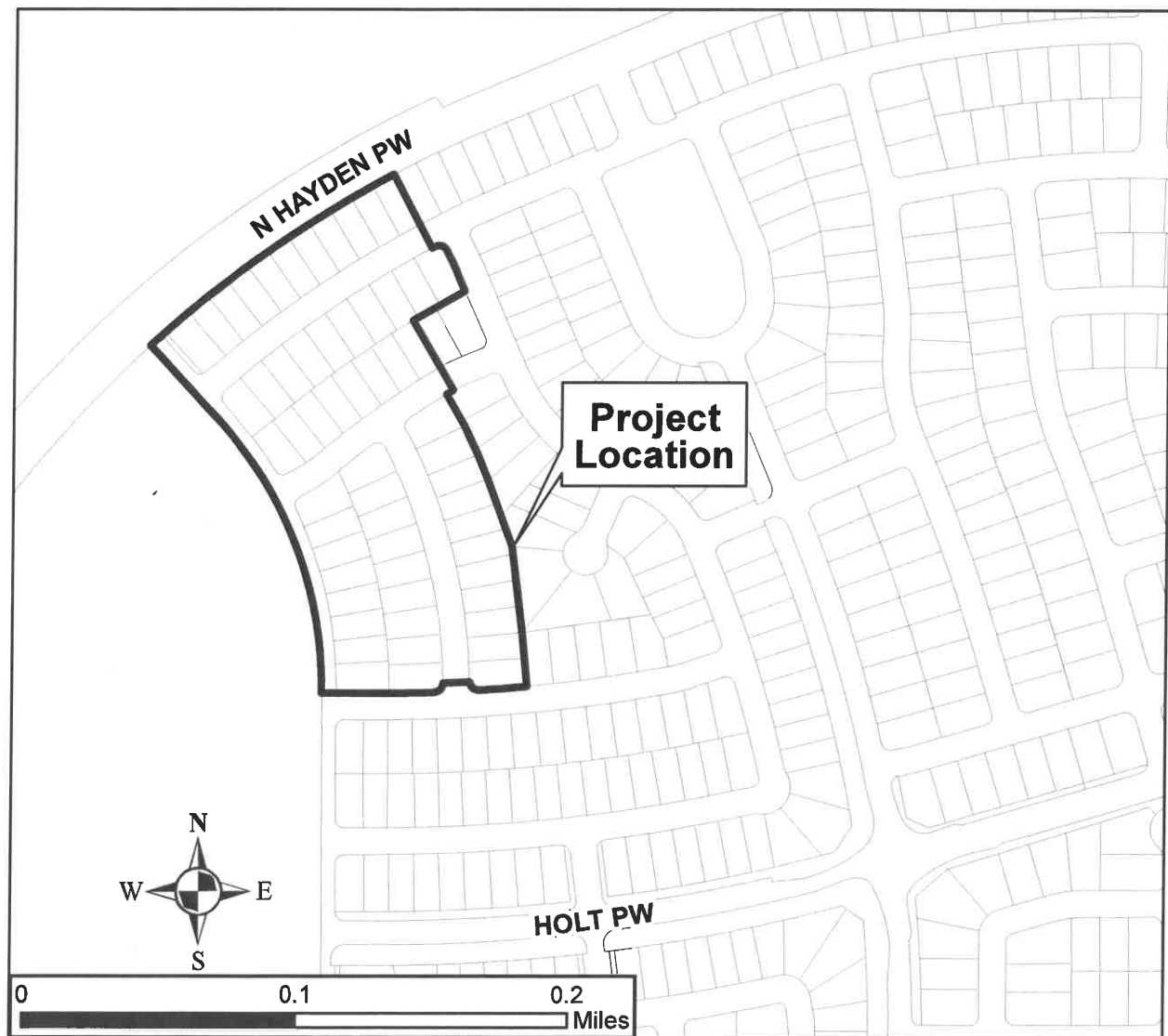
Subscribed and sworn to (or affirmed) before  
me on this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_, \_\_\_\_\_  
proved to me on the basis of satisfactory  
evidence to be the person(s) who appeared  
before me.

*Place Notary Seal and/or Stamp Above*

\_\_\_\_\_  
*Signature of Notary Public*

# EXHIBIT A

## City of Roseville Fiddymment Ranch Phase 2 Village F-11A2



THE UNDERSIGNED HEREBY CERTIFY THAT THEY ARE THE ONLY PERSONS HAVING ANY RECORD TITLE INTEREST IN THE LANDS SUBMITTED HEREON, HEREBY CONSENT TO THE PREPARATION AND RECORDING OF THIS FINAL MAP OF "TODDMENT RANCH PHASE 2 VILLAGE 11-A2" AND DO HEREBY OFFER FOR DEDICATION FOR SPECIFIC PURPOSES THE FOLLOWING:

THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED AS AN EASEMENT FOR PUBLIC PURPOSES:

A. AS PUBLIC ASSESSMENTS, THE AREAS SHOWN HEREIN AS THE "PUBLIC UTILITY EASEMENT" ARE FOR INSTALLATION AND MAINTENANCE OF, BUT NOT LIMITED TO, ELECTRICITY, TRAFFIC CONTROL, APPLIANCES, WATER, SEWER, DRAINAGE AND GAS PIPES, AND FOR UNDERGROUND WIRES AND CONDUITS FOR ELECTRICAL, TELEPHONE AND TELEVISION SERVICES, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO, ON, OVER, UNDER, AND ACROSS LOT A AND THOSE STRIPS OF LAND TEN (10) AND TWELVE AND ONE-HALF (12.5) FEET IN WIDTH AND CONTIGUOUS TO THE STREETS, DRIVE, AND WAYS SHOWN HEREON.

THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED IN FEE FOR PUBLIC PURPOSES.

A. AS PUBLIC RIGHT OF WAY (INCLUDING ALL IMPROVEMENTS THEREON), LOT A<sub>1</sub> AND THE STREETS SHOWN HERE AS PROVINCETOWN WAY, PRUETT DRIVE, MERRIMACK STREET, AND NEWMARKET STREET.

**REALTY  
ATC-RENTAL ONE, LLC**  
A DELAWARE LIMITED LIABILITY COMPANY

BY: DAVID L. ASH  
ITS: SENIOR VICE PRESIDENT

#### **OWNER'S ACKNOWLEDGEMENT**

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

COUNTY OF San Francisco ) SS notariable Res. &  
ON 14th day of November, 2018, before me, Notary Public,  
PERSONAL and in the presence of two disinterested witnesses, and in  
and known to me, on the basis of satisfactory evidence to be the PERSONS  
WHOSE NAMES ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED  
TO ME, THAT HE, SHE, HE EXECUTED THE SAME IN HIS, HER, HER AUTHORIZED  
CAPACITY, OR ON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE  
INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

SIGNATURE: Michael Rios  
PRINT NAME: Michael Rios  
MY COMMISSION NUMBER: 218278  
MY COMMISSION EXPIRES: March 31, 2007  
PRINCIPAL COUNTY OF BUSINESS: San Francisco

**SURVEYOR'S STATEMENT**

THIS "FINAL MAP OF FLOODMENT RANCH PHASE 2 WILDERNESS" 11-42 WAS PREPARED BY ME OR UNDER MY SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, IT ACCURATELY REPRESENTS THE DATA AND MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBVERSION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF A/T/C REALTY CO., LLC, ON JANUARY 1, 2018. I HEREBY STATE THAT THIS FINAL MAP SUBSTANTIALLY COMPLIES TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP (IF ANY) THAT ALL MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED OR THAT THEY WILL BE SET IN THOSE POSITIONS ON OR BEFORE DECEMBER 31, 2020, AND THAT SAID MONUMENTS ARE OR WILL BE SUFFICIENT TO ENHANCE THE SURVEY TO BE RETOLDED.

DATED THIS 7<sup>th</sup> DAY OF August, 2015  
Scott D. Shurtleff  
 SCOTT A. SHURTLEDGE, P.L.S. NO. 6441



### CITY ENGINEER'S STATEMENT

I HEREBY STATE THAT I HAVE EXAMINED THIS FINAL MAP OF FIDMONT RANCH PHASE 2 VILLAGE 11-42 AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP ON FILE AND ANY APPROVED ALTERATIONS THEREOF, AND THAT IT COMPLETS WITH ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES.

7/3  
D/TE  
MARC STOUT  
CITY ENGINEER, CITY OF ROSEVILLE  
R.C.E. #98879 EXPIRATION DATE: SEPTEMBER 30, 2020

I HEREBY STATE THAT I AM SATISFIED THAT THIS FINAL MAP OF FIDWYMENT RANCH PHASE 2 VILLAGE 11-A2 IS TECHNICALLY CORRECT.

FOR MARC STOUT, CITY ENGINEER, CITY OF ROSEVILLE

*[Signature]* 9/9/19

TIMOTHY G. BLAIR DATE

P.L.S. #8278 EXPIRATION DATE: DECEMBER 31, 2019



**CITY CLERK'S STATEMENT**

I HEREBY CERTIFY THAT THE CITY COUNCIL, CITY OF ROSEVILLE, HAS APPROVED THIS FINAL MAP OF FIDOWENT RANCH PHASE 2 VILLAGE, LOTS #1-A2 AND HAS ACCEPTED ON BEHALF OF THE PUBLIC, SUBJECT TO IMPROVEMENT, LOT #A AND ALL THE RIGHTS-OF-WAY AND EASEMENTS OFFERED HEREON FOR DEDICATION. THE CITY COUNCIL HAS ALSO APPROVED THE ABANDONMENT OF THE IRREVOCABLE OFFERS OF DEDICATION OF RIGHTS OF WAY AND EASEMENTS LISTED WITHIN NOTE #4 ON SHEET 2.

9/26/19  
DATED \_\_\_\_\_  
  
\_\_\_\_\_  
CITY CLERK, CITY OF ROSEMOUNT  
  
BY: \_\_\_\_\_  
ASSISTANT CITY CLERK

## COUNTY RECORDER'S STATEMENT

FILED FOR RECORD THIS 2<sup>nd</sup> DAY OF NOVEMBER, 2019, AT 10:50 A.M.  
IN BOOK EE OF MAPS AT PAGES 76 AT THE REQUEST OF OLD REPUBLIC  
TITLE COMPANY:

SERIES NO. 2019-008939  
FEE: \$ 95.00

RYAN RONCO  
COUNTY RECORDER IN AND FOR  
PLACER COUNTY, CALIFORNIA

BY:   
DEPUTY

FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
VILLAGE 11-A2  
SUBDIVISION NO. PL14-0438

BEING A SUBDIVISION OF LOT 8 AS SHOWN ON THE FINAL MAP  
OF SUBDIVISION NO. PL-0364, ENTITLED "FUDWENT RANCH  
PHASE 2A," FILED SEPTEMBER 22, 2017, IN BOOK "DP" OF  
MAPS AT PAGE 88 OFFICIAL RECORDS, A PORTION OF SECTIONS  
13 AND 24, T. 11 N., R. 6 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA

RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS

JULY 2019

RA4 JOB NO. 176021

SHEET 1 OF 6 SHEET

**BASIS OF BEARINGS**

THE LINE BETWEEN FOUND MONUMENTS IN NORTH HAYDEN PARKWAY TAKEN AS N67°03'56"E, AS SHOWN ON THE FINAL MAP OF SUBDIVISION NO. 03-11, "TIDDYMENT RANCH PHASE 2", ON FILE IN THE OFFICE OF THE PLACER COUNTY RECORDER IN BOOK 787 OF MAPS AT PAGE 24, IS THE BASIS OF BEARINGS FOR THIS MAP

**REFERENCES:**

- (1) BB MAPS 24, FIDDMYMENT RANCH PHASE 2 - LARGE LOTS
- (2) DD MAPS 9, FIDDMYMENT RANCH PHASE 2 - T9 & T19
- (3) DD MAPS 88, FIDDMYMENT RANCH PHASE 2 - LARGE LOTS
- (4) EE MAPS 25, FIDDMYMENT RANCH PHASE 2 - VILLAGE 11A1

**NOTES:**

1. ALL MONUMENT LINE LINES ARE AT RIGHT ANGLES TO THE MONUMENT LINE UNLESS OTHERWISE NOTED
2. REAR LOT CORNERS SHALL BE MARKED WITH 1/2" REBAR AND CAPPED WITH 1/4" GALV. FRONT AND SIDE LOT LINES SHALL BE 1" PROTECTED AND MARKED ON BACK OF SIDEWALK WITH 1" BRASS DISK STAMPED LS 6441.
3. A GEOTECHNICAL ENGINEERING REPORT (WKA NO 587/09) DATED 10/06/09 FOR THE TIDDYMENT RANCH 11 AND 12 INFRASTRUCTURE IMPROVEMENTS AND RESIDENTIAL DEVELOPMENT WAS DONE BY WALLACE KOHL & ASSOCIATES, INC. AND IS ON FILE AT THE CITY OF ROSEVILLE DEVELOPMENT SERVICES-ENGINEERING FILE NUMBER 308-660.
4. PER SECTION 66434(g) OF THE SUBDIVISION MAP ACT, THE FILING OF THIS MAP DOES HEREBY ABANDON THE PORTION OF THE IRREVOCABLE OFFER OF DEDICATION "100' ROW" AND THE PUBLIC UTILITY EASEMENTS "PUE" AS SHOWN ON SUBDIVISION NO. PL-0364 (TDD M 88) WITHIN THE BOUNDARY OF THIS MAP, SAID IRREVOCABLE OFFER OF DEDICATION AND PUBLIC UTILITY EASEMENTS ARE THEREFORE NOT SHOWN HEREON.
5. TOTAL AREA OF THIS SUBDIVISION IS 9.264ACRES, CONSISTING OF 57 RESIDENTIAL LOTS AND 1 LANDSCAPE LOT.

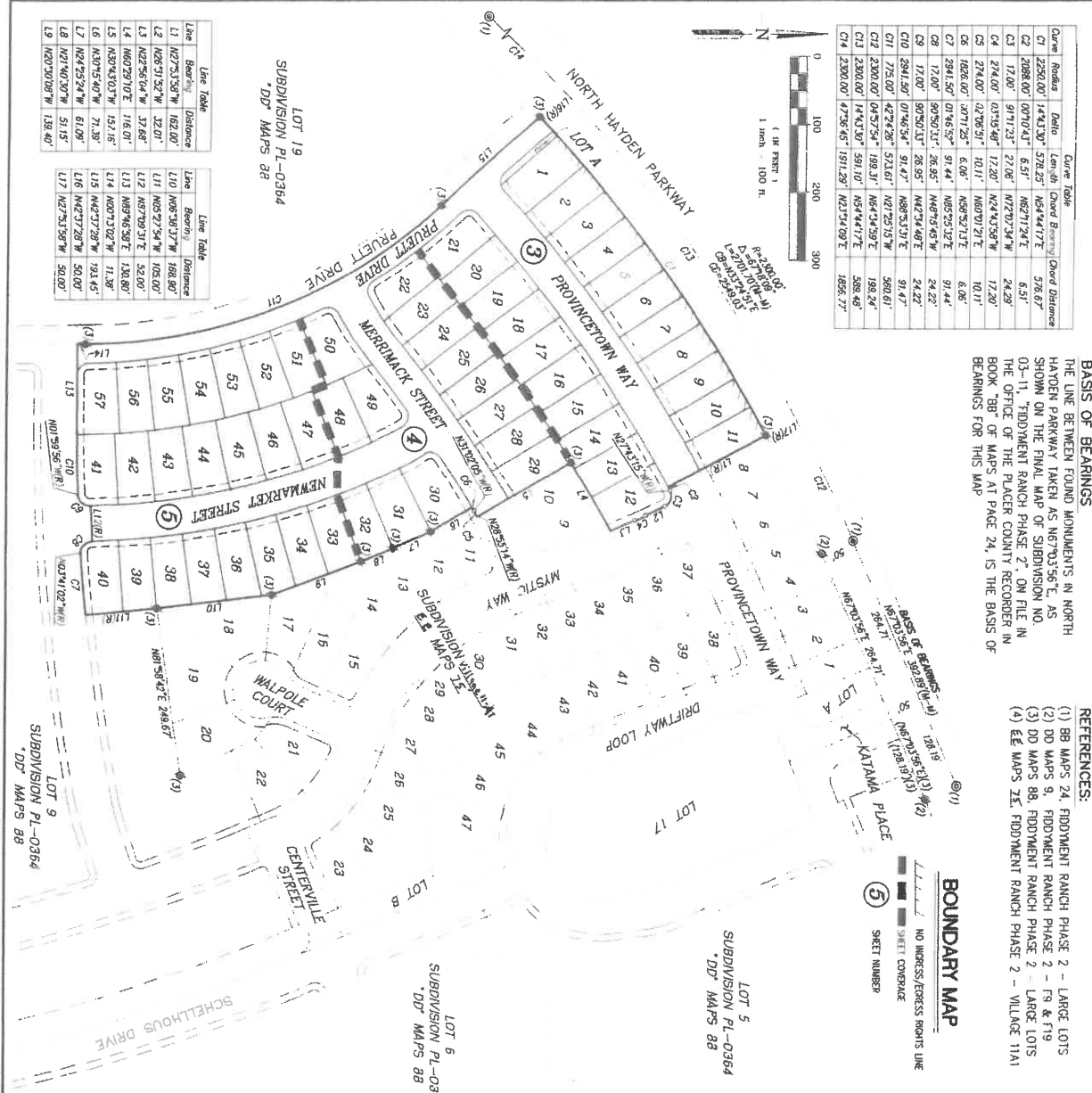
**BOUNDARY MAP**

NO IMPROVEMENTS/ACCESS RIGHTS LINE  
SHEET NUMBER  
SHEET COVERAGE

| Curve | Radius   | Delta     | Length  | Chord Bearing | Chord Distance |
|-------|----------|-----------|---------|---------------|----------------|
| C1    | 2250.00' | 14°43'30" | 578.23' | N64°44'17"E   | 578.67'        |
| C2    | 2088.00' | 00°07'43" | 6.91'   | N62°01'24"E   | 6.91'          |
| C3    | 17.00'   | 91°11'23" | 27.00'  | N07°01'24"E   | 24.29'         |
| C4    | 274.00'  | 03°15'46" | 17.20'  | N24°43'59"E   | 17.20'         |
| C5    | 274.00'  | 03°05'53" | 10.11'  | N00°01'21"E   | 10.11'         |
| C6    | 1626.00' | 10°11'25" | 6.06'   | N58°53'13"E   | 6.06'          |
| C7    | 2284.57' | 07°46'59" | 91.44'  | N65°03'43"E   | 91.44'         |
| C8    | 17.00'   | 90°00'33" | 28.93'  | N42°39'46"E   | 24.22'         |
| C9    | 17.00'   | 90°00'33" | 28.93'  | N42°39'46"E   | 24.22'         |
| C10   | 2841.57' | 07°46'59" | 91.44'  | N65°03'43"E   | 91.44'         |
| C11   | 274.00'  | 03°15'46" | 17.20'  | N24°43'59"E   | 17.20'         |
| C12   | 2300.00' | 14°43'30" | 591.31' | N64°44'17"E   | 588.24'        |
| C13   | 2300.00' | 14°43'30" | 591.31' | N64°44'17"E   | 588.24'        |
| C14   | 2300.00' | 14°43'30" | 591.31' | N64°44'17"E   | 588.24'        |

| Line | Bearing     | Distance |
|------|-------------|----------|
| L1   | N67°33'36"W | 162.00'  |
| L2   | N67°33'36"W | 162.00'  |
| L3   | N67°33'36"W | 162.00'  |
| L4   | N67°33'36"W | 162.00'  |
| L5   | N67°33'36"W | 162.00'  |
| L6   | N67°33'36"W | 162.00'  |
| L7   | N67°33'36"W | 162.00'  |
| L8   | N67°33'36"W | 162.00'  |
| L9   | N67°33'36"W | 162.00'  |

| Line | Bearing     | Distance |
|------|-------------|----------|
| L10  | N05°38'37"W | 168.00'  |
| L11  | N05°38'37"W | 168.00'  |
| L12  | N05°38'37"W | 168.00'  |
| L13  | N05°38'37"W | 168.00'  |
| L14  | N05°38'37"W | 168.00'  |
| L15  | N05°38'37"W | 168.00'  |
| L16  | N05°38'37"W | 168.00'  |
| L17  | N05°38'37"W | 168.00'  |
| L18  | N05°38'37"W | 168.00'  |
| L19  | N05°38'37"W | 168.00'  |



**LEGEND**

- SUBDIVISION BOUNDARY
- LOT LINE
- EXISTING EASEMENT AS NOTED
- NEW EASEMENT AS NOTED
- CENTER LINE / MONUMENT LINE
- MONUMENT LINE
- EXISTING LOT LINE

FOUND BRASS DISK IN STANDARD CITY OF ROSEVILLE MONUMENT BOX, STAMPED PER REFERENCE AS NOTED  
FOUND 5/8" REBAR WITH PLASTIC CAP  
STAMPED PER REFERENCE AS NOTED  
DIMENSION POINT  
SET BRASS DISK STAMPED LS 6441  
IN STANDARD CITY OF ROSEVILLE MONUMENT BOX  
PUBLIC UTILITY EASEMENT  
IRREVOCABLE OFFER OF DEDICATION  
RIGHT OF WAY  
EXISTING  
(M-M)  
(R)  
(T)  
TOTAL  
(DATA) (1)  
RECORD DATA & REFERENCE  
SQUARED FEET

**FINAL MAP OF  
FIDDMYMENT RANCH PHASE 2  
VILLAGE 11-A2  
SUBDIVISION NO. PL14-0438**

BEING A SUBDIVISION OF LOT 8 AS SHOWN ON THE FINAL MAP OF SUBDIVISION NO. PL-0364, ENTITLED "FIDDMYMENT RANCH PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "DD" OF MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF SECTIONS 13 AND 24, T. 11 N., R. 6 E., M.D.B. & M.  
CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA  
RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2019  
SHEET 2 OF 5 SHEETS  
RAA JOB NO. 175021

SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.

| Line | Bearing      | Distance |
|------|--------------|----------|
| L1   | N68°51'52" W | 32.01'   |
| L2   | N41°25'45" W | 26.00'   |
| L3   | N41°22'48" W | 26.00'   |
| L4   | N42°37'28" W | 13.86'   |

| Curve Radius | Delta    | Length   | Chord Bearing | Chord Distance |
|--------------|----------|----------|---------------|----------------|
| C41          | 2088.00' | 0°17'21" | 46.86'        | N61°16'13" E   |
| C42          | 2088.00' | 0°17'41" | 51.13'        | N60°17'08" E   |
| C43          | 2088.00' | 0°17'43" | 51.13'        | N59°52'17" E   |
| C44          | 2088.00' | 0°17'43" | 51.13'        | N57°28'00" E   |
| C45          | 2088.00' | 0°17'43" | 51.13'        | N56°13'16" E   |
| C46          | 2088.00' | 0°17'43" | 51.13'        | N54°39'10" E   |
| C47          | 2088.00' | 0°17'43" | 51.13'        | N53°14'32" E   |
| C48          | 2088.00' | 0°17'43" | 51.13'        | N51°50'00" E   |
| C49          | 2088.00' | 0°17'43" | 51.13'        | N50°25'29" E   |
| C50          | 2088.00' | 0°17'43" | 40.08'        | N49°01'14" E   |
| C51          | 801.00'  | 0°57'14" | 70.36'        | N40°06'51" W   |

| Curve Radius | Delta    | Length    | Chord Bearing | Chord Distance |
|--------------|----------|-----------|---------------|----------------|
| C1           | 2088.00' | 0°10'04"  | 6.51'         | N82°12'47" E   |
| C2           | 171.00'  | 9°17'23"  | 27.06'        | N72°07'34" W   |
| C3           | 274.00'  | 10°35'48" | 17.20'        | N64°43'58" W   |
| C4           | 301.00'  | 10°35'48" | 18.63'        | N64°43'58" W   |
| C5           | 775.00'  | 4°27'26"  | 51.63'        | N67°25'15" W   |
| C6           | 2250.00' | 0°04'13"  | 28.94'        | N67°44'38" E   |
| C7           | 22.00'   | 16°50'00" | 6.46'         | N54°12'28" W   |
| C8           | 17.00'   | 88°46'17" | 26.35'        | N67°01'37" W   |
| C9           | 17.00'   | 65°14'04" | 18.46'        | N75°58'00" W   |
| C10          | 17.00'   | 23°07'37" | 6.87'         | N80°07'52" E   |
| C11          | 2114.00' | 0°11'14"  | 44.10'        | N47°58'24" E   |
| C12          | 2114.00' | 1°31'42"  | 49.20'        | N55°20'09" E   |
| C13          | 2114.00' | 0°14'42"  | 45.94'        | N47°59'53" E   |
| C14          | 2114.00' | 1°28'46"  | 49.73'        | N55°21'18" E   |
| C15          | 2114.00' | 0°22'06"  | 50.49'        | N62°47'05" E   |
| C16          | 17.00'   | 87°14'42" | 27.07'        | N62°59'53" E   |
| C17          | 801.00'  | 10°14'42" | 150.45'       | N47°15'25" W   |
| C18          | 2250.00' | 0°07'13"  | 9.05'         | N47°13'40" E   |
| C19          | 2250.00' | 0°07'13"  | 59.37'        | N49°07'57" E   |
| C20          | 2250.00' | 0°17'46"  | 47.63'        | N50°27'41" E   |
| C21          | 2250.00' | 0°17'13"  | 48.14'        | N51°00'30" E   |
| C22          | 2250.00' | 0°17'13"  | 48.14'        | N52°34'23" E   |
| C23          | 2250.00' | 0°17'13"  | 48.14'        | N54°07'57" E   |
| C24          | 2250.00' | 0°17'13"  | 48.14'        | N55°21'30" E   |
| C25          | 2250.00' | 0°17'13"  | 48.14'        | N56°35'03" E   |
| C26          | 2250.00' | 0°17'13"  | 48.14'        | N57°48'36" E   |
| C27          | 2250.00' | 0°17'13"  | 48.14'        | N59°02'09" E   |
| C28          | 2250.00' | 0°17'13"  | 48.14'        | N60°15'42" E   |
| C29          | 2250.00' | 0°17'13"  | 48.14'        | N61°29'16" E   |
| C30          | 2140.00' | 0°17'13"  | 45.79'        | N61°29'16" E   |
| C31          | 2140.00' | 0°17'46"  | 47.96'        | N62°47'47" E   |
| C32          | 2140.00' | 0°17'13"  | 45.79'        | N61°40'50" E   |
| C33          | 2140.00' | 0°17'13"  | 45.79'        | N62°34'23" E   |
| C34          | 2140.00' | 0°17'13"  | 45.79'        | N63°27'57" E   |
| C35          | 2140.00' | 0°17'13"  | 45.79'        | N64°21'30" E   |
| C36          | 2140.00' | 0°17'13"  | 45.79'        | N65°15'03" E   |
| C37          | 2140.00' | 0°17'13"  | 45.79'        | N66°08'36" E   |
| C38          | 2140.00' | 0°17'13"  | 45.79'        | N67°02'09" E   |
| C39          | 2140.00' | 0°17'13"  | 45.79'        | N67°55'42" E   |
| C40          | 2140.00' | 0°17'13"  | 45.79'        | N68°49'16" E   |

BEING A SUBDIVISION OF LOT 8 AS SHOWN ON THE FINAL MAP OF SUBDIVISION NO. PL-0364, ENTITLED "FIDDYMENT RANCH PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "DP" OF MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF SECTIONS 13 AND 24, T. 11 N., R. 5 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA

RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS

JULY 2019

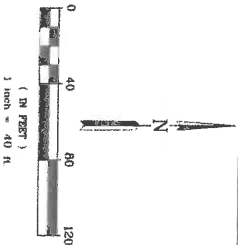
RA JOB NO. 175021

SHEET 3 OF 5 SHEETS

SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.

| Line Table |             |          |
|------------|-------------|----------|
| Line       | Bearing     | Distance |
| L1         | N42°37'28"W | 13.96'   |
| L2         | N58°06'39"E | 28.00'   |
| L3         | N61°07'00"E | 17.73'   |
| L4         | N39°42'24"W | 28.00'   |
| L5         | N36°27'48"W | 28.00'   |
| L6         | N33°59'07"W | 26.00'   |
| L7         | N35°20'07"W | 21.47'   |
| L8         | N63°46'48"E | 26.00'   |
| L9         | N64°07'21"E | 28.00'   |

| Curve | Radius   | Delta     | Length  | Chord Bearing | Chord Distance |
|-------|----------|-----------|---------|---------------|----------------|
| C1    | 300.00'  | 0°15'44"  | 18.87'  | 142°41'59"W   | 18.87'         |
| C2    | 300.00'  | 0°37'30"  | 42.47'  | 146°10'56"E   | 42.38'         |
| C3    | 300.00'  | 0°37'30"  | 10.23'  | 146°56'40"E   | 10.23'         |
| C4    | 300.00'  | 0°37'30"  | 32.16'  | 146°59'40"E   | 32.14'         |
| C5    | 1068.00' | 0°17'26"  | 10.11'  | 146°07'21"E   | 10.11'         |
| C6    | 1068.00' | 0°17'26"  | 6.06'   | 145°52'13"E   | 6.06'          |
| C7    | 300.00'  | 10°50'24" | 56.76'  | 145°41'48"E   | 56.67'         |
| C8    | 1062.00' | 0°42'51"  | 141.84' | 145°28'14"E   | 141.80'        |
| C9    | 1062.00' | 0°10'56"  | 97.29'  | 145°46'54"E   | 97.28'         |
| C10   | 1062.00' | 0°10'56"  | 44.54'  | 145°46'54"E   | 44.54'         |
| C11   | 1062.00' | 0°47'02"  | 138.07' | 145°46'54"E   | 138.08'        |
| C12   | 1062.00' | 0°17'00"  | 43.64'  | 145°20'23"E   | 43.64'         |



| Curve | Radius   | Delta     | Length  | Chord Bearing | Chord Distance |
|-------|----------|-----------|---------|---------------|----------------|
| C13   | 1062.00' | 0°25'02"  | 39.37'  | 145°29'24"E   | 39.36'         |
| C14   | 300.00'  | 0°37'30"  | 41.73'  | 145°46'19"W   | 41.66'         |
| C15   | 1019.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C16   | 801.00'  | 0°44'07"  | 150.45' | 141°31'52"W   | 150.23'        |
| C17   | 801.00'  | 0°44'07"  | 70.38'  | 140°06'51"W   | 70.34'         |
| C18   | 801.00'  | 0°44'07"  | 80.09'  | 141°44'48"W   | 80.06'         |
| C19   | 17.00'   | 86°59'34" | 25.61'  | 145°21'11"W   | 21.46'         |
| C20   | 224.00'  | 0°50'24"  | 25.64'  | 145°41'48"E   | 21.46'         |
| C21   | 224.00'  | 0°51'00"  | 25.64'  | 145°41'48"E   | 21.46'         |
| C22   | 224.00'  | 0°51'00"  | 25.64'  | 145°41'48"E   | 21.46'         |
| C23   | 1478.00' | 0°21'46"  | 19.65'  | 145°41'48"E   | 19.65'         |
| C24   | 1478.00' | 0°21'46"  | 43.78'  | 145°41'48"E   | 43.78'         |
| C25   | 1478.00' | 0°21'46"  | 43.78'  | 145°41'48"E   | 43.78'         |
| C26   | 1478.00' | 0°21'46"  | 43.78'  | 145°41'48"E   | 43.78'         |
| C27   | 1478.00' | 0°21'46"  | 43.78'  | 145°41'48"E   | 43.78'         |
| C28   | 1478.00' | 0°21'46"  | 43.78'  | 145°41'48"E   | 43.78'         |
| C29   | 1478.00' | 0°21'46"  | 43.78'  | 145°41'48"E   | 43.78'         |
| C30   | 356.00'  | 0°14'59"  | 10.40'  | 145°29'24"E   | 10.40'         |
| C31   | 186.00'  | 0°25'02"  | 34.03'  | 145°29'24"E   | 34.03'         |
| C32   | 186.00'  | 0°25'02"  | 34.03'  | 145°29'24"E   | 34.03'         |
| C33   | 17.00'   | 86°59'34" | 25.61'  | 141°40'44"E   | 21.76'         |
| C34   | 356.00'  | 0°14'59"  | 10.40'  | 145°29'24"E   | 10.40'         |
| C35   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C36   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C37   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C38   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C39   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C40   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C41   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C42   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C43   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C44   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C45   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C46   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C47   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C48   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C49   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C50   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C51   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C52   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |
| C53   | 1065.00' | 2°22'43"  | 421.95' | 141°31'50"W   | 420.23'        |

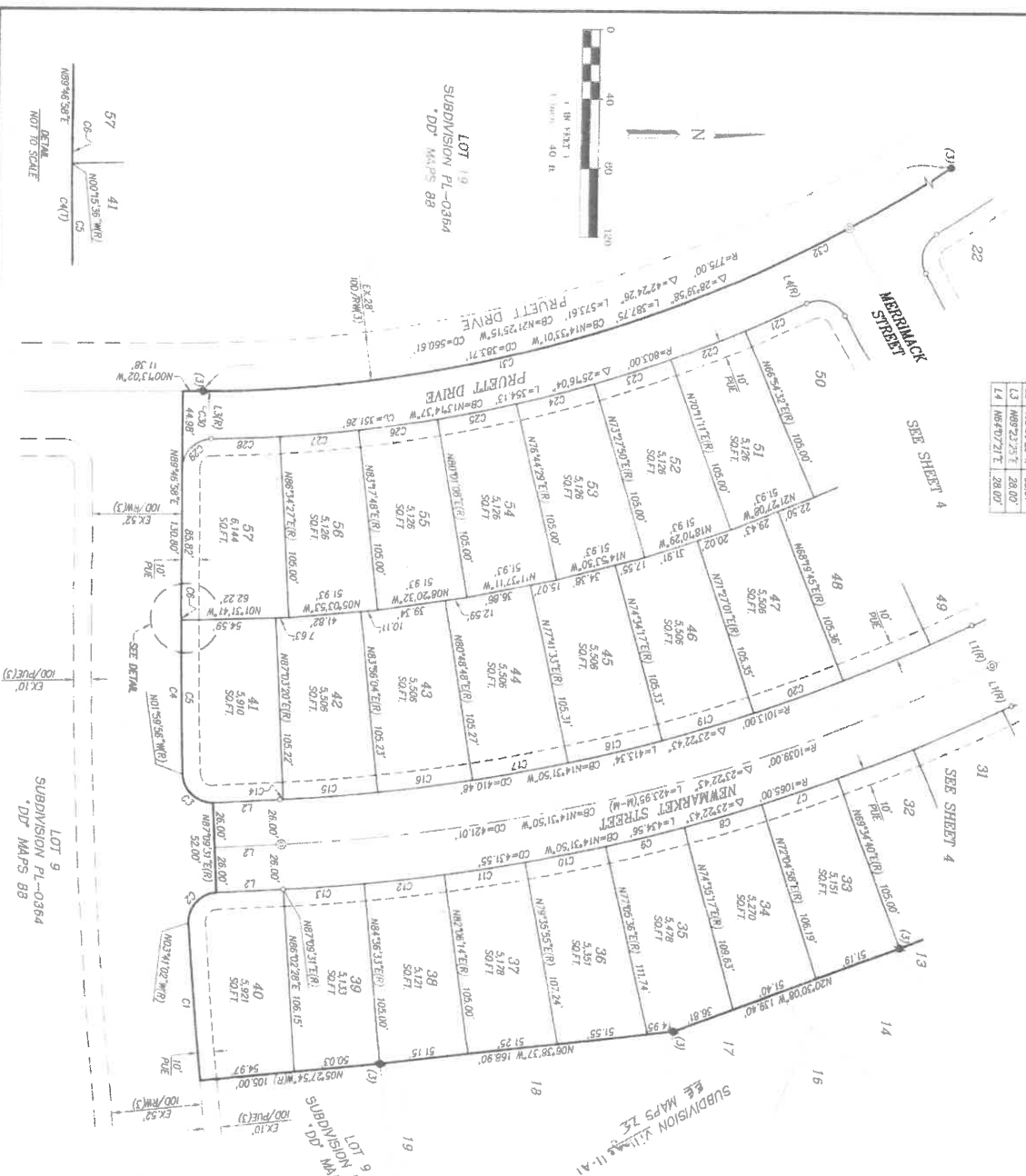
FINAL MAP OF  
FIDDYMONT RANCH PHASE 2  
VILLAGE 11-A2  
SUBDIVISION NO. P14-0438

BEING A SUBDIVISION OF LOT 8 AS SHOWN ON THE FINAL MAP  
OF SUBDIVISION NO. P1-0364, ENTITLED "FIDDYMONT RANCH  
PHASE 2A," FILED SEPTEMBER 22, 2017, IN BOOK "DT OF  
MAPS AT PAGE 88 OFFICIAL RECORDS, A PORTION OF SECTIONS  
13 AND 24, T. 11 N., R. 9 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA  
RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2019  
SHEET 4 OF 5 SHEETS  
RIA JOB NO. 175021

SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.

| Line | Bearing     | Distance |
|------|-------------|----------|
| L1   | N63°46'48"E | 76.00'   |
| L2   | N02°20'28"W | 38.81'   |
| L3   | N08°22'23"E | 28.00'   |
| L4   | N64°07'21"E | 28.00'   |



| Curve | Radius   | Delta     | Length | Chord Bearing | Chord Distance |
|-------|----------|-----------|--------|---------------|----------------|
| C1    | 2941.50' | 01°46'32" | 51.44' | N65°25'32"E   | 91.44'         |
| C2    | 17.00'   | 30°50'31" | 28.55' | N49°54'57"W   | 24.22'         |
| C3    | 12.00'   | 30°50'31" | 28.55' | N42°34'48"E   | 24.22'         |
| C4    | 2941.50' | 01°46'32" | 51.44' | N68°53'17"E   | 91.46'         |
| C5    | 2941.50' | 01°44'00" | 89.27' | N68°52'14"E   | 89.26'         |
| C6    | 2941.50' | 03°02'44" | 2.20'  | N68°54'17"E   | 2.20'          |
| C7    | 1065.00' | 02°30'16" | 46.56' | N19°01'17"W   | 46.56'         |
| C8    | 1065.00' | 02°30'16" | 46.57' | N14°03'11"W   | 46.56'         |
| C9    | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C10   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C11   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C12   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C13   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C14   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C15   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C16   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C17   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C18   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C19   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C20   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C21   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C22   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C23   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C24   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C25   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C26   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C27   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C28   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C29   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C30   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C31   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |
| C32   | 1065.00' | 02°30'16" | 46.57' | N03°08'36"W   | 46.56'         |

FINAL MAP OF  
FIDDYMONT RANCH PHASE 2  
VILLAGE 11-A2  
SUBDIVISION NO. PL4-0438

BEING A SUBDIVISION OF LOT 8 AS SHOWN ON THE FINAL MAP  
OF SUBDIVISION NO. PL-0364 ENTITLED "FIDDYMONT RANCH  
PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "DD OF  
MAPS AT PAGE 88 OFFICIAL RECORDS, A PORTION OF SECTIONS  
13 AND 24, T. 11 N., R. 5 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA  
RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2018  
SHEET 5 OF 5 SHEETS  
RJA JOB NO. 175021



## COUNCIL COMMUNICATION

CC #: 0980

File #: 0400-04-09-01

**Title:** Fiddymment Ranch Phase 2 Village F-11A3 - Notice of Completion

**Contact:** Darin Crockett 916-746-1324 dcrockett@roseville.ca.us

**Meeting Date:** 9/16/2020

**Item #:** 7.17.

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council adopt the attached resolution accepting Fiddymment Ranch Phase 2 Village F-11A3, CWJ#180170, as complete and authorizing the City Engineer to execute the Notice of Completion.

### BACKGROUND

The Engineering Division has made a final inspection of the above project and has found the roadway infrastructure work complete in accordance with the improvement plans and City specifications.

### FISCAL IMPACT

The actions requested as part of this action have no impact to the City's General Fund. Construction costs were paid by the developer.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a Notice of Completion meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Darin Crockett, Construction Inspector

Mike Isom, Development Services Director





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Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-360

NOC

Exhibit A

Final Map

RESOLUTION NO. 20-360

RESOLUTION OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS Fiddymment Ranch Phase 2 Village 1 1-A3 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING THE DEDICATIONS OFFERED ON THE RECORDED MAP OF THE SUBDIVISION AS DESCRIBED BELOW.

BE IT RESOLVED by the Council of the City of Roseville as follows:

1. The "Notice of Completion" on file in the City Clerk's Department relative to that public work known as the Fiddymment Ranch Phase 2 Village 11-A3 is hereby approved and the public work accepted.
2. Except for Lots A and B, all other rights of way and easements as offered on the final map of Fiddymment Ranch Phase 2 Village 11-A3 recorded with Placer County Recorder's Office in Book EE of Maps, Page '1.B' is hereby accepted. Lots A and B as offered for dedication on said map are not hereby accepted in fee as rights of way and as public utility easements.
4. The City Engineer is hereby authorized and directed to execute said Notice on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville, this \_\_\_\_ day of \_ \_ \_ \_ \_ 2020, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

---

MAYOR

ATTEST:

---

CITY CLERK

RECORDING REQUESTED BY AND WHEN  
RECORDED MAIL TO:

CITY CLERK  
CITY OF ROSEVILLE  
311 VERNON STREET  
ROSEVILLE, CA 95678

Exempt from recording fees  
Pursuant to Gov't Code §27383

---

**NOTICE OF COMPLETION**

NOTICE IS HEREBY GIVEN that the public work of improvement known as the \_\_\_\_\_ Project was completed and accepted by the City of Roseville on \_\_\_\_\_. The location is situated in the City of Roseville, County of Placer, State of California and is indicated on the attached map, marked as Exhibit "A" and incorporated herein by this reference. The real property herein described is owned by the City of Roseville, 311 Vernon Street, Roseville CA 95678.

The direct/general contractor on said project was \_\_\_\_\_.

The surety on said project was \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_  
City of Roseville  
Owner

ATTEST:

\_\_\_\_\_  
Sonia Orozco, City Clerk

State of California    )  
County of Placer        )

I, \_\_\_\_\_, being first duly sworn, depose and say: I am the \_\_\_\_\_ of the City of Roseville, a municipal corporation in the State of California, owner of the property described in the above Notice. I am duly authorized to make this verification for and on behalf of the City of Roseville. I have read the Notice of Completion and know its contents and the facts stated therein are true.

\_\_\_\_\_

City of Roseville

|                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

State of California    )  
County of Placer        )

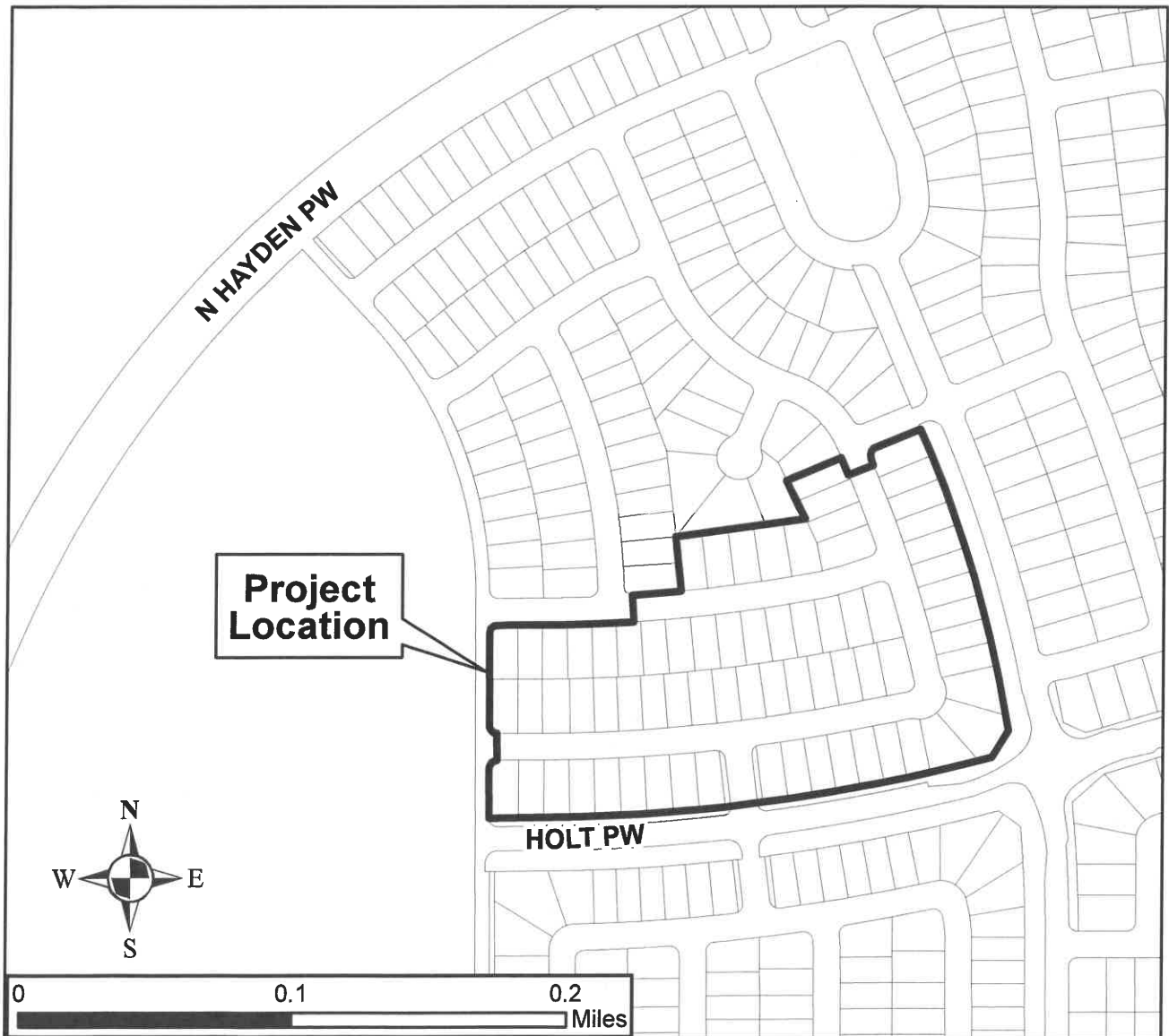
Subscribed and sworn to (or affirmed) before  
me on this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_, \_\_\_\_\_  
proved to me on the basis of satisfactory  
evidence to be the person(s) who appeared  
before me.

*Place Notary Seal and/or Stamp Above*

\_\_\_\_\_  
*Signature of Notary Public*

# EXHIBIT A

## City of Roseville Fiddymment Ranch Phase 2 Village F-11A3





REFERENCES (FIDWYMENT RANCH PHASE 2):

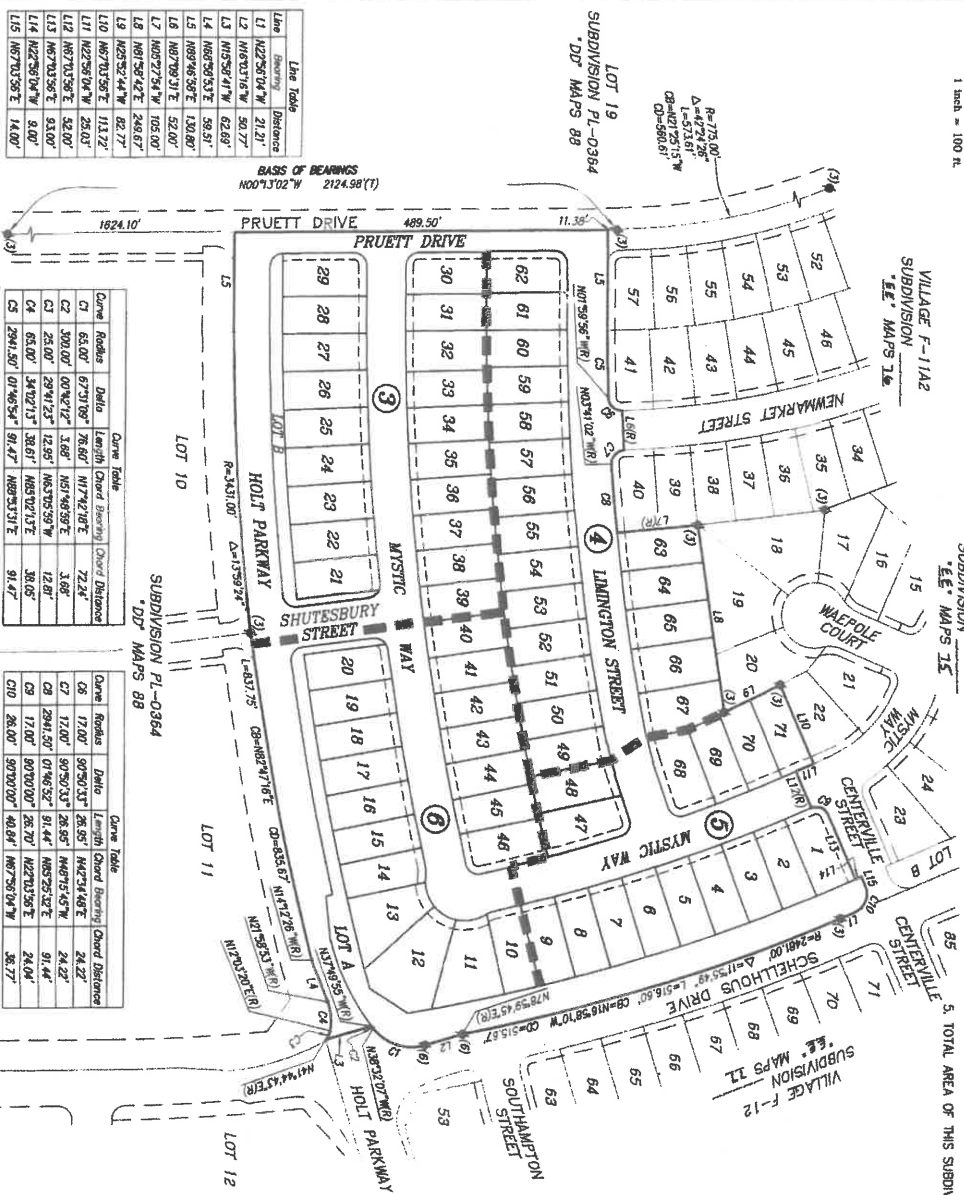
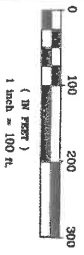
- (1) BB MAPS 24, LARGE LOTS
- (2) DD MAPS 9, F9 & F19
- (3) DD MAPS 88, LARGE LOTS
- (4) EE MAPS 11, F11A1
- (5) EE MAPS 11, F11A2
- (6) EE MAPS 11, F11A2

BASIS OF BEARINGS

THE LINE BETWEEN FOUND REBAR IN PRUETT DRIVE TAKEN AS N00°30'02"W, AS SHOWN ON THE FINAL MAP OF SUBDIVISION NO. PL-0364, "FIDWYMENT RANCH PHASE 2A", ON FILE IN THE OFFICE OF THE PLACER COUNTY RECORDER IN BOOK "DD" OF MAPS AT PAGE 88, IS THE BASIS OF BEARINGS FOR THIS MAP.

BOUNDARY MAP

SHEET NUMBER 5



| Line | Bearing     | Distance |
|------|-------------|----------|
| L1   | N02°56'04"W | 21.21'   |
| L2   | N60°03'16"W | 50.77'   |
| L3   | N03°56'41"W | 62.69'   |
| L4   | N08°46'32"E | 138.00'  |
| L5   | N07°09'31"E | 92.00'   |
| L6   | N07°23'34"W | 105.00'  |
| L7   | N01°56'42"E | 246.67'  |
| L8   | N02°56'41"W | 82.77'   |
| L9   | N02°56'04"W | 111.72'  |
| L10  | N02°56'04"W | 25.00'   |
| L11  | N02°56'04"W | 52.00'   |
| L12  | N02°56'04"W | 52.00'   |
| L13  | N02°56'04"W | 52.00'   |
| L14  | N02°56'04"W | 52.00'   |
| L15  | N02°56'04"W | 52.00'   |

| Curve | Radius   | Delta     | Length | Chord Bearing | Chord Distance |
|-------|----------|-----------|--------|---------------|----------------|
| C1    | 65.00'   | 67°31'09" | 78.60' | N17°42'18"E   | 72.24'         |
| C2    | 300.00'  | 00°42'12" | 1.68'  | N01°46'39"E   | 3.68'          |
| C3    | 25.00'   | 20°42'12" | 12.95' | N03°05'39"W   | 12.80'         |
| C4    | 65.00'   | 54°03'13" | 38.61' | N08°02'13"E   | 38.05'         |
| C5    | 2941.50' | 01°46'54" | 91.47' | N08°53'31"E   | 91.47'         |

| Curve | Radius   | Delta     | Length | Chord Bearing | Chord Distance |
|-------|----------|-----------|--------|---------------|----------------|
| C6    | 17.00'   | 90°50'33" | 36.95' | N42°34'48"E   | 24.22'         |
| C7    | 17.00'   | 90°50'33" | 36.95' | N40°15'45"W   | 24.22'         |
| C8    | 2941.50' | 01°46'52" | 91.44' | N08°25'42"E   | 91.44'         |
| C9    | 17.00'   | 80°50'00" | 36.70' | N02°03'36"E   | 24.04'         |
| C10   | 26.00'   | 90°00'00" | 40.84' | N67°56'04"W   | 36.77'         |

NOTES:

1. ALL MONUMENT THE LINES ARE AT RIGHT ANGLES TO THE MONUMENT LINE UNLESS OTHERWISE NOTED.
2. REAR LOT CORNERS SHALL BE MARKED WITH 1/2" REBAR AND CAPPED WITH LS 6441. FRONT AND SIDE LOT LINES SHALL BE 1" PROTECTED AND MARKED ON BACK OF SIDEWALK WITH 1" BRASS DISK STAMPED LS 6441.
3. A GEOTECHNICAL ENGINEERING REPORT (FMA NO. 5877.09) DATED 10/06/06 FOR THE FIDWYMENT RANCH II AND III INFRASTRUCTURE IMPROVEMENTS AND RESIDENTIAL DEVELOPMENT, WAS DONE BY WALLACE KUHIL & ASSOCIATES, INC. AND IS ON FILE AT THE CITY OF ROSEVILLE DEVELOPMENT SERVICES-ENGINEERING FILE NUMBER 308-660.
4. PER SECTION 66434(c) OF THE SUBDIVISION MAP ACT, THE PLUNG OF THIS MAP DOES HEREBY ABANDON THE PORTION OF THE IRREVOCABLE OFFER OF DEDICATION 100' ROW AND THE PUBLIC UTILITY EASEMENTS "PUE" AS SHOWN ON SUBDIVISION NO. PL-0364 ("DD" MAP 88) AS LYING WITHIN THE BOUNDARY OF THIS MAP. SAID IRREVOCABLE OFFER OF DEDICATION AND PUBLIC UTILITY EASEMENTS ARE THEREFORE NOT SHOWN HEREON.
5. TOTAL AREA OF THIS SUBDIVISION IS 13.954 ACRES, CONSISTING OF 71 RESIDENTIAL LOTS AND 2 LANDSCAPE LOTS.

LEGEND

- SUBDIVISION BOUNDARY
- LOT LINE
- EXISTING EASEMENT AS NOTED
- NEW EASEMENT AS NOTED
- CENTER LINE / MONUMENT LINE
- MONUMENT LINE
- EXISTING LOT LINE
- BRASS DISK IN STANDARD CITY OF ROSEVILLE MONUMENT BOX, STAMPED PER REFERENCE AS NOTED
- 5/8" REBAR WITH PLASTIC CAP
- STAMPED PER REFERENCE AS NOTED
- DIMENSION POINT
- SET BRASS DISK STAMPED LS 6441
- IN STANDARD CITY OF ROSEVILLE MONUMENT BOX
- PUE
- PUBLIC UTILITY EASEMENT
- IRREVOCABLE OFFER OF DEDICATION
- RIGHT OF WAY
- EX
- EXISTING
- (M-W)
- MONUMENT TO MONUMENT
- (R)
- RADIAL BEARING
- (T)
- TOTAL
- RECORD DATA & REFERENCE
- (DATA Y1)
- SQ.FT.
- SQUARE FEET

FINAL MAP OF FIDWYMENT RANCH PHASE 2 VILLAGE 11-A3 SUBDIVISION NO. PL14-0438

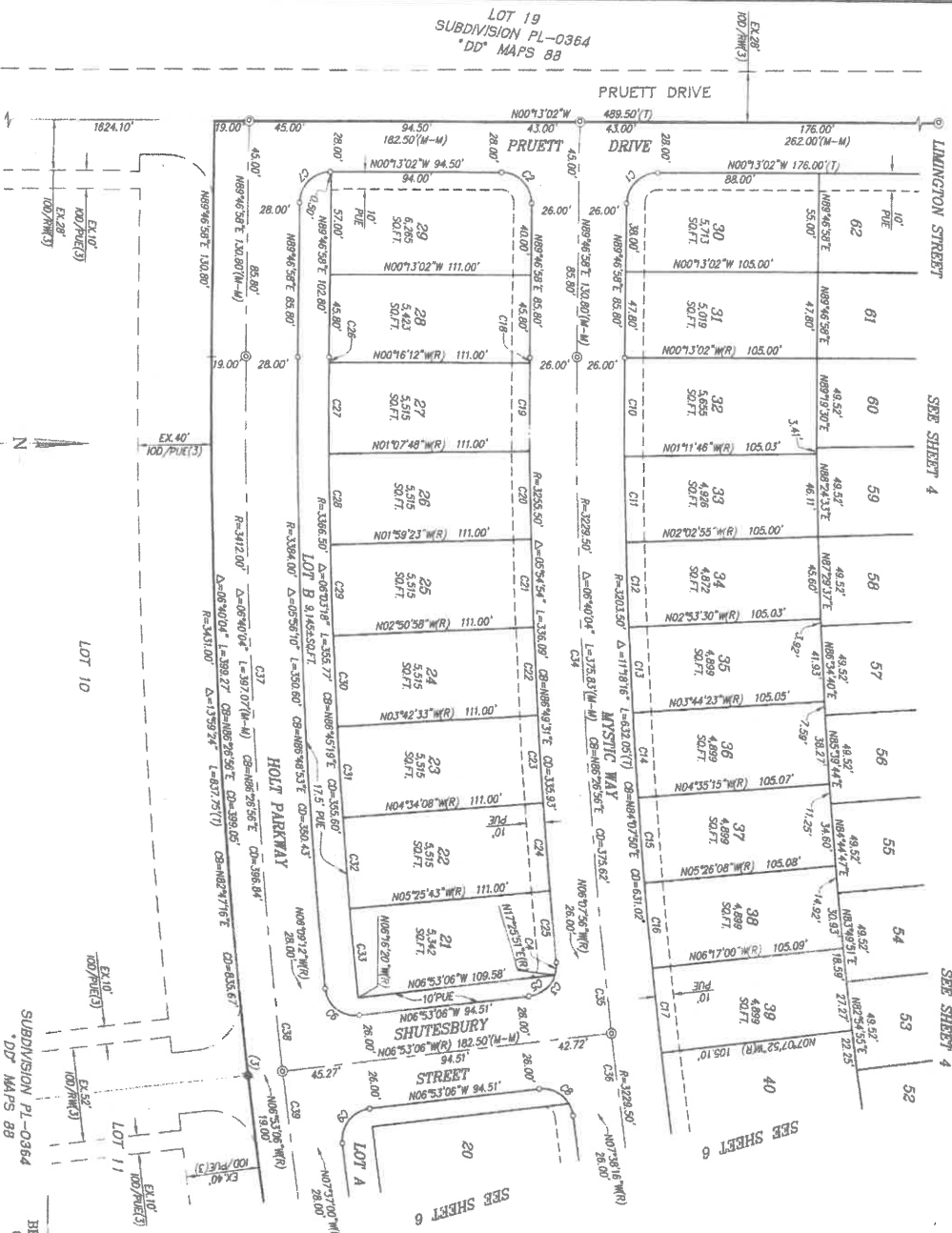
BEING A SUBDIVISION OF LOT 9 AS SHOWN ON THE FINAL MAP OF SUBDIVISION NO. PL-0364, ENTITLED "FIDWYMENT RANCH PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "DD" OF MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF SECTIONS 13 AND 24, T. 11 N., R. 5 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA  
RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2019  
SHEET 2 OF 6 SHEETS

RAJ JOB NO. 175021

SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.

| Curve | Radius | Delta     | Length | Chord Bearing | Chord Distance |
|-------|--------|-----------|--------|---------------|----------------|
| C1    | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C2    | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C3    | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C4    | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C5    | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C6    | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C7    | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C8    | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C9    | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C10   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C11   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C12   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C13   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C14   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C15   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C16   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C17   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C18   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C19   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C20   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C21   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C22   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C23   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C24   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C25   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C26   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C27   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C28   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C29   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C30   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C31   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C32   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C33   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C34   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C35   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C36   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C37   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C38   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |
| C39   | 17.00' | 90°00'00" | 28.10' | N45°10'2" W   | 24.04'         |



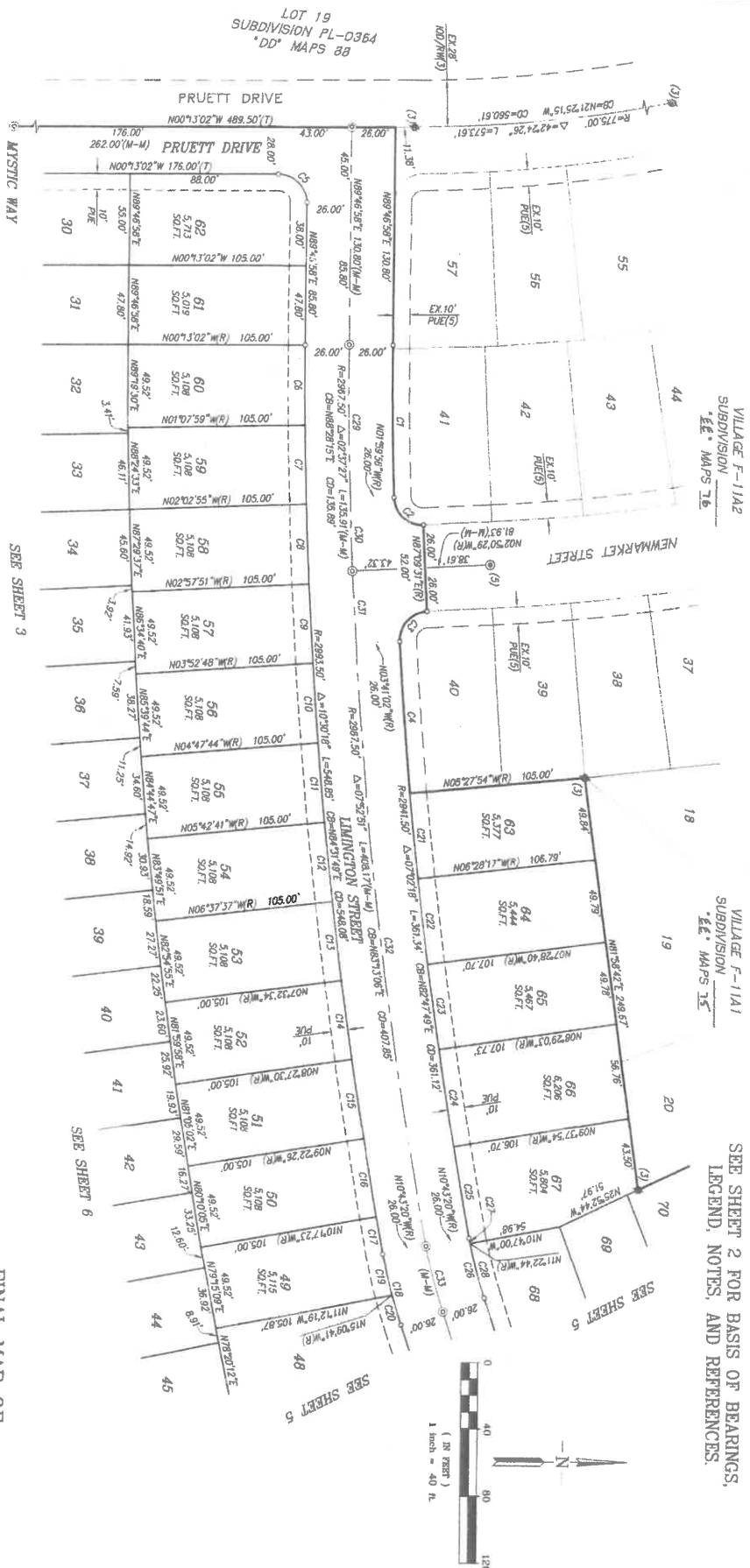
FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
VILLAGE 11-A3  
SUBDIVISION NO. PL4-0438

BEING A SUBDIVISION OF LOT 9 AS SHOWN ON THE FINAL MAP  
OF SUBDIVISION NO. PL-0364, ENTITLED "FIDDYMENT RANCH  
PHASE 2A", FILED SEPTEMBER 22, 2017 IN BOOK "DD" OF  
MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF SECTIONS  
13 AND 24, T. 11 N., R. 9 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA  
RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2019  
SHEET 3 OF 6 SHEETS



SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.



| Curve | Radius   | Delta     | Length | Chord Bearing | Chord Distance |
|-------|----------|-----------|--------|---------------|----------------|
| C1    | 2941.50' | 0°46'54"  | 91.47' | N08°53'31"E   | 91.46'         |
| C2    | 17.00'   | 90°50'33" | 28.95' | N42°24'46"E   | 24.22'         |
| C3    | 17.00'   | 90°50'33" | 28.95' | N46°15'45"W   | 24.22'         |
| C4    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C5    | 17.00'   | 90°50'33" | 28.70' | N44°46'59"E   | 24.04'         |
| C6    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C7    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C8    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C9    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C10   | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C11   | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |

| Curve | Radius   | Delta     | Length | Chord Bearing | Chord Distance |
|-------|----------|-----------|--------|---------------|----------------|
| C1    | 2941.50' | 0°46'54"  | 91.47' | N08°53'31"E   | 91.46'         |
| C2    | 17.00'   | 90°50'33" | 28.95' | N42°24'46"E   | 24.22'         |
| C3    | 17.00'   | 90°50'33" | 28.95' | N46°15'45"W   | 24.22'         |
| C4    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
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| C6    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C7    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C8    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C9    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C10   | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C11   | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |

| Curve | Radius   | Delta     | Length | Chord Bearing | Chord Distance |
|-------|----------|-----------|--------|---------------|----------------|
| C1    | 2941.50' | 0°46'54"  | 91.47' | N08°53'31"E   | 91.46'         |
| C2    | 17.00'   | 90°50'33" | 28.95' | N42°24'46"E   | 24.22'         |
| C3    | 17.00'   | 90°50'33" | 28.95' | N46°15'45"W   | 24.22'         |
| C4    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C5    | 17.00'   | 90°50'33" | 28.70' | N44°46'59"E   | 24.04'         |
| C6    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C7    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C8    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C9    | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C10   | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |
| C11   | 2941.50' | 0°46'54"  | 91.44' | N08°53'31"E   | 91.44'         |

FINAL MAP OF  
FIDDYMONT RANCH PHASE 2  
VILLAGE 11-A3  
SUBDIVISION NO. PL4-0438

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA

RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2018

BEING A SUBDIVISION OF LOT 9 AS SHOWN ON THE FINAL MAP  
OF SUBDIVISION NO. PL-0384, ENTITLED "FIDDYMONT RANCH  
PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "DD" OF  
MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF SECTIONS  
13 AND 24, T. 11 N., R. 5 E., M.D.B. & M.

PLA JOB NO. 175021 SHEET 4 OF 6 SHEETS

SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.



| Line | Length | Bearing     | Distance |
|------|--------|-------------|----------|
| 1    | 17.00' | N07°00'00"E | 28.00'   |
| 2    | 26.00' | N07°00'00"E | 40.00'   |
| 3    | 22.99' | N07°00'00"E | 35.77'   |
| 4    | 22.99' | N07°00'00"E | 35.77'   |
| 5    | 22.99' | N07°00'00"E | 35.77'   |
| 6    | 22.99' | N07°00'00"E | 35.77'   |
| 7    | 22.99' | N07°00'00"E | 35.77'   |
| 8    | 22.99' | N07°00'00"E | 35.77'   |
| 9    | 22.99' | N07°00'00"E | 35.77'   |
| 10   | 22.99' | N07°00'00"E | 35.77'   |
| 11   | 22.99' | N07°00'00"E | 35.77'   |
| 12   | 22.99' | N07°00'00"E | 35.77'   |
| 13   | 22.99' | N07°00'00"E | 35.77'   |
| 14   | 22.99' | N07°00'00"E | 35.77'   |
| 15   | 22.99' | N07°00'00"E | 35.77'   |
| 16   | 22.99' | N07°00'00"E | 35.77'   |
| 17   | 22.99' | N07°00'00"E | 35.77'   |
| 18   | 22.99' | N07°00'00"E | 35.77'   |

| Curve | Radius | Delta     | Chord  | Chord Distance |
|-------|--------|-----------|--------|----------------|
| C1    | 17.00' | 90°00'00" | 28.00' | 28.00'         |
| C2    | 26.00' | 90°00'00" | 40.00' | 40.00'         |
| C3    | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C4    | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C5    | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C6    | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C7    | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C8    | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C9    | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C10   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C11   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C12   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C13   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C14   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C15   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C16   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C17   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C18   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C19   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C20   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C21   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C22   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C23   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C24   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C25   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C26   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C27   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C28   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C29   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C30   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C31   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C32   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C33   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C34   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C35   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C36   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C37   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C38   | 22.99' | 90°00'00" | 35.77' | 35.77'         |
| C39   | 22.99' | 90°00'00" | 35.77' | 35.77'         |

FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
VILLAGE 11-A3  
SUBDIVISION NO. P14-0438

BEING A SUBDIVISION OF LOT 9 AS SHOWN ON THE FINAL MAP OF SUBDIVISION NO. P1-0864, ENTITLED "FIDDYMENT RANCH PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "DPT" OF MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF SECTIONS 13 AND 24, T. 11 N., R. 5 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA

ROBERT-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2019

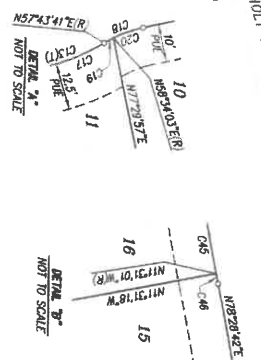
R14 JOB NO. 175021

SHEET 6 OF 6 SHEETS

SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.

VILLAGE F-12  
SUBDIVISION  
63 MAPS 21

| Curve | Radius  | Delta     | Length  | Chord Bearing | Chord Distance |
|-------|---------|-----------|---------|---------------|----------------|
| C1    | 240.00' | 115.50°   | 95.60'  | N165°10'W     | 515.67'        |
| C2    | 65.00'  | 67°11'00" | 78.00'  | N167°16'E     | 72.24'         |
| C3    | 300.00' | 24°31'16" | 128.82' | N163°46'E     | 123.23'        |
| C4    | 300.00' | 24°31'16" | 128.82' | N163°46'E     | 123.23'        |
| C5    | 300.00' | 24°31'16" | 128.82' | N163°46'E     | 123.23'        |
| C6    | 25.00'  | 28°14'21" | 38.87'  | N163°55'W     | 124.53'        |
| C7    | 65.00'  | 34°02'12" | 78.00'  | N163°55'W     | 72.24'         |
| C8    | 17.00'  | 89°14'50" | 28.48'  | N174°19'E     | 24.19'         |
| C9    | 17.00'  | 89°14'50" | 28.48'  | N174°19'E     | 24.19'         |
| C10   | 17.00'  | 89°14'50" | 28.48'  | N174°19'E     | 24.19'         |
| C11   | 17.00'  | 89°14'50" | 28.48'  | N174°19'E     | 24.19'         |
| C12   | 32.00'  | 19°32'08" | 54.85'  | N170°54'E     | 51.44'         |
| C13   | 32.00'  | 19°32'08" | 54.85'  | N170°54'E     | 51.44'         |
| C14   | 32.00'  | 19°32'08" | 54.85'  | N170°54'E     | 51.44'         |
| C15   | 32.00'  | 19°32'08" | 54.85'  | N170°54'E     | 51.44'         |
| C16   | 32.00'  | 19°32'08" | 54.85'  | N170°54'E     | 51.44'         |
| C17   | 32.00'  | 19°32'08" | 54.85'  | N170°54'E     | 51.44'         |
| C18   | 32.00'  | 19°32'08" | 54.85'  | N170°54'E     | 51.44'         |
| C19   | 32.00'  | 19°32'08" | 54.85'  | N170°54'E     | 51.44'         |
| C20   | 32.00'  | 19°32'08" | 54.85'  | N170°54'E     | 51.44'         |
| C21   | 233.00' | 107°05'   | 414.21' | N170°57'W     | 414.60'        |



FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
VILLAGE 11-A3  
SUBDIVISION NO. P14-0438

BEING A SUBDIVISION OF LOT 9 AS SHOWN ON THE FINAL MAP  
OF SUBDIVISION NO. P1-0364, ENTITLED "FIDDYMENT RANCH  
PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "DD" OF  
MAPS AT PAGE 68, OFFICIAL RECORDS, A PORTION OF SECTIONS  
13 AND 24, T. 11 N., R. 5 E., M.D.B. & M.

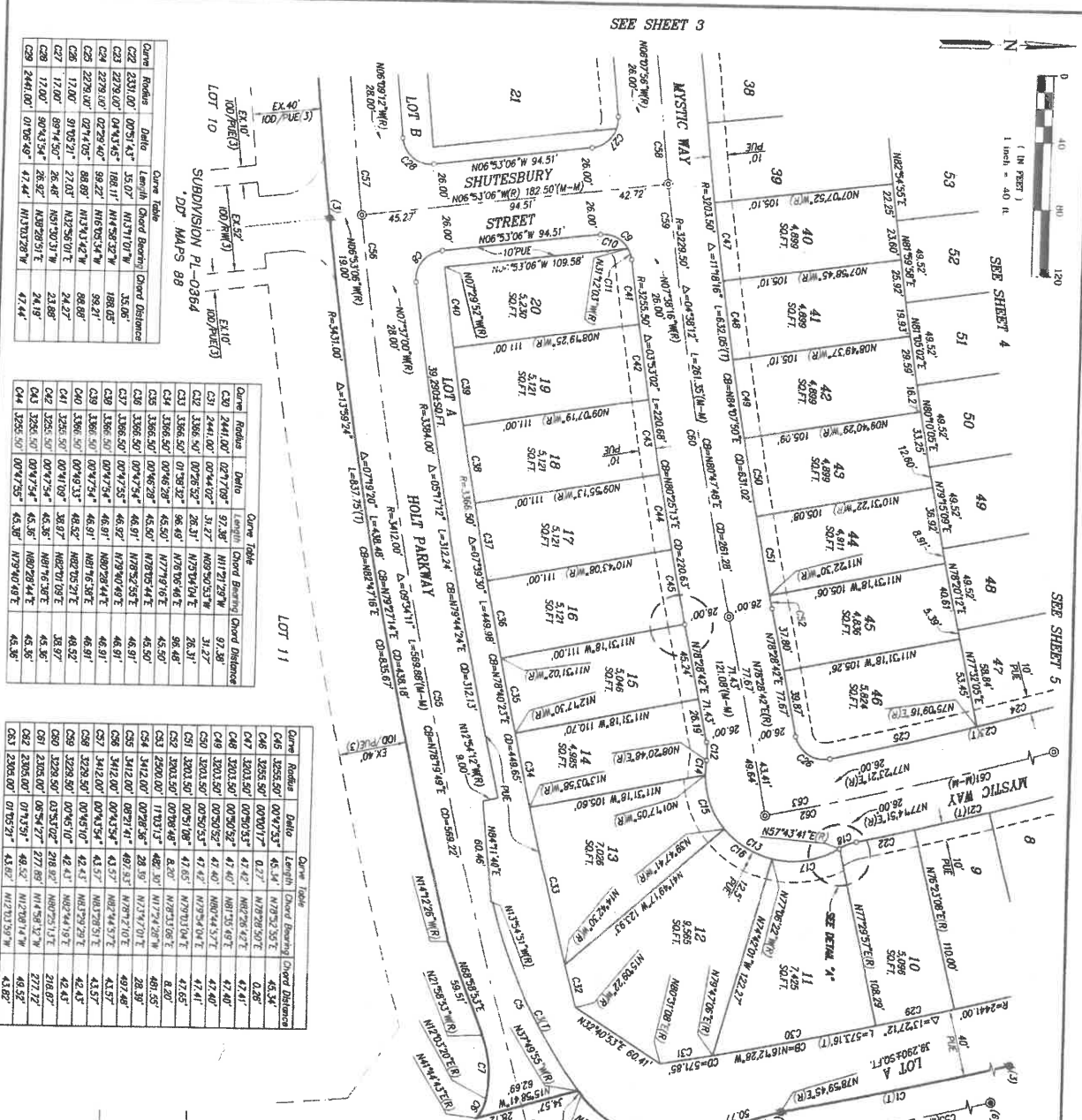
CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA

RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS

RIA JOB NO. 175021

JULY 2019

SHEET 8 OF 8 SHEETS



| Curve | Radius   | Delta    | Length | Chord Bearing | Chord Distance |
|-------|----------|----------|--------|---------------|----------------|
| C1    | 2441.00' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C2    | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C3    | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C4    | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C5    | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C6    | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C7    | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C8    | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C9    | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C10   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C11   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C12   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C13   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C14   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C15   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C16   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C17   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C18   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C19   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C20   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C21   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C22   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C23   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C24   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C25   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C26   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C27   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C28   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C29   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C30   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C31   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C32   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C33   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C34   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C35   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C36   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C37   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C38   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C39   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C40   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C41   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C42   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C43   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C44   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C45   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C46   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C47   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C48   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C49   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C50   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C51   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C52   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C53   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C54   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C55   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C56   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C57   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C58   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C59   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C60   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C61   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C62   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C63   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C64   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C65   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C66   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C67   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C68   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C69   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C70   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C71   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C72   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C73   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C74   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C75   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C76   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C77   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C78   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C79   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C80   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C81   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C82   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C83   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C84   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C85   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C86   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C87   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C88   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C89   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C90   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C91   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C92   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C93   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C94   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C95   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C96   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C97   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C98   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C99   | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |
| C100  | 3368.50' | 0°17'00" | 97.86' | N171°29'W     | 97.86'         |

SEE SHEET 3



## COUNCIL COMMUNICATION

CC #: 0986

File #: 0400-04-09-01

**Title:** Fiddymment Ranch Phase 2 Village F-12 - Notice of Completion

**Contact:** Darin Crockett 916-746-1324 dcrockett@roseville.ca.us

**Meeting Date:** 9/16/2020

**Item #:** 7.18.

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council adopt the attached resolution accepting Fiddymment Ranch Phase 2 Village F-12, CWJ#180171, as complete and authorizing the City Engineer to execute the Notice of Completion.

### BACKGROUND

The Engineering Division has made a final inspection of the above project and has found the roadway infrastructure work complete in accordance with the improvement plans and City specifications.

### FISCAL IMPACT

The actions requested as part of this action have no impact to the City's General Fund. Construction costs were paid by the developer.

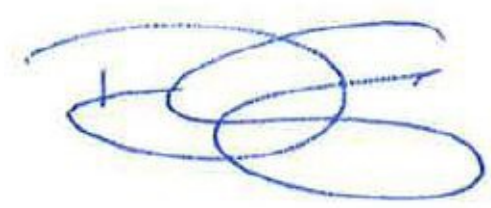
### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Accepting the Notice of Completion for the Fiddymment Ranch Phase 2 Village F-12 meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Darin Crockett, Construction Inspector

Mike Isom, Development Services Director



---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-365

NOC

Exhibit A

Final Map

RESOLUTION NO. 20-365

RESOLUTION OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS Fiddymment Ranch Phase 2 Village F-12 PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING THE DEDICATIONS OFFERED ON THE RECORDED MAP OF THE SUBDIVISION AS DESCRIBED BELOW.

BE IT RESOLVED by the Council of the City of Roseville as follows:

1. The "Notice of Completion" on file in the City Clerk's Department relative to that public work known as the Fiddymment Ranch Phase 2 Village F-12 is hereby approved and the public work accepted.
2. Except for Lot B, all other rights of way and easements as offered on the final map of Fiddymment Ranch Phase 2 Village F-12 recorded with Placer County Recorder's Office in Book EE of Maps, Page 77 is hereby accepted. Lot B offered for dedication on said map is not hereby accepted in fee as right of way and as a public utility easement.
3. The City Engineer is hereby authorized and directed to execute said Notice on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville, this \_\_\_\_ day of \_\_\_\_\_ 2020, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
CITY CLERK

RECORDING REQUESTED BY AND WHEN  
RECORDED MAIL TO:

CITY CLERK  
CITY OF ROSEVILLE  
311 VERNON STREET  
ROSEVILLE, CA 95678

Exempt from recording fees  
Pursuant to Gov't Code §27383

---

**NOTICE OF COMPLETION**

NOTICE IS HEREBY GIVEN that the public work of improvement known as the \_\_\_\_\_ Project was completed and accepted by the City of Roseville on \_\_\_\_\_. The location is situated in the City of Roseville, County of Placer, State of California and is indicated on the attached map, marked as Exhibit "A" and incorporated herein by this reference. The real property herein described is owned by the City of Roseville, 311 Vernon Street, Roseville CA 95678.

The direct/general contractor on said project was \_\_\_\_\_.

The surety on said project was \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_  
City of Roseville  
Owner

ATTEST:

\_\_\_\_\_  
Sonia Orozco, City Clerk

State of California    )  
County of Placer        )

I, \_\_\_\_\_, being first duly sworn, depose and say: I am the \_\_\_\_\_ of the City of Roseville, a municipal corporation in the State of California, owner of the property described in the above Notice. I am duly authorized to make this verification for and on behalf of the City of Roseville. I have read the Notice of Completion and know its contents and the facts stated therein are true.

\_\_\_\_\_

City of Roseville

|                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

State of California    )  
County of Placer        )

Subscribed and sworn to (or affirmed) before  
me on this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_, \_\_\_\_\_  
proved to me on the basis of satisfactory  
evidence to be the person(s) who appeared  
before me.

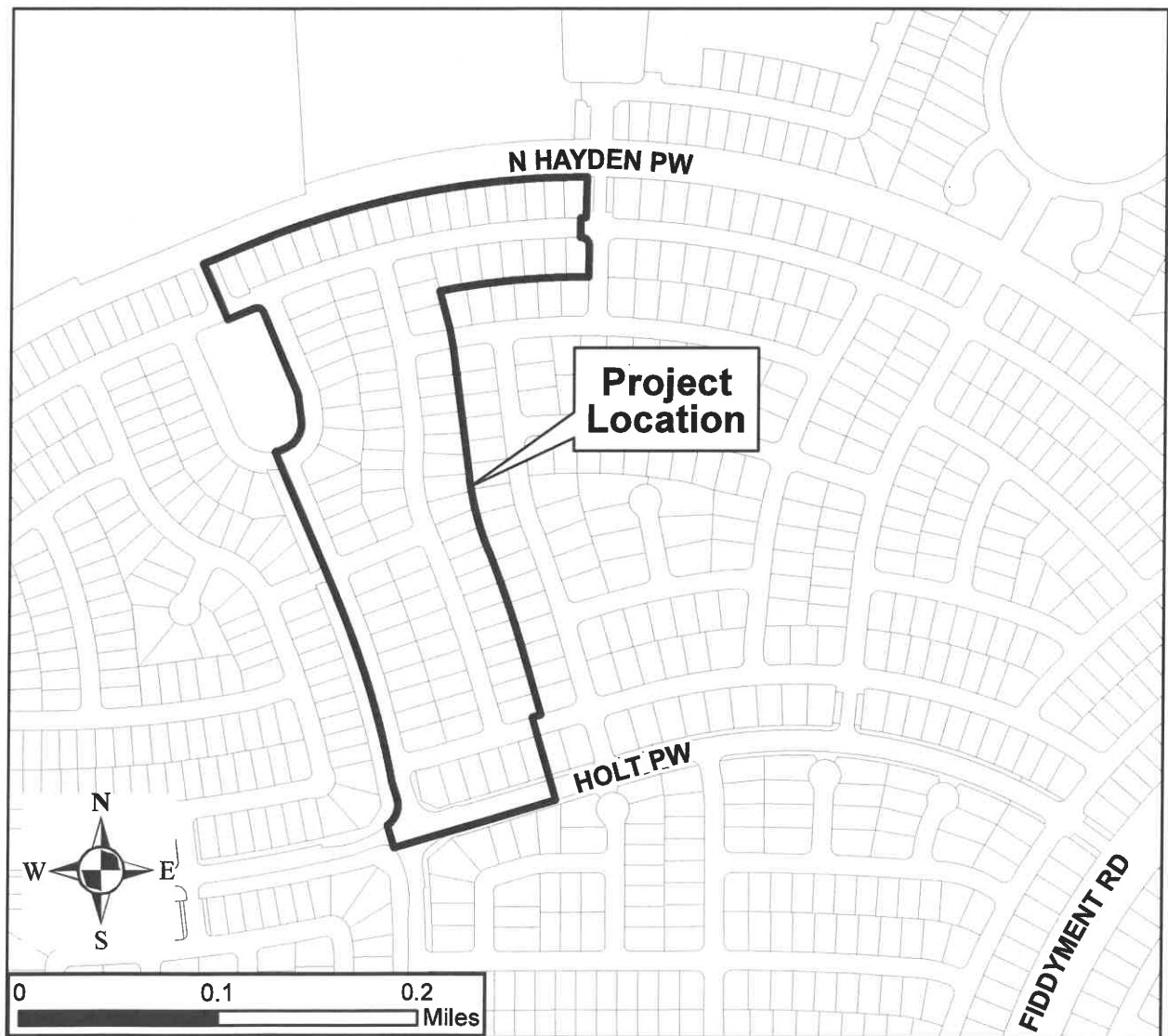
*Place Notary Seal and/or Stamp Above*

\_\_\_\_\_  
*Signature of Notary Public*



# EXHIBIT A

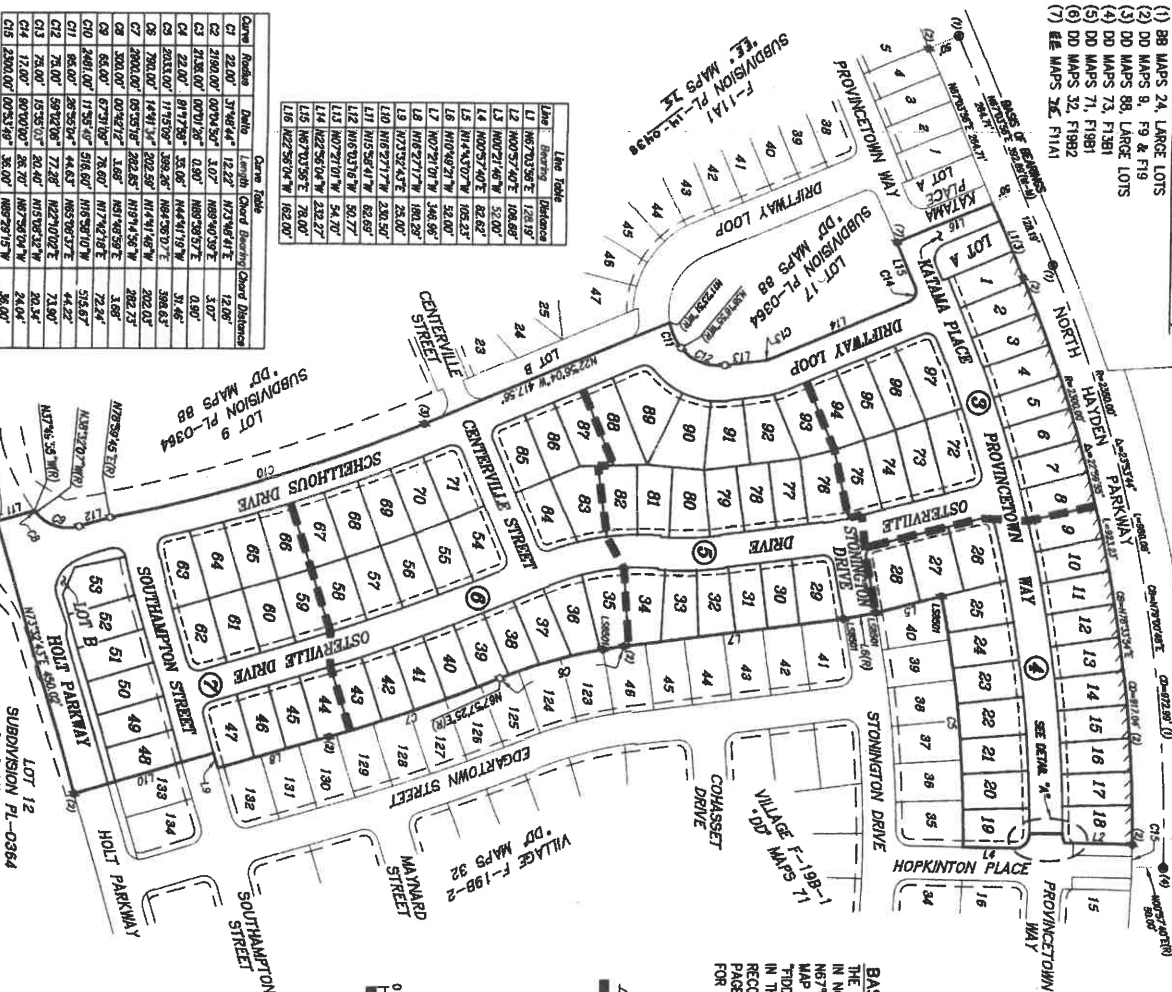
## City of Roseville Fiddymment Ranch Phase 2 Village F-12





REFERENCES (FIDDYMENT RANCH PHASE 2):

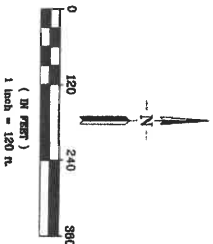
- (1) 88 MAPS 24, LARGE LOTS
- (2) 88 MAPS 8, 9 & 19
- (3) 88 MAPS 88, LARGE LOTS
- (4) 88 MAPS 73, 11381
- (5) 88 MAPS 71, 11381
- (6) 88 MAPS 32, 11382
- (7) 88 MAPS 12, 11381



**BASIS OF BEARINGS**  
 THE LINE BETWEEN FOUND MONUMENTS IN NORTH HAYDEN PARKWAY TAKEN AS 167°35'45" AS SHOWN ON THE FINAL MAP OF SUBDIVISION NO. 03-11, FIDDYMENT RANCH PHASE 2, ON FILE IN THE OFFICE OF THE PLACER COUNTY RECORDER IN BOOK 787 OF MAPS AT PAGE 24, IS THE BASIS OF BEARINGS FOR THIS MAP.

**BOUNDARY MAP**

- NO MONUMENT/BEARING POINTS LINE
- SHEET COVERAGE
- ⑤ SHEET NUMBER



- NOTES:**
1. ALL MONUMENT TIE LINES ARE AT RIGHT ANGLES TO THE MONUMENT LINE UNLESS OTHERWISE NOTED.
  2. REAR LOT CORNERS SHALL BE MARKED WITH 1/2" REBAR AND CAPPED WITH 1/2" BRASS DISK STAMPED LS 6441. FRONT AND SIDE LOT LINES SHALL BE 1" PROJECTED AND MARKED ON BACK OF SIDEWALK WITH 1" BRASS DISK STAMPED LS 6441.
  3. A GEOTECHNICAL ENGINEERING REPORT (WMA NO 5877.08) DATED 10/06/06 FOR THE FIDDYMENT RANCH II AND III INFRASTRUCTURE IMPROVEMENTS AND RESIDENTIAL DEVELOPMENT, WAS DONE BY WALLACE KUH, & ASSOCIATES, INC. AND IS ON FILE AT THE CITY OF ROSEVILLE DEVELOPMENT SERVICES-ENGINEERING NUMBER 306-660.
  4. PER SECTION 66434(g) OF THE SUBDIVISION MAP ACT, THE FILING OF THIS MAP DOES HEREBY ABANDON THE PORTION OF THE IRREVOCABLE OFFER OF DEDICATION "100 ROW" AND THE PUBLIC UTILITY EASEMENTS "TUE" AS SHOWN ON SUBDIVISION NO. PL-0364 ("DD" M 88) AS LIVING WITHIN THE BOUNDARY OF THIS MAP. SAID IRREVOCABLE OFFER OF DEDICATION AND PUBLIC UTILITY EASEMENTS ARE THEREFORE NOT SHOWN HEREON.
  5. TOTAL AREA OF THIS SUBDIVISION IS 19.85 ACRES, CONSISTING OF 97 RESIDENTIAL LOTS AND 2 LANDSCAPE LOTS.

**LEGEND**

- SUBDIVISION BOUNDARY
- LOT LINE
- EXISTING EASEMENT AS NOTED
- NEW EASEMENT AS NOTED
- CENTER LINE / MONUMENT LINE
- MONUMENT TIE LINE
- BRASS DISK IN STANDARD CITY OF ROSEVILLE MONUMENT BOX, STAMPED PER REFERENCE AS NOTED
- 5/8" REBAR WITH PLASTIC CAP
- STAMPED PER REFERENCE AS NOTED
- DIMENSION POINT
- SET BRASS DISK STAMPED LS 6441
- IN STANDARD CITY OF ROSEVILLE MONUMENT BOX
- SET 5/8" REBAR WITH PLASTIC CAP (UNLESS OTHERWISE NOTED)
- STAMPED LS 6441
- PUBLIC UTILITY EASEMENT
- IRREVOCABLE OFFER OF DEDICATION
- RIGHT OF WAY
- EX. EXISTING
- (M-W) MONUMENT TO MONUMENT
- (R) RADIAL BEARING
- (T) TOTAL
- (DATA) RECORD DATA & REFERENCE
- (S) SQUARE FEET

**FINAL MAP OF  
 FIDDYMENT RANCH PHASE 2  
 VILLAGE 12  
 SUBDIVISION NO. PL-0364**

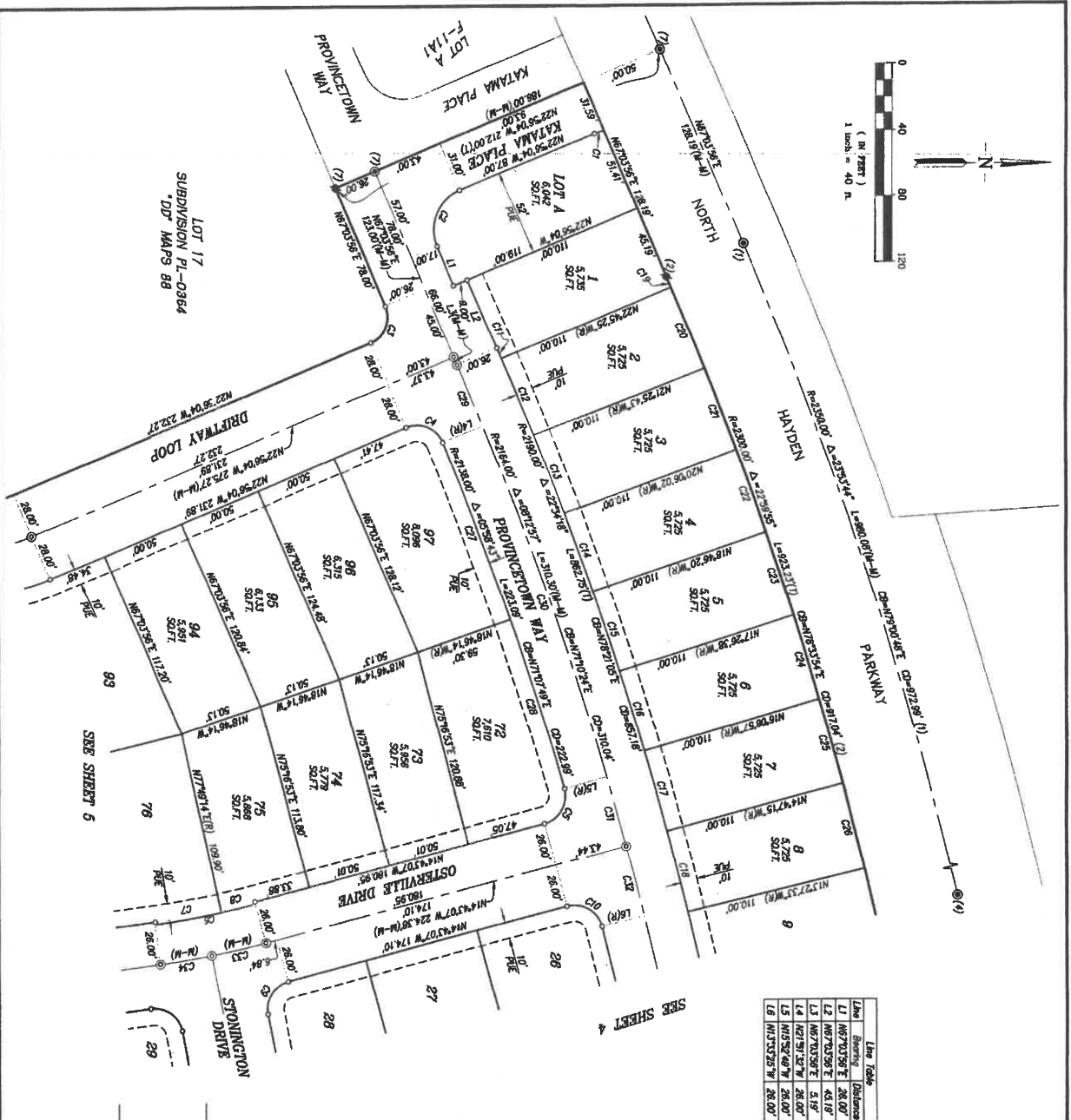
BEING A SUBDIVISION OF LOTS 5 AND 6 AS SHOWN ON THE FINAL MAP OF SUBDIVISION NO. PL-0364, ENTITLED "FIDDYMENT RANCH PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "DD" OF MAPS AT PAGE 68, OFFICIAL RECORDS, A PORTION OF SECTIONS 13 AND 24, T. 11 N., R. 6 E., M.D.B. & M.

CITY OF ROSEVILLE  
 PLACER COUNTY, CALIFORNIA

RUGGERI-JENSEN-AZAR  
 CIVIL ENGINEERS, PLANNERS, SURVEYORS  
 JULY 2019

BIA JOB NO. 176021 SHEET 2 OF 7 SHEETS

SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.



| Line | Bearing     | Distance |
|------|-------------|----------|
| 1    | N67°03'56\" | 28.00'   |
| 2    | N67°03'56\" | 43.19'   |
| 3    | N67°03'56\" | 5.19'    |
| 4    | N67°03'56\" | 28.00'   |
| 5    | N67°03'56\" | 28.00'   |
| 6    | N67°03'56\" | 28.00'   |

| Curve | Radius  | Delta       | Length | Chord Bearing | Chord Distance |
|-------|---------|-------------|--------|---------------|----------------|
| C1    | 31.00'  | 119°38'37\" | 6.04'  | N17°21'19\"   | 6.03'          |
| C2    | 28.00'  | 90°00'00\"  | 40.84' | N67°03'56\"   | 38.77'         |
| C3    | 17.00'  | 90°00'00\"  | 26.70' | N67°03'56\"   | 24.04'         |
| C4    | 17.00'  | 91°04'12\"  | 27.02' | N67°03'56\"   | 24.87'         |
| C5    | 17.00'  | 91°04'12\"  | 27.02' | N67°03'56\"   | 24.87'         |
| C6    | 478.60' | 07°22'06\"  | 60.86' | N17°03'56\"   | 60.92'         |
| C7    | 478.60' | 07°22'06\"  | 60.86' | N17°03'56\"   | 60.92'         |
| C8    | 12.00'  | 88°07'48\"  | 25.57' | N67°03'56\"   | 24.23'         |
| C9    | 12.00'  | 91°04'12\"  | 27.02' | N67°03'56\"   | 24.87'         |
| C10   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C11   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C12   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C13   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C14   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C15   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C16   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C17   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C18   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C19   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C20   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C21   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C22   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C23   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C24   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C25   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C26   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C27   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C28   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C29   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C30   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C31   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C32   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C33   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |
| C34   | 280.00' | 07°22'06\"  | 50.77' | N67°03'56\"   | 50.77'         |

FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
VILLAGE 12  
SUBDIVISION NO. PL4-0438

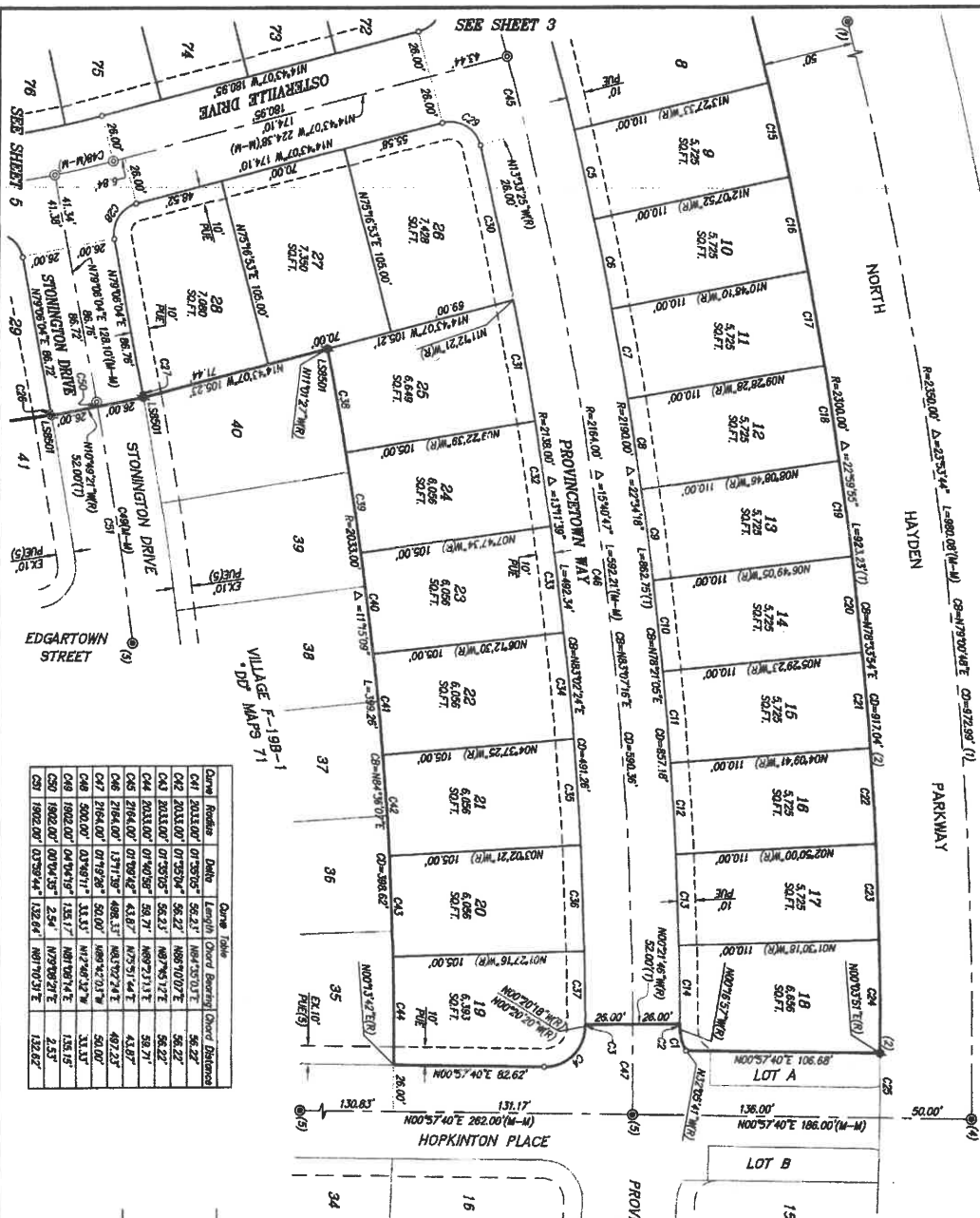
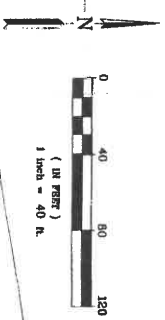
BEING A SUBDIVISION OF LOTS 5 AND 6 AS SHOWN ON THE  
FINAL MAP OF SUBDIVISION NO. PL-0344, ENTITLED "FIDDYMENT  
RANCH PHASE 2A," FILED SEPTEMBER 22, 2017, IN BOOK "DP"  
OF MAPS AT PAGE 98, OFFICIAL RECORDS, A PORTION OF  
SECTIONS 13 AND 24, T. 11 N., R. 5 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA

RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2019

RIA JOB NO. 1750231 SHEET 3 OF 7 SHEETS

SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.



| Curve | Radius   | Delta     | Length | Chord Bearing | Chord Distance |
|-------|----------|-----------|--------|---------------|----------------|
| C1    | 2033.00' | 07°55'04" | 56.23' | N64°55'03"E   | 56.23'         |
| C2    | 2033.00' | 07°55'04" | 56.23' | N68°10'07"E   | 56.23'         |
| C3    | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C4    | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C5    | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C6    | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C7    | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C8    | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C9    | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C10   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C11   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C12   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C13   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C14   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C15   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C16   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C17   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C18   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C19   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C20   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C21   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C22   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C23   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C24   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C25   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C26   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C27   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C28   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C29   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C30   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C31   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C32   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C33   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C34   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C35   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C36   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C37   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C38   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C39   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |
| C40   | 2033.00' | 07°55'04" | 56.23' | N69°56'37"E   | 56.23'         |

| Curve | Radius   | Delta     | Length | Chord Bearing | Chord Distance |
|-------|----------|-----------|--------|---------------|----------------|
| C1    | 22.00'   | 31°46'44" | 12.22' | N75°46'41"E   | 12.06'         |
| C2    | 2190.00' | 00°14'46" | 3.07'  | N69°50'39"E   | 3.07'          |
| C3    | 2190.00' | 00°14'46" | 3.07'  | N69°50'39"E   | 3.07'          |
| C4    | 22.00'   | 91°7'58"  | 35.06' | N44°41'19"W   | 31.46'         |
| C5    | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C6    | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C7    | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C8    | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C9    | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C10   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C11   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C12   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C13   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C14   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C15   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C16   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C17   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C18   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C19   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C20   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C21   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C22   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C23   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C24   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C25   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C26   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C27   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C28   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C29   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C30   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C31   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C32   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C33   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C34   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C35   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C36   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C37   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C38   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C39   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |
| C40   | 2190.00' | 01°19'42" | 50.77' | N75°12'18"E   | 50.76'         |

FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
VILLAGE 12  
SUBDIVISION NO. P14-0438

BEING A SUBDIVISION OF LOTS 5 AND 6 AS SHOWN ON THE  
FINAL MAP OF SUBDIVISION NO. P1-0384, ENTITLED "FIDDYMENT  
RANCH PHASE 2A," FILED SEPTEMBER 22, 2017, IN BOOK "D" OF  
MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF  
SECTIONS 13 AND 24, T. 11 N., R. 6 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA

RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS

JULY 2019

SHA JOB NO. 176021

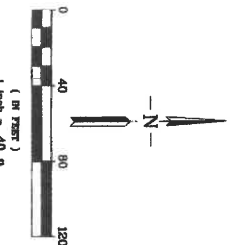
SHEET 4 OF 7 SHEETS

SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.

| Course | Angle   | Dist.     | Length | Course      | Angle   | Dist.  | Length |
|--------|---------|-----------|--------|-------------|---------|--------|--------|
| C1     | 12.07°  | 6670.47'  | 25.57' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C2     | 103.00° | 07074.35' | 2.57'  | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C3     | 103.00° | 07074.35' | 2.57'  | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C4     | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C5     | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C6     | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C7     | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C8     | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C9     | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C10    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C11    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C12    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C13    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C14    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C15    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C16    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C17    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C18    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C19    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C20    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C21    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C22    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C23    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C24    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C25    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C26    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C27    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C28    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C29    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C30    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C31    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C32    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C33    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C34    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C35    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C36    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C37    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C38    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C39    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C40    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C41    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |
| C42    | 17.00°  | 6672.00'  | 25.65' | N22°56'04"W | 117.20' | 6.210' | 23.87' |



| Line | Bearing     | Distance |
|------|-------------|----------|
| L1   | N65°55'47"W | 28.00'   |
| L2   | N45°10'55"W | 28.00'   |
| L3   | N45°10'55"W | 28.00'   |



FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
VILLAGE 12  
SUBDIVISION NO. PL4-0438

BEING A SUBDIVISION OF LOTS 6 AND 8 AS SHOWN ON THE  
FINAL MAP OF SUBDIVISION NO. PL-0384, ENTITLED "FIDDYMENT  
RANCH PHASE 2A," FILED SEPTEMBER 22, 2017, IN BOOK "DD"  
OF MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF  
SECTIONS 13 AND 24, T. 11 N., R. 5 E., M.D.B. & M.

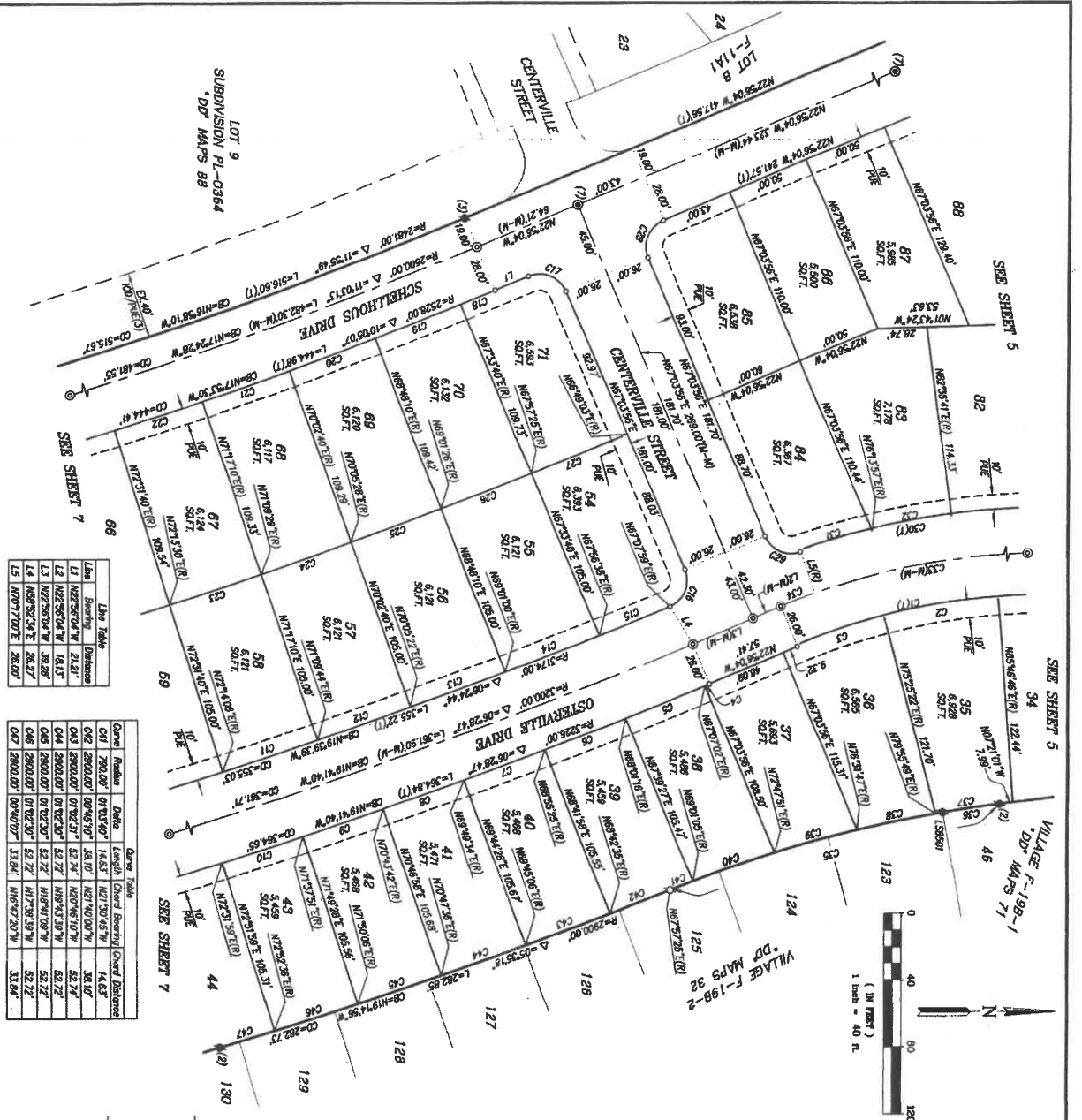
CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA

RUIGER-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2019

SHEET 5 OF 7 SHEETS



SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.



| Lot | Area   | Area   |
|-----|--------|--------|
| 123 | 123.44 | 123.44 |
| 124 | 124.70 | 124.70 |
| 125 | 125.00 | 125.00 |
| 126 | 126.00 | 126.00 |
| 127 | 127.00 | 127.00 |
| 128 | 128.00 | 128.00 |
| 129 | 129.00 | 129.00 |
| 130 | 130.00 | 130.00 |

| Comp | Radius | Delta   | Chord Bearing | Chord Distance |
|------|--------|---------|---------------|----------------|
| C1   | 780.00 | 0703.07 | N67°03'53"W   | 14.63          |
| C2   | 780.00 | 0703.07 | N67°03'53"W   | 14.63          |
| C3   | 780.00 | 0703.07 | N67°03'53"W   | 14.63          |
| C4   | 780.00 | 0703.07 | N67°03'53"W   | 14.63          |
| C5   | 780.00 | 0703.07 | N67°03'53"W   | 14.63          |
| C6   | 780.00 | 0703.07 | N67°03'53"W   | 14.63          |
| C7   | 780.00 | 0703.07 | N67°03'53"W   | 14.63          |
| C8   | 780.00 | 0703.07 | N67°03'53"W   | 14.63          |
| C9   | 780.00 | 0703.07 | N67°03'53"W   | 14.63          |
| C10  | 780.00 | 0703.07 | N67°03'53"W   | 14.63          |

| Comp | Radius | Delta   | Length | Chord Bearing | Chord Distance |
|------|--------|---------|--------|---------------|----------------|
| C1   | 374.00 | 1270.17 | 176.27 | N67°25'56"W   | 176.65         |
| C2   | 374.00 | 1021.54 | 67.60  | N67°25'56"W   | 67.97          |
| C3   | 374.00 | 1021.54 | 67.60  | N67°25'56"W   | 67.97          |
| C4   | 374.00 | 1021.54 | 67.60  | N67°25'56"W   | 67.97          |
| C5   | 374.00 | 1021.54 | 67.60  | N67°25'56"W   | 67.97          |
| C6   | 374.00 | 1021.54 | 67.60  | N67°25'56"W   | 67.97          |
| C7   | 374.00 | 1021.54 | 67.60  | N67°25'56"W   | 67.97          |
| C8   | 374.00 | 1021.54 | 67.60  | N67°25'56"W   | 67.97          |
| C9   | 374.00 | 1021.54 | 67.60  | N67°25'56"W   | 67.97          |
| C10  | 374.00 | 1021.54 | 67.60  | N67°25'56"W   | 67.97          |

FINAL MAP OF  
FIDDYMONT RANCH PHASE 2  
VILLAGE 12  
SUBDIVISION NO. P14-0438

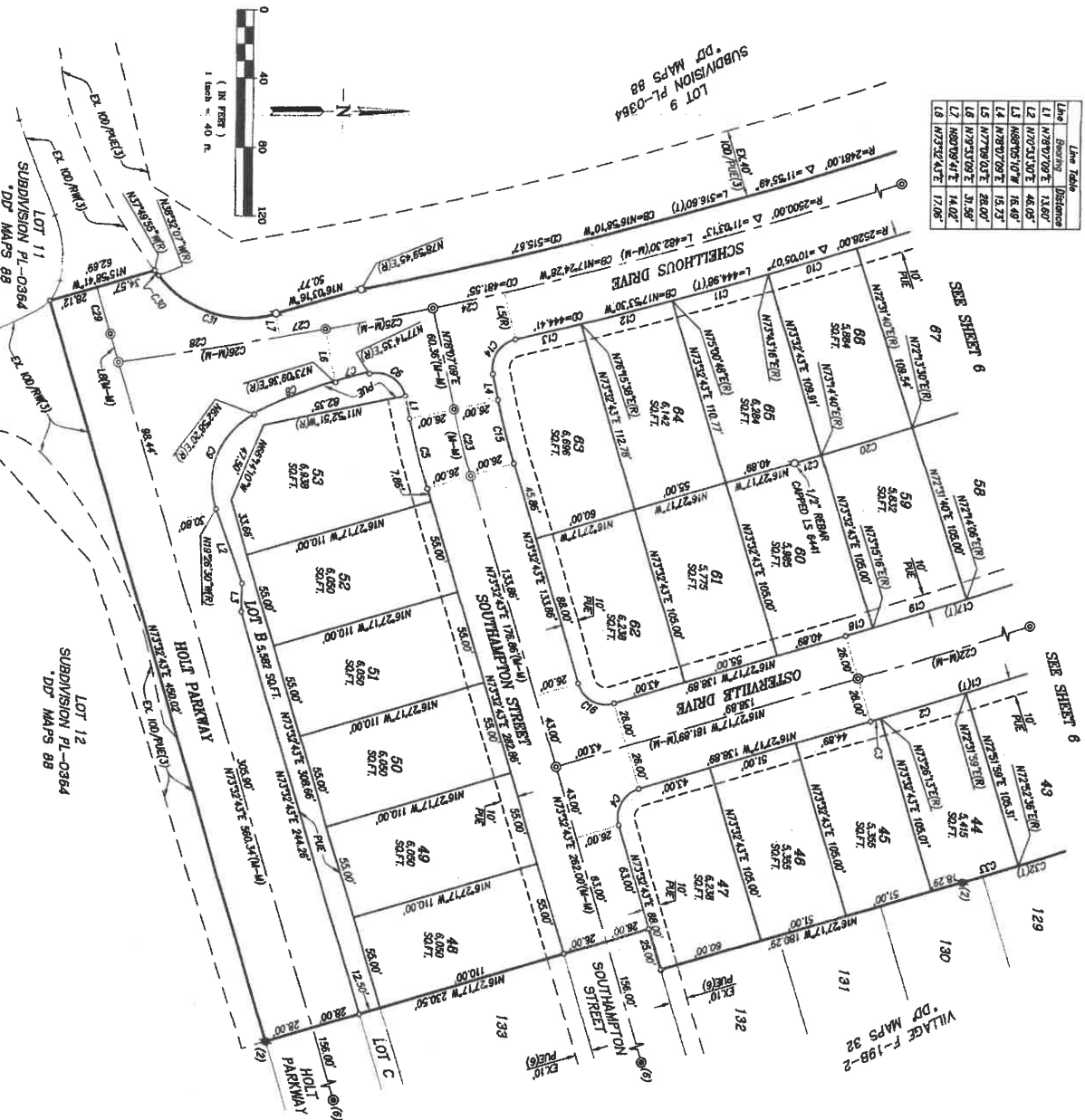
BRING A SUBDIVISION OF LOTS 6 AND 8 AS SHOWN ON THE  
FINAL MAP OF SUBDIVISION NO. PL-0364, ENTITLED "FIDDYMONT  
RANCH PHASE 2A," FILED SEPTEMBER 22, 2017, IN BOOK "PD"  
OF MAPS AT PAGE 89, OFFICIAL RECORDS, A PORTION OF  
SECTIONS 13 AND 24, T. 11 N., R. 5 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA  
RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2019

PLA JOB NO. 175021 SHEET 6 OF 7 SHEETS

SEE SHEET 2 FOR BASIS OF BEARINGS,  
LEGEND, NOTES, AND REFERENCES.

| Line | Bearing     | Distance |
|------|-------------|----------|
| L1   | N75°09'30"E | 13.00'   |
| L2   | N75°33'00"E | 46.00'   |
| L3   | N68°05'10"W | 16.40'   |
| L4   | N78°07'00"E | 15.73'   |
| L5   | N77°09'03"E | 28.00'   |
| L6   | N78°09'41"E | 31.50'   |
| L7   | N73°24'37"E | 14.02'   |
| L8   | N73°24'37"E | 17.06'   |



| Curve | Radius   | Delta     | Length  | Chord     | Bearing | Chord Distance |
|-------|----------|-----------|---------|-----------|---------|----------------|
| C1    | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C2    | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C3    | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C4    | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C5    | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C6    | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C7    | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C8    | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C9    | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C10   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C11   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C12   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C13   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C14   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C15   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C16   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C17   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C18   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C19   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C20   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C21   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C22   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C23   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C24   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C25   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C26   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C27   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C28   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C29   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C30   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C31   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C32   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |
| C33   | 3258.00' | 06°28'47" | 564.64' | 11941.40' | 304.65' |                |

# FINAL MAP OF FIDDYMENT RANCH PHASE 2 VILLAGE 12 SUBDIVISION NO. PL4-0438

BEING A SUBDIVISION OF LOTS 5 AND 6 AS SHOWN ON THE  
FINAL MAP OF SUBDIVISION NO. PL-0364, ENTITLED "FIDDYMENT  
RANCH PHASE 2A", FILED SEPTEMBER 22, 2017, IN BOOK "DP"  
OF MAPS AT PAGE 88, OFFICIAL RECORDS, A PORTION OF  
SECTIONS 13 AND 24, T. 11 N., R. 6 E., M.D.B. & M.

CITY OF ROSEVILLE  
PLACER COUNTY, CALIFORNIA  
RUGGERI-JENSEN-AZAR  
CIVIL ENGINEERS, PLANNERS, SURVEYORS  
JULY 2019  
SHEET 7 OF 7 SHEETS  
PLA JOB NO. 175021





## COUNCIL COMMUNICATION

**CC #: 0985**

**File #: 0400-04-09-01**

**Title:** Fiddymment Ranch Phase 2I Infrastructure Plans - Notice of Completion

**Contact:** Darin Crockett 916-746-1324 dcrockett@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 7.19.**

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council adopt the attached resolution accepting Fiddymment Ranch Phase 2I Infrastructure Plans, CWJ#180141, as complete and authorizing the City Engineer to execute the Notice of Completion.

### BACKGROUND

The Engineering Division has made a final inspection of the above project and has found the roadway infrastructure work complete in accordance with the improvement plans and City Specifications.

### FISCAL IMPACT

The actions requested as part of this action have no impact to the City's General Fund. Construction costs were paid by the developer.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a Notice of Completion meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Darin Crockett, Construction Inspector

Mike Isom, Development Services Director



---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-364

NOC

Exhibit A

Final Map BB

Final Map EE

RESOLUTION NO. 20-364

RESOLUTION OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS **Fiddymment Ranch Phase 21 Infrastructure** PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING A PORTION OF THE DEDICATIONS OFFERED ON THE RECORDED MAP OF THE SUBDIVISION.

BE IT RESOLVED by the Council of the City of Roseville as follows:

1. The "Notice of Completion" on file in the City Clerk's Department relative to that public work known as the **Fiddymment Ranch Phase 21 Infrastructure** is hereby approved and the public work accepted.
2. A portion of the right-of-way and easements offered for dedication on the final map of Fiddymment Ranch Phase 21 Infrastructure Plans recorded in Book BB of Maps, Page 24, and the Final Map of Fiddymment Ranch Phase Large Lot Subdivision Record in Book EE of Maps, Page 74 in the office of the recorder of Placer County, is hereby accepted by the City in part as said dedications relates to the improvement plan set known as **Fiddymment Ranch Phase 21 Infrastructure** Plans.
3. The City Engineer is hereby authorized and directed to execute said Notice on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville, this \_\_\_\_ day of \_\_\_\_ , 20\_\_\_\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
CITY CLERK

RECORDING REQUESTED BY AND WHEN  
RECORDED MAIL TO:

CITY CLERK  
CITY OF ROSEVILLE  
311 VERNON STREET  
ROSEVILLE, CA 95678

Exempt from recording fees  
Pursuant to Gov't Code §27383

---

**NOTICE OF COMPLETION**

NOTICE IS HEREBY GIVEN that the public work of improvement known as the \_\_\_\_\_ Project was completed and accepted by the City of Roseville on \_\_\_\_\_. The location is situated in the City of Roseville, County of Placer, State of California and is indicated on the attached map, marked as Exhibit "A" and incorporated herein by this reference. The real property herein described is owned by the City of Roseville, 311 Vernon Street, Roseville CA 95678.

The direct/general contractor on said project was \_\_\_\_\_.

The surety on said project was \_\_\_\_\_.

\_\_\_\_\_

City of Roseville  
Owner

ATTEST:

\_\_\_\_\_  
Sonia Orozco, City Clerk

State of California    )  
County of Placer        )

I, \_\_\_\_\_, being first duly sworn, depose and say: I am the \_\_\_\_\_ of the City of Roseville, a municipal corporation in the State of California, owner of the property described in the above Notice. I am duly authorized to make this verification for and on behalf of the City of Roseville. I have read the Notice of Completion and know its contents and the facts stated therein are true.

\_\_\_\_\_

City of Roseville

|                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

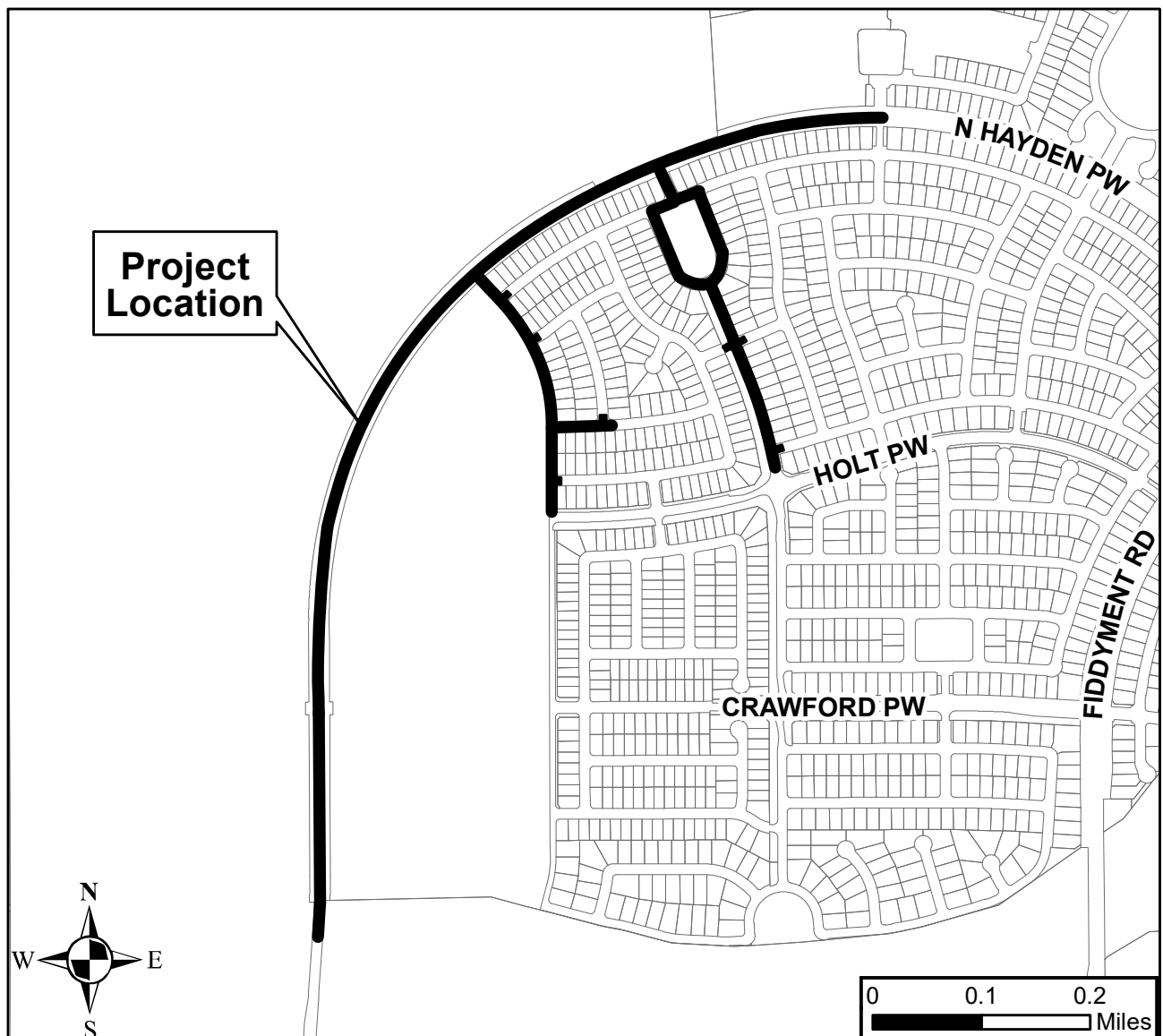
State of California    )  
County of Placer        )

Subscribed and sworn to (or affirmed) before  
me on this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_, \_\_\_\_\_  
proved to me on the basis of satisfactory  
evidence to be the person(s) who appeared  
before me.

*Place Notary Seal and/or Stamp Above*

\_\_\_\_\_  
*Signature of Notary Public*

**EXHIBIT A**  
City of Roseville  
Fiddymment Ranch Phase 2  
Infrastructure Plans  
North Hayden Parkway Backbone



## OWNER'S STATEMENT

THE UNDERSIGNED HEREBY CERTIFY THAT THEY ARE THE ONLY PERSONS HAVING ANY RECORD TITLE INTEREST IN THE LANDS SUBDIVIDED HEREIN, HEREBY CONSENT TO THE PREPARATION AND RECORDING OF THIS FINAL MAP OF "FIDDYMENT RANCH PHASE 2 LARGE LOT SUBDIVISION" AND OFFER FOR DEDICATION AND DO HEREBY DEDICATE AS PUBLIC RIGHTS-OF-WAY AND AS PUBLIC UTILITY EASEMENT THE PARKWAY, BOULEVARD, DRIVE, ROAD AND WAY AND DO HEREBY OFFER FOR DEDICATION AND DO HEREBY DEDICATE FOR SPECIFIC PURPOSES THE FOLLOWING:

- A. PUBLIC EASEMENTS FOR INSTALLATION AND MAINTENANCE OF, BUT NOT LIMITED TO, ELECTRIC, TRAFFIC CONTROL, APPURTENANCES, WATER, SEWER, DRAINAGE AND GAS PIPES, AND FOR UNDERGROUND WIRES AND CONDUITS FOR ELECTRICAL, TELEPHONE AND TELEVISION SERVICES, TOGETHER WITH WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER, UNDER AND ACROSS THOSE STRIPS OF LAND TWENTY FIVE FEET (25'), TWENTY FIVE FEET (25'), TWELVE AND ONE-HALF FEET (12.5') AND TEN FEET (10') IN WIDTH AND CONTIGUOUS TO THE PARKWAY, BOULEVARD, DRIVE, ROAD AND WAY SHOWN HEREIN AND DESIGNATED "P.U.E." (PUBLIC UTILITY EASEMENT), AND P.E. (PEDESTRIAN EASEMENT).

AND DO ALSO IRREVOCABLY OFFER FOR DEDICATION:

- B. LOTS 22 AND 27 IN FEE TO THE CITY OF ROSEVILLE FOR PUBLIC PARKS.  
C. LOTS 17 AND 18 IN FEE TO THE CITY OF ROSEVILLE FOR OPEN SPACE AS PARK PRESERVES.  
D. LOT 21 IN FEE TO THE CITY OF ROSEVILLE AS A WELL SITE.  
E. LOT 20 IN FEE TO THE CITY OF ROSEVILLE AS A COMMUNITY GARDEN.  
F. LOT 28 IS RESERVED FOR FUTURE DEDICATION AS SCHOOL SITES.  
G. AS RIGHT-OF-WAY AND P.U.E. THE STRIPS OF LAND DESIGNATED AS IRREVOCABLE OFFER OF DEDICATION. (I.O.D./ R/W)

ROSEVILLE/FIDDYMENT LAND VENTURE L.L.C.

A DELAWARE LIMITED LIABILITY COMPANY

BY: SIGNATURE AT FIDDYMENT, L.L.C. A CALIFORNIA LIMITED LIABILITY COMPANY, MEMBER  
BY: SIGNATURE PROPERTIES, INC., A CALIFORNIA CORPORATION, MANAGER

BY: MICHAEL J. GHELMETTI, PRESIDENT NAME: James C. Gheilmetti - C.B.O.  
TITLE: James C. Gheilmetti - C.B.O.

## NOTARY'S ACKNOWLEDGMENT

STATE OF CALIFORNIA }  
COUNTY OF PLACER } SS  
ON THE 25<sup>th</sup> DAY OF JULY, 2006, BEFORE ME, Robt Jensen  
Sherman, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY  
APPEARED, MICHAEL J. GHELMETTI AND  
JAMES C. GHELMETTI of PERSONALLY KNOWN TO ME OR  
PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S)  
WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND  
ACKNOWLEDGED TO ME THAT HE/SHE/IT/ THEY EXECUTED THE SAME IN HIS/HER/ THEIR  
AUTHORIZED CAPACITY(IES) AND THAT BY HIS/HER/ THEIR SIGNATURE(S) ON THE INSTRUMENT  
THE PERSON(S) OR THE ENTITY ON BEHALF OF WHICH THE PERSON(S) ACTED,  
EXECUTED THE INSTRUMENT.

WITNESS MY HAND: Robt Jensen  
PRINTED NAME: Robt Jensen  
MY PRINCIPAL PLACE OF BUSINESS IS THE  
COUNTY OF: PLACER  
MY COMMISSION EXPIRES: 01/10/2008  
MY COMMISSION NO.: 1453340

FINAL MAP OF  
**FIDDYMENT RANCH PHASE 2**  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11

A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF  
FIDDYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE  
RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N.,  
R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T.11 N., R.6 E., M.D.B.&M.

CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

**WOOD RODGERS**  
ENGINEERING • MAPS • PLANNING • SURVEYING  
3301 O St., Ste. 100-S Tel 916.341.7780  
Sacramento, CA 95815 Fax 916.341.7787

JULY 2006

## CITY CLERK'S STATEMENT

I HEREBY CERTIFY THAT THE CITY COUNCIL, CITY OF ROSEVILLE HAS  
APPROVED THIS FINAL MAP OF FIDDYMENT RANCH PHASE 2 LARGE LOT  
SUBDIVISION AND HAS ACCEPTED ON BEHALF OF THE PUBLIC, SUBJECT TO  
IMPROVEMENT, THE RIGHTS-OF-WAY AND EASEMENTS OFFERED HEREON FOR  
DEDICATION. THE CITY COUNCIL HAS REJECTED AT THIS TIME, BUT RESERVES  
THE RIGHT TO ACCEPT AT A LATER DATE, ON BEHALF OF THE PUBLIC ALL  
IRREVOCABLE OFFERS OF LAND AND RIGHTS-OF-WAY OFFERED HEREON, IN  
ACCORDANCE WITH THE TERMS OF THAT OFFER.

07-19-06  
DATED

Audrey Björns  
ASSISTANT CITY CLERK, CITY OF ROSEVILLE  
BY: \_\_\_\_\_  
DEPUTY

## NOTARY'S ACKNOWLEDGMENT

STATE OF CALIFORNIA }  
COUNTY OF Placer } SS  
ON THE 25 DAY OF July, 2006, BEFORE ME, Audrey Björns  
Björns, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY  
APPEARED, Rob Jensen.

PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S)  
WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND  
ACKNOWLEDGED TO ME THAT HE/SHE/IT/ THEY EXECUTED THE SAME IN HIS/HER/ THEIR  
AUTHORIZED CAPACITY(IES) AND THAT BY HIS/HER/ THEIR SIGNATURE(S) ON THE INSTRUMENT  
THE PERSON(S) OR THE ENTITY ON BEHALF OF WHICH THE PERSON(S) ACTED,  
EXECUTED THE INSTRUMENT.

WITNESS MY HAND: Audrey Björns  
PRINTED NAME: Audrey Björns  
MY PRINCIPAL PLACE OF BUSINESS IS THE  
COUNTY OF: Placer  
MY COMMISSION EXPIRES: 03-12-2009  
MY COMMISSION NO.: 1558257

## TRUSTEE/BENEFICIARY STATEMENTS

SEE SHEET TWO FOR TRUSTEE AND BENEFICIARY'S STATEMENTS.

## SURVEYOR'S STATEMENT

THIS FINAL MAP OF FIDDYMENT RANCH PHASE 2 LARGE LOT WAS PREPARED  
BY ME OR UNDER MY DIRECTION AND WAS BASED UPON A FIELD SURVEY IN  
CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND  
LOCAL ORDINANCES AT THE REQUEST OF ROSEVILLE/FIDDYMENT LAND  
VENTURE L.L.C. IN JANUARY, 2004. I HEREBY STATE THAT THIS FINAL MAP  
SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED  
TENTATIVE MAP. ALL MONUMENTS SHOWN HEREON ARE OF THE CHARACTER  
AND WILL OCCUPY THE POSITIONS INDICATED AND WILL BE SET BY JULY 1,  
2007, AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY  
TO BE RETRACED.



DCR  
DOUGLAS C. OFFENHAUGH  
P.L.S. 604 EXP. 01-30-07  
WOOD RODGERS, INC.  
DATE July 9, 2006

## CITY ENGINEER'S STATEMENT

I HEREBY STATE THAT I HAVE EXAMINED THIS FINAL MAP OF FIDDYMENT  
RANCH PHASE 2 LARGE LOT SUBDIVISION AND FIND IT TO BE SUBSTANTIALLY  
THE SAME AS THE TENTATIVE MAP ON FILE AND ANY APPROVED ALTERATIONS  
THEREOF; THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL  
APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.

Rob Jensen DATE 7-25-06  
ROB JENSEN  
CITY ENGINEER, CITY OF ROSEVILLE  
R.C.E. #33343 EXPIRATION DATE 6/30/07

I HEREBY STATE THAT I AM SATISFIED THAT THIS FINAL MAP OF FIDDYMENT  
RANCH PHASE 2 LARGE LOT SUBDIVISION IS TECHNICALLY CORRECT.

FOR ROB JENSEN, CITY ENGINEER, CITY OF ROSEVILLE  
Robert H. Blaser, P.E. DATE: 7/19/06  
ROBERT H. BLASER, P.E.  
R.C.E. #30232 EXPIRATION DATE 3/31/08

## RECORDER'S STATEMENT

FILED THIS 28<sup>th</sup> DAY OF July, 2006, AT 15:17  
2 M. O'CLOCK IN BOOK BB OF MAPS, AT PAGE 24,  
IN THE OFFICE OF THE PLACER COUNTY RECORDER.  
RECORDED AT THE REQUEST OF WOOD RODGERS, INC.

FILE NO. 2006-008197  
FEE \$ 68.00

JIM McCauley  
JIM McCAULEY  
PLACER COUNTY  
RECORDER

BY: Cgack  
DEPUTY

## TRUSTEES STATEMENT

AMERICAN SECURITIES COMPANY, A CALIFORNIA CORPORATION, AS TRUSTEE UNDER DEED OF TRUST RECORDED ON FEBRUARY 10, 2004, IN THE OFFICE OF THE PLACER COUNTY RECORDER UNDER RECORDER'S SERIAL NUMBER 2004-0013889, HEREBY CONSENTS TO THE PREPARATION AND RECORDATION OF THIS MAP:

BY: Jim J. O'Malley  
 PRINT: Lisa E. Schaeffer  
 TITLE: SVP

BY: James E. Rizzo  
 PRINT: Amy C. Rizzo  
 TITLE: AUP

## NOTARY'S ACKNOWLEDGMENT

STATE OF CALIFORNIA }  
 COUNTY OF Contra Costa } SS

ON THE 10<sup>th</sup> DAY OF July, 2006, BEFORE ME, Kathy J. Parsons, A NOTARY PUBLIC IN AND FOR SAID STATE, PERSONALLY APPEARED, Lisa E. Schaeffer & Amy C. Rizzo

BE PERSONALLY KNOWN TO ME OR PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/ THEY EXECUTED THE SAME IN HIS/HER/ THEIR AUTHORIZED CAPACITIES AND THAT BY HIS/HER/ THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S) OR THE ENTITY ON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

WITNESS MY HAND: Kathy J. Parsons  
 PRINTED NAME: KATHY J. PARSONS

MY PRINCIPAL PLACE OF BUSINESS IS THE  
 COUNTY OF: Contra Costa

MY COMMISSION EXPIRES: May 25, 2009  
 MY COMMISSION NO.: 1491846

## LEGEND

- DIMENSION POINT
- ✦ FOUND SECTION CORNER AS DESCRIBED ON SHEET 5
- ✦ FOUND 1/4 CORNER AS DESCRIBED ON SHEET 5
- ✦ FOUND 1/16 CORNER AS DESCRIBED ON SHEET 5
- ⊙ SET BRASS DISK STAMPED L.S. 8046 IN STANDARD CITY OF ROSEVILLE MONUMENT BOX PER CITY STANDARD DWG. ST-36
- ⊙ SET 5/8" REBAR W/ PLASTIC CAP STAMPED L.S. 8046
- ⊙ FOUND BRASS DISK STAMPED L.S. 8046 IN STANDARD CITY OF ROSEVILLE MONUMENT BOX PER CITY STANDARD DWG. ST-36
- ✦ FOUND 5/8" REBAR W/ PLASTIC CAP STAMPED L.S. 8046
- ( ) RECORD INFORMATION PER REFERENCE
- (R) RADIAL LINE
- OS OPEN SPACE
- O.A. OVERALL DIMENSION
- P.U.E. PUBLIC UTILITY EASEMENT
- P.E. PEDESTRIAN EASEMENT
- P.C.R. PLACER COUNTY OFFICIAL RECORDS
- I.O.D. IRREVOCABLE OFFER OF DEDICATION

## REFERENCES

- |                                 |                                                            |
|---------------------------------|------------------------------------------------------------|
| (1) Book 8 Surveys Page 4       | (8) Book 17 Parcel Maps Page 102                           |
| (2) Book 1 Surveys Page 15      | (9) Book 8 Surveys Page 5                                  |
| (3) Book 13 Surveys Page 18     | (10) Book 5 Maps Page 58                                   |
| (4) Book 26 Parcel Maps Page 93 | (11) Book X Maps Page 97                                   |
| (5) Book W Maps Page 377        | (12) Book AA Maps Page 10                                  |
| (6) Book 8 Surveys Page 106     | (13) LOT LINE ADJUSTMENT DOCUMENT No. 2006-0054208, P.C.R. |
| (7) Book 9 Surveys Page 56      | (14) LOT LINE ADJUSTMENT DOCUMENT No. 2006-0045172, P.C.R. |

## NOTES

1. THE TOTAL AREA FOR THIS SUBDIVISION IS 1217± ACRES GROSS, CONSISTING OF 37 LOTS.
2. THE LAND SHOWN HEREON BEING OF ALL OF SECTION 13 AND A PORTION OF SECTION 24, T. 11 N., R. 5 E., M.D.M. AND A PORTION OF SECTIONS 18 AND 19, T. 11 N., R. 5 E. M.D.M. IS HEREBY MERGED AND RESUBDIVIDED PER GOVERNMENT CODE, SECTION 66499.20 1/2.
3. A PRELIMINARY SOILS REPORT WAS PREPARED BY WALLACE-KUHL AND ASSOCIATES DATED FEBRUARY 18, 2004, FILE NO. 5877.01. A COPY OF THIS REPORT IS AVAILABLE FOR PUBLIC INSPECTION AT THE CITY OF ROSEVILLE ENGINEERING DEPARTMENT.
4. THIS PROPERTY IS SUBJECT TO THE CITY OF ROSEVILLE TREE PRESERVATION ORDINANCE NO. 2284, CHAPTER 16.10, TITLE 16 OF THE ROSEVILLE MUNICIPAL CODE.
5. ALL DISTANCES SHOWN HEREON ARE IN FEET AND DECIMAL PARTS THEREOF.
6. ALL CURVES ARE DIMENSIONED WITH RADIUS, DELTA, ARC LENGTH, CHORD BEARING AND CHORD DISTANCE. CHORD DISTANCES MAY CONTAIN SOME ROUNDING ERROR.
7. C.C. & R.'S WHICH AFFECT THIS FINAL MAP HAVE BEEN RECORDED AS DOCUMENT NO. 2005-0081545, P.C.R. AND AMENDED BY A DECLARATION OF ANNEXATION RECORDED AS DOCUMENT NO. 2006-0054208, P.C.R., AND AS DOCUMENT NO. 2006-0051059, P.C.R.

## CERTIFICATE FOR PUBLIC DEDICATION OF LAND

PURSUANT TO SECTION 68477.5 OF THE SUBDIVISION MAP ACT, THE CITY OF ROSEVILLE SHALL RECONVEY LOTS 20 AND 21 TO THE SUBDIVIDER NAMED BELOW IF A DETERMINATION IS MADE THAT THE SAME PUBLIC PURPOSE FOR WHICH THE FEE DEDICATION WAS REQUIRED DOES NOT EXIST, EXCEPT FOR ALL OR ANY PORTION OF THE PROPERTY THAT IS REQUIRED FOR THAT SAME PUBLIC PURPOSE OR FOR PUBLIC UTILITIES.

SUBDIVIDER: ROSEVILLE/FIDDYMENT LAND VENTURE L.L.C.,  
 A DELAWARE LIMITED LIABILITY COMPANY  
 BY: SIGNATURE AT FIDDYMENT, L.L.C.,  
 A CALIFORNIA LIMITED LIABILITY COMPANY, MEMBER  
 SIGNATURE PROPERTIES, INC.,  
 A CALIFORNIA CORPORATION, MANAGER  
 ADDRESS: 1322 BLUE OAKS BOULEVARD, SUITE 100  
 ROSEVILLE, CA 95678

## BASIS OF BEARINGS

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE EAST LINE OF THE NORTHEAST QUARTER OF SECTION 24, T. 11 N., R. 5 E., M.D.M., TAKEN AS NORTH 00°26'58" WEST PER THE MAP OF SUN CITY ROSEVILLE LARGE LOT SUBDIVISION ON FILE IN THE OFFICE OF THE PLACER COUNTY RECORDER IN BOOK "S" OF MAPS AT PAGE 58.

FINAL MAP OF  
**FIDDYMENT RANCH PHASE 2**  
 LARGE LOT SUBDIVISION  
 SUBDIVISION NO. 03-11

A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T. 11 N., R. 5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T. 11 N., R. 6 E., M.D.B.&M.

CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

JULY 2006

  
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 Sacramento, CA 95818 Fax 916.341.7767

Sheet 2 of 21



SUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF  
MENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE  
DED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N.,  
M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T. 11 N., R. 6 E., M.D.B.&M.

CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

  
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**LEGEND (THIS SHEET ONLY)**

 Found section corner as described in monument notes  
 Found 1/4 corner as described in monument notes  
 Found 1/16 corner as described in monument notes  
 GLO General Land Office  
 (e) Record data; see Sheet 4

Sheet 3 of 21

| LOT<br>NUMBER | WEST ROSEVILLE<br>SPECIFIC PLAN<br>NO. | LOT<br>NUMBER | WEST ROSEVILLE<br>SPECIFIC PLAN<br>NO. |
|---------------|----------------------------------------|---------------|----------------------------------------|
| 1             | F-54                                   | 19            | F-30                                   |
| 2             | F-34                                   | 20            | F-61                                   |
| 3             | F-30                                   | 21            | F-68                                   |
| 4             | F-35                                   | 22            | F-53                                   |
| 5             | F-65                                   | 23            | F-58                                   |
| 6             | F-6                                    | 24            | F-32                                   |
| 7             | F-7                                    | 25            | F-32                                   |
| 8             | F-8                                    | 26            | F-50                                   |
| 9             | F-9                                    | 27            | F-50                                   |
| 10            | F-9                                    | 28            | F-46                                   |
| 11            | F-11                                   | 29            | F-51                                   |
| 12            | F-12                                   | 30            | F-51                                   |
| 13            | F-13                                   | 31            | F-51                                   |
| 14            | F-14                                   | 32            | F-51                                   |
| 15            | F-15                                   | 33            | F-81                                   |
| 16            | F-16                                   | 34            | F-83                                   |
| 17            | F-17                                   | 35            | F-82                                   |
| 18            | F-63                                   | 36            | F-85                                   |

(Scale: 30 W 32.000.000 X2)

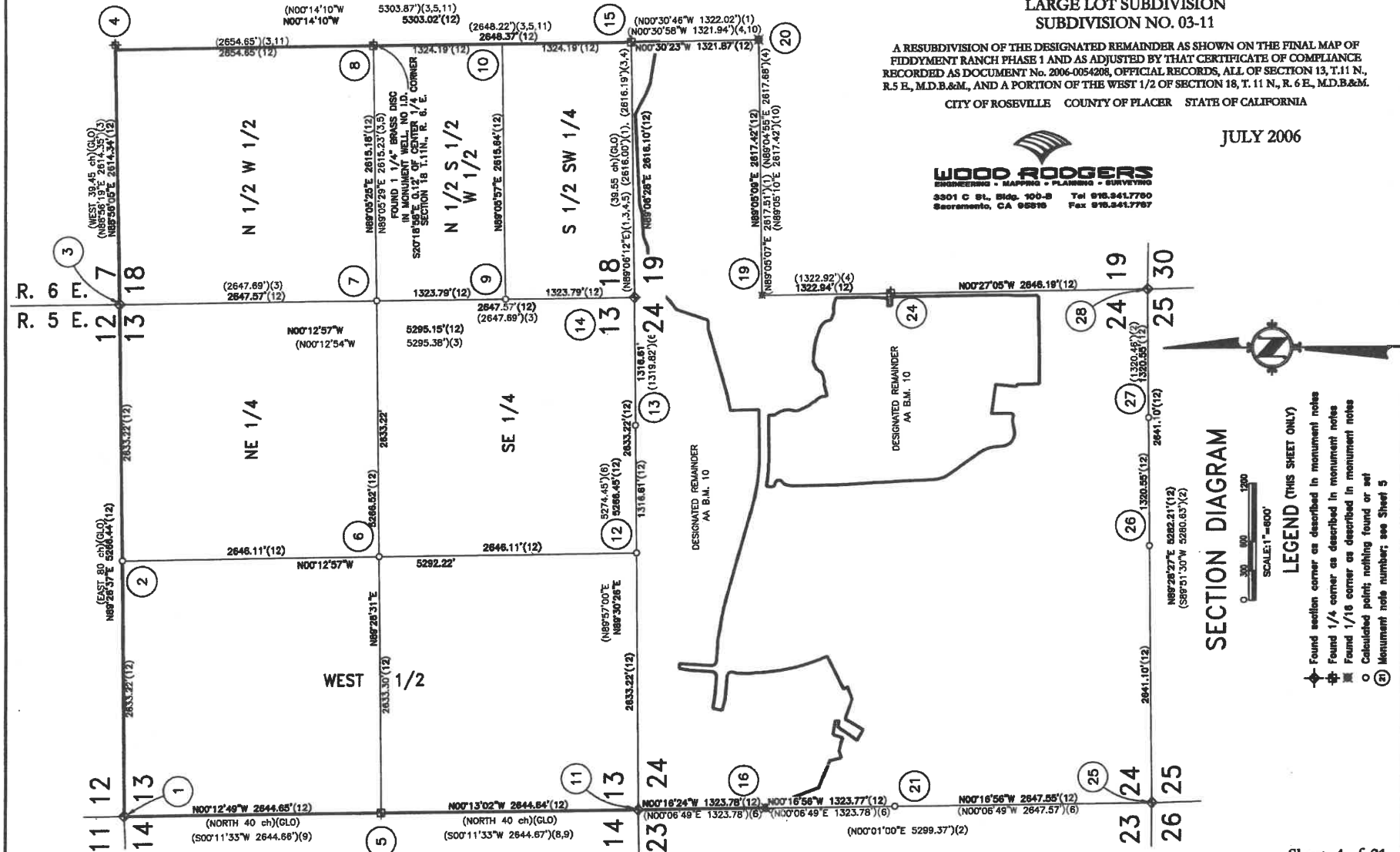
BOUNDARY DETAIL/SHEET INDEX

FINAL MAP OF  
FIDDYMMENT RANCH PHASE 2  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11

A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDEYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N., R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T.11 N., R.6 E., M.D.B.&M.

CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

JULY 2006



Sheet 4 of 21

## MONUMENT DESCRIPTIONS

1. Found 3/4" diameter rebar tagged RCE 7083 per Book 1 Surveys Page 67. Accepted as northwest corner Section 13, T11N, R5E.

2. Calculated position for 1/4 corner common to Sections 12 and 13; nothing found or set.

3. Found 2" diameter iron pipe per Book 13 Surveys Page 18 with 2" diameter brass disk stamped:



Accepted as section corner common to Sections 12 and 13 T11N R5E and Sections 7 and 18 T11N R5E.

4. Found 2" diameter iron pipe per Book 13 Surveys Page 18 with 2" diameter brass disk stamped:



Accepted as being on north line of Section 18. The position for the north quarter corner of Section 18 was established on the section line 50.00 feet westerly from this monument.

5. Found 2-1/2" diameter capped iron pipe per Book 17 Parcel Maps Page 102, stamped:



Accepted as west 1/4 corner of Section 13.

6. Calculated position for center 1/4 corner of Section 13. Nothing found or set.

7. Calculated position for east 1/4 corner of Section 13 established by single proportionate measurement. Nothing found or set.

8. Found 2" diameter brass disk in standard City of Roseville monument well not stamped:

Accepted as Center 1/4 of Section 18.

9. Calculated position for South 1/16 Corner common to Sections 13 and 18, established by single proportionate measurement. Nothing found or set.

10. Calculated position of Center South 1/16 Corner Section 18 established by single proportionate measurement. Nothing found or set.

11. Found 1-1/2" diameter iron pipe per Book 17 Parcel Maps Page 102 with 2" diameter brass disk stamped:



Accepted as Southwest Corner of Section 13.

12. Calculated position of south 1/4 corner Section 13 established by single proportionate measurement. Nothing found or set.

13. Calculated position of East 1/16 corner common to Sections 13 and 24 established by single proportionate measurement. Nothing found or set.

14. Found 2" diameter capped iron pipe per Book 8 Surveys Page 5 stamped:



Accepted as section corner common to Sections 13 and 24, T11N, R5E and Sections 18 and 19, T11N, R5E.

15. Found 2" diameter capped iron pipe per Book 8 Surveys Page 5, stamped:



Accepted as 1/4 corner common to Sections 18 and 19, T11N, R5E.

16. Found 1-1/4" diameter iron pipe per Book 8 Surveys Page 106 with 2" diameter brass disk stamped:



Accepted as North 1/16 Corner common to Sections 23 and 24, T11N, R5E.

19. 2-1/2" brass disc in standard City of Roseville monument well, set per AA BM 10, stamped:



Accepted as North 1/16 Corner common to Section 24 T11N, R5E and Section 19, T11N, R5E.

20. 2-1/2" brass disc in standard City of Roseville monument well, set per AA BM 10, stamped:



Accepted as Center North 1/16 Corner of Section 19, T11N, R5E.

21. Calculated position for 1/4 Corner common to Sections 23 and 24 established by single proportionate measurement. Nothing found or set.

24. Found 3" diameter brass disk in monument well per Book 8 Surveys Page 5, stamped:



Accepted as 1/4 corner common to Section 24, T11N, R5E and Section 19, T11N, R5E.

25. Found 1-1/2" diameter brass disk in concrete per Book 8 Surveys Page 106, stamped (Incorrectly):



Accepted as Section Corner common to Sections 23,24,25 and 26, T11N, R5E.

26. Calculated position of South 1/4 Corner Section 24, T11N, R5E, established by single proportionate measurement. Nothing found or set.

27. Calculated position of East 1/16 Corner Sections 24 and 25, T11N, R5E, established by single proportionate measurement. Nothing found or set.

28. 2-1/2" diameter brass disk in standard City of Roseville monument well set per AA BM 10, stamped:



Accepted as Section corner common to Sections 24 and 25, T11N, R5E and Sections 19 and 30, T11N, R5E.

FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11

A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N., R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T. 11 N., R. 6 E., M.D.B.&M.

CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

JULY 2006

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Sheet 5 of 21

# FINAL MAP OF FIDDYMENT RANCH PHASE 2 LARGE LOT SUBDIVISION SUBDIVISION NO. 03-11

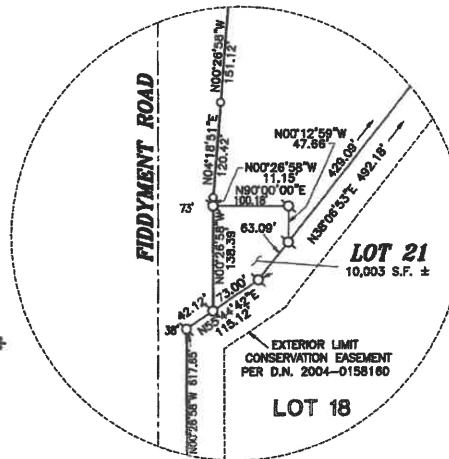
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CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

JULY 2006

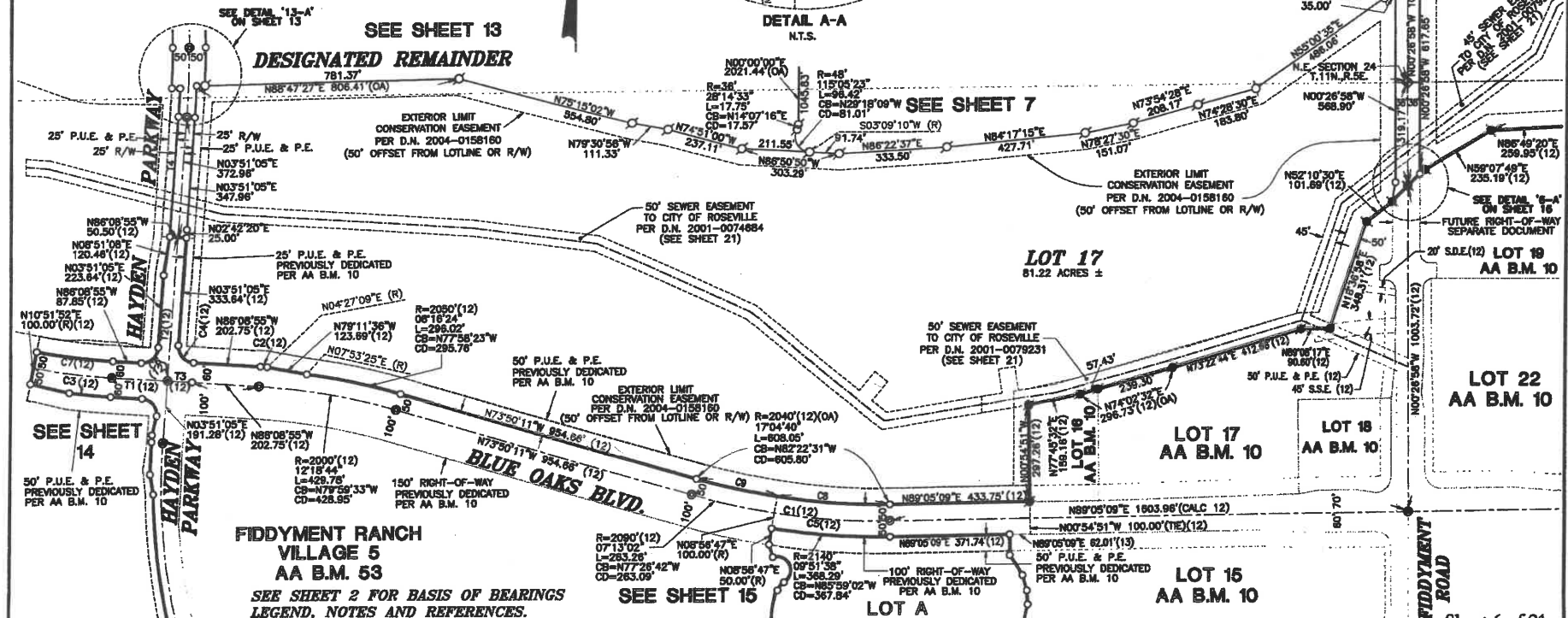
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Sacramento, CA 95816 Fax 916.341.7767

0 100 200 400  
SCALE: 1"=200'



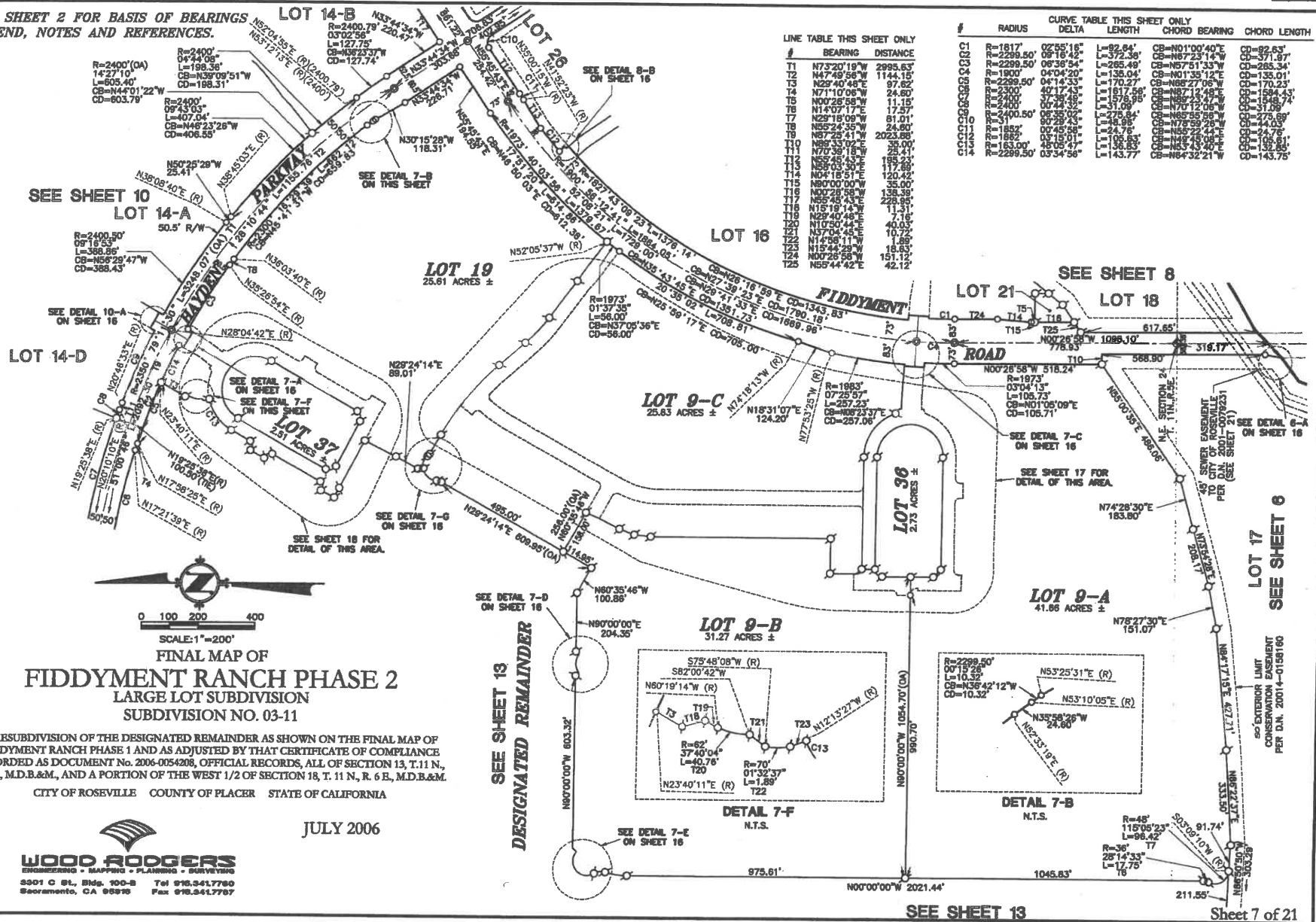
| #  | RADIUS  | CURVE DELTA | TABLE THIS SHEET ONLY LENGTH | CHORD BEARING  | CHORD DISTANCE |
|----|---------|-------------|------------------------------|----------------|----------------|
| C1 | R=2080' | 170°44'00"  | L=822.95'                    | CB=N82°22'31"W | CD=620.65'     |
| C2 | R=2080' | 00°36'04"   | L=21.61'                     | CB=N85°50'53"W | CD=21.61'      |
| C3 | R=2000' | 07°00'47"   | L=244.80'                    | CB=N82°38'31"W | CD=244.85'     |
| C4 | R=60'   | 80°00'00"   | L=78.54'                     | CB=N41°06'50"W | CD=70.71'      |
| C5 | R=2090' | 09°51'38"   | L=359.69'                    | CB=N83°59'02"W | CD=359.24'     |
| C6 | R=60'   | 80°00'00"   | L=78.54'                     | CB=N45°51'05"E | CD=70.71'      |
| C7 | R=1950' | 07°00'47"   | L=238.85'                    | CB=N82°38'32"W | CD=238.53'     |
| C8 | R=2040' | 09°51'38"   | L=351.05'                    | CB=N83°59'02"W | CD=350.80'     |
| C9 | R=2040' | 07°13'02"   | L=228.37'                    | CB=N77°28'42"W | CD=228.80'     |

| #  | BEARING     | DISTANCE |
|----|-------------|----------|
| T1 | N89°08'55"W | 173.35'  |
| T2 | N03°51'05"E | 443.84'  |
| T3 | N88°08'55"W | 75.50'   |
| T4 | N03°51'05"E | 372.96'  |



Sheet 6 of 21

SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.



SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.

| #   | RADIUS  | CURVE TABLE THIS SHEET ONLY<br>DELTA LENGTH | CHORD BEARING | CHORD DISTANCE            |
|-----|---------|---------------------------------------------|---------------|---------------------------|
| C1  | R=1800' | 04°04'20"                                   | L=135.04'     | CB=N01°35'12"E CD=135.01' |
| C2  | R=1800' | 03°15'01"                                   | L=105.53'     | CB=N49°45'08"E CD=105.51' |
| C3  | R=1800' | 00°45'56"                                   | L=24.78'      | CB=N55°22'44"E CD=24.76'  |
| C4  | R=1800' | 00°45'56"                                   | L=24.78'      | CB=N55°22'44"E CD=24.76'  |
| C5  | R=1800' | 00°45'56"                                   | L=24.78'      | CB=N55°22'44"E CD=24.76'  |
| C6  | R=1800' | 00°45'56"                                   | L=24.78'      | CB=N55°22'44"E CD=24.76'  |
| C7  | R=1800' | 00°45'56"                                   | L=24.78'      | CB=N55°22'44"E CD=24.76'  |
| C8  | R=1800' | 00°45'56"                                   | L=24.78'      | CB=N55°22'44"E CD=24.76'  |
| C9  | R=1800' | 00°45'56"                                   | L=24.78'      | CB=N55°22'44"E CD=24.76'  |
| C10 | R=1800' | 00°45'56"                                   | L=24.78'      | CB=N55°22'44"E CD=24.76'  |

| #   | BEARING     | DISTANCE |
|-----|-------------|----------|
| T1  | N00°28'58"W | 319.17'  |
| T2  | N35°43'45"E | 1351.73' |
| T3  | N29°41'33"E | 1689.95' |
| T4  | N33°44'34"W | 220.00'  |
| T5  | N33°44'34"W | 402.95'  |
| T6  | N33°44'34"W | 220.00'  |
| T7  | N55°00'35"E | 488.06'  |
| T8  | N55°00'35"E | 35.00'   |
| T9  | N55°45'43"E | 194.55'  |
| T10 | N33°44'34"W | 220.47'  |
| T11 | N55°45'43"E | 228.95'  |
| T12 | N27°38'23"E | 1780.18' |
| T13 | N16°31'07"E | 124.20'  |
| T14 | N00°28'58"W | 151.12'  |
| T15 | N00°28'58"W | 1098.10' |

0 100 200 400  
SCALE: 1"=200'

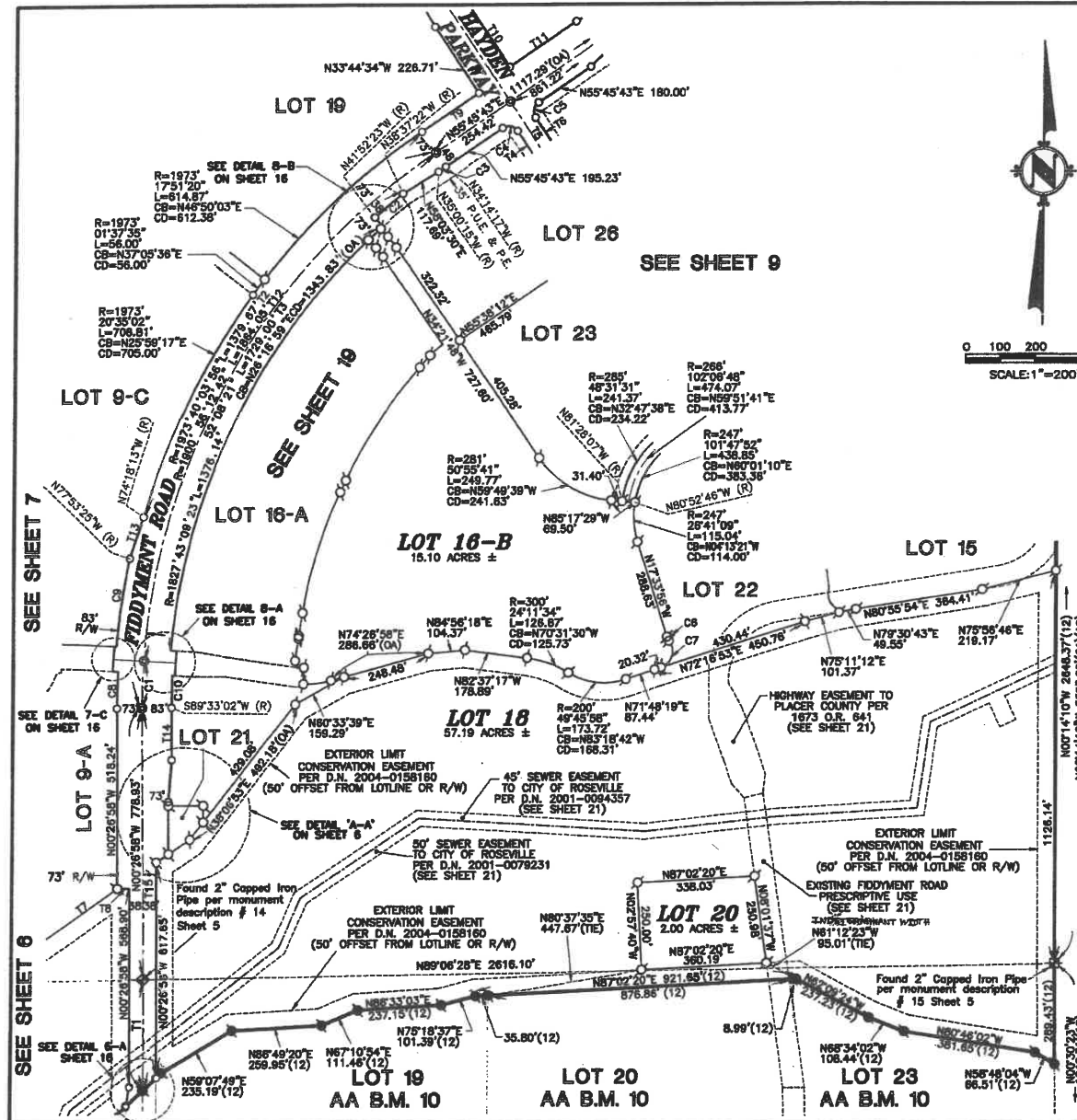
# FINAL MAP OF FIDDYMENT RANCH PHASE 2 LARGE LOT SUBDIVISION SUBDIVISION NO. 03-11

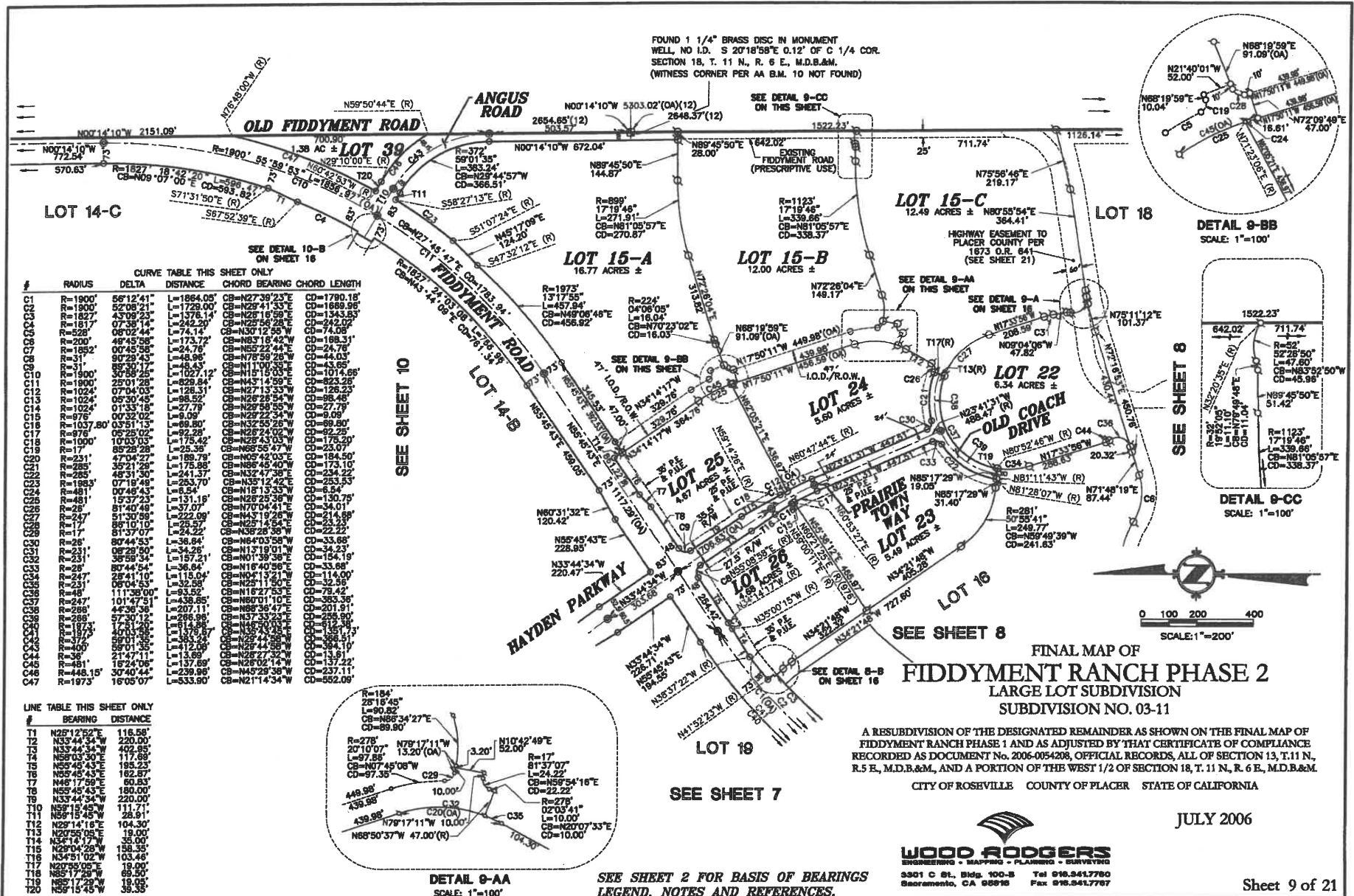
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JULY 2006

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Sacramento, CA 95816 Fax 916.941.7707

Sheet 8 of 21







| #       | RADIUS    | DELTA     | LENGTH         | CHORD BEARING | CHORD LENGTH |
|---------|-----------|-----------|----------------|---------------|--------------|
| R=1973' | 18'05.07" | L=533.90' | R=82°11'43.47" | C=552.05'     |              |
| R=2400' | 00°44.32" | L=31.03'  | R=81°52'00.00" | C=0.95'       |              |
| R=2400' | 00°50.50" | L=275.84' | R=80°55'58.56" | C=275.69'     |              |
| R=17'   | 90°00.00" | L=26.70'  | R=79°54'56.56" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=79°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=78°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=77°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=76°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=75°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=74°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=73°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=72°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=71°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=70°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=69°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=68°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=67°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=66°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=65°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=64°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=63°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=62°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=61°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=60°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=59°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=58°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=57°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=56°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=55°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=54°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=53°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=52°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=51°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=50°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=49°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=48°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=47°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=46°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=45°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=44°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=43°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=42°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=41°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=40°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=39°00'00.00" | C=24.04'      |              |
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| R=17'   | 90°00.00" | L=26.70'  | R=37°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=36°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=35°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=34°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=33°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=32°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=31°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=30°00'00.00" | C=24.04'      |              |
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| R=17'   | 90°00.00" | L=26.70'  | R=24°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=23°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=22°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=21°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=20°00'00.00" | C=24.04'      |              |
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| R=17'   | 90°00.00" | L=26.70'  | R=17°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=16°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=15°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=14°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=13°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=12°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=11°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=10°00'00.00" | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=9°00'00.00"  | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=8°00'00.00"  | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=7°00'00.00"  | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=6°00'00.00"  | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=5°00'00.00"  | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=4°00'00.00"  | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=3°00'00.00"  | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=2°00'00.00"  | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=1°00'00.00"  | C=24.04'      |              |
| R=17'   | 90°00.00" | L=26.70'  | R=0°00'00.00"  | C=24.04'      |              |

| LINE TABLE THIS SHEET ONLY |             |          |     |             |          |
|----------------------------|-------------|----------|-----|-------------|----------|
| #                          | BEARING     | DISTANCE | #   | BEARING     | DISTANCE |
| T1                         | N70°38'15"W | 25.51    | T15 | N70°11'03"E | 24.60    |
| T2                         | N69°55'44"W | 10.00    | T9  | N62°45'19"E | 195.23   |
| T3                         | N69°55'44"W | 10.00    | T17 | N34°44'34"W | 220.00   |
| T4                         | N29°04'16"E | 58.00    | T18 | N34°44'34"W | 220.00   |
| T5                         | N69°55'44"W | 10.00    | T19 | N62°45'19"E | 201.77   |
| T6                         | N29°04'16"E | 208.00   | T20 | N29°15'45"E | 111.71   |
| T7                         | N69°55'44"W | 10.00    | T22 | N29°15'45"E | 116.58   |
| T8                         | N69°55'44"W | 10.00    | T23 | N61°54'45"E | 28.91    |
| T9                         | N69°55'44"W | 10.00    | T24 | N61°54'45"E | 28.91    |
| T10                        | N29°04'16"E | 51.00    | T25 | N16°57'48"E | 47.00    |
| T11                        | N69°55'44"W | 10.00    | T26 | N29°15'02"E | 320.58   |
| T12                        | N69°55'44"W | 10.00    | T27 | N29°15'02"E | 320.58   |
| T13                        | N69°55'44"W | 51.00    |     |             |          |

FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11

A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDYDENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N., R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T. 11 N., R. 6 E., M.D.B.&M.

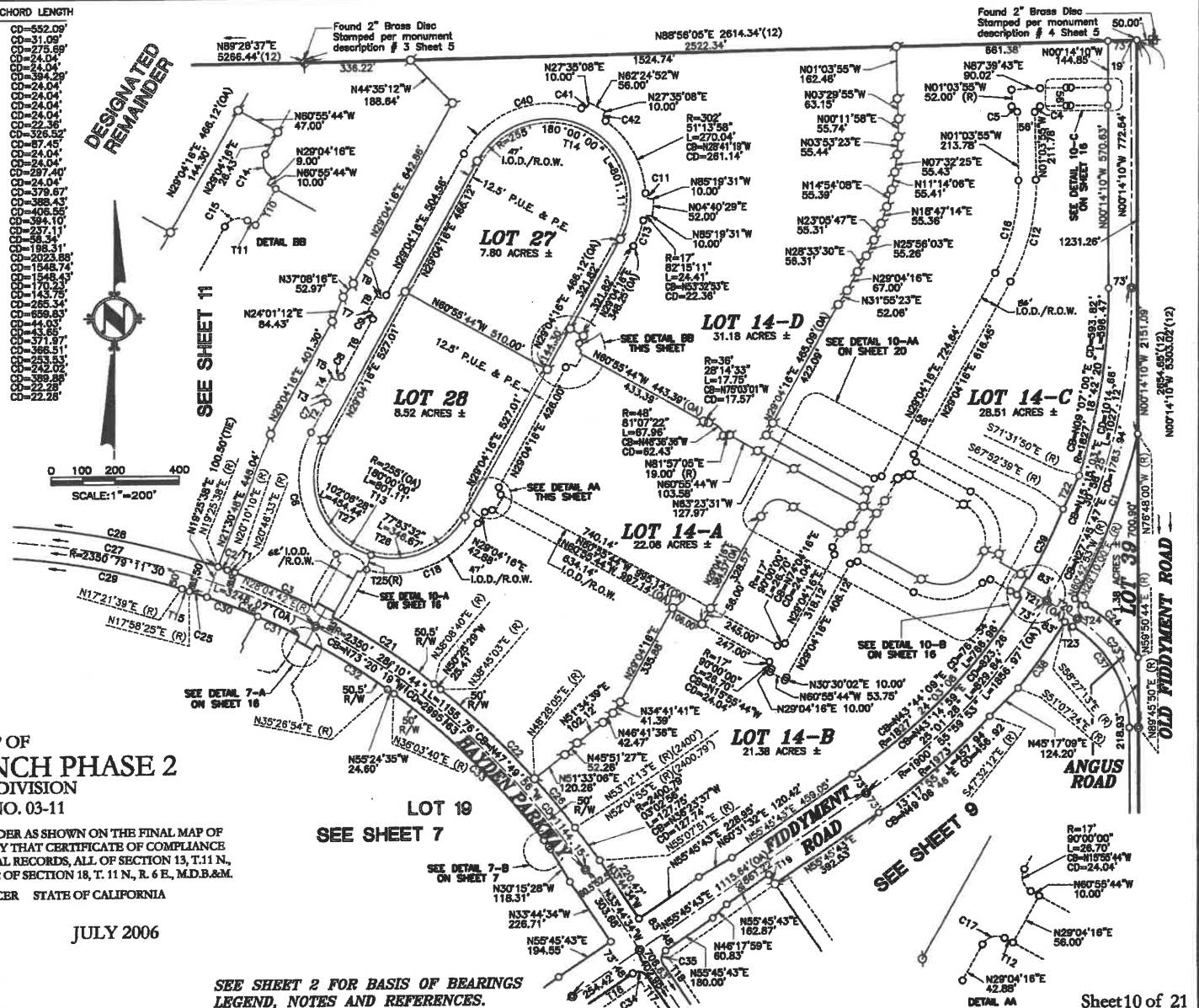
CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

JULY 2006

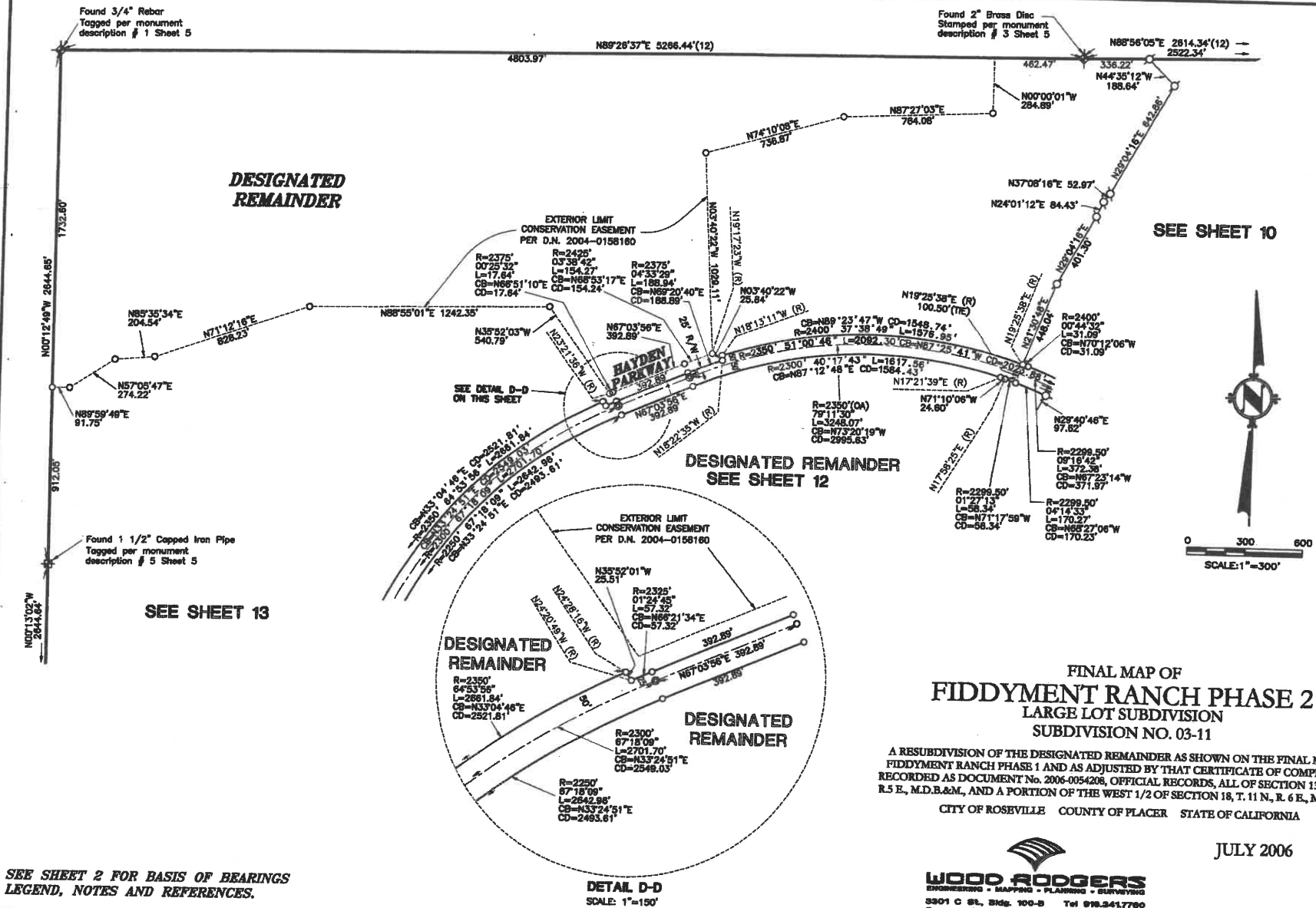


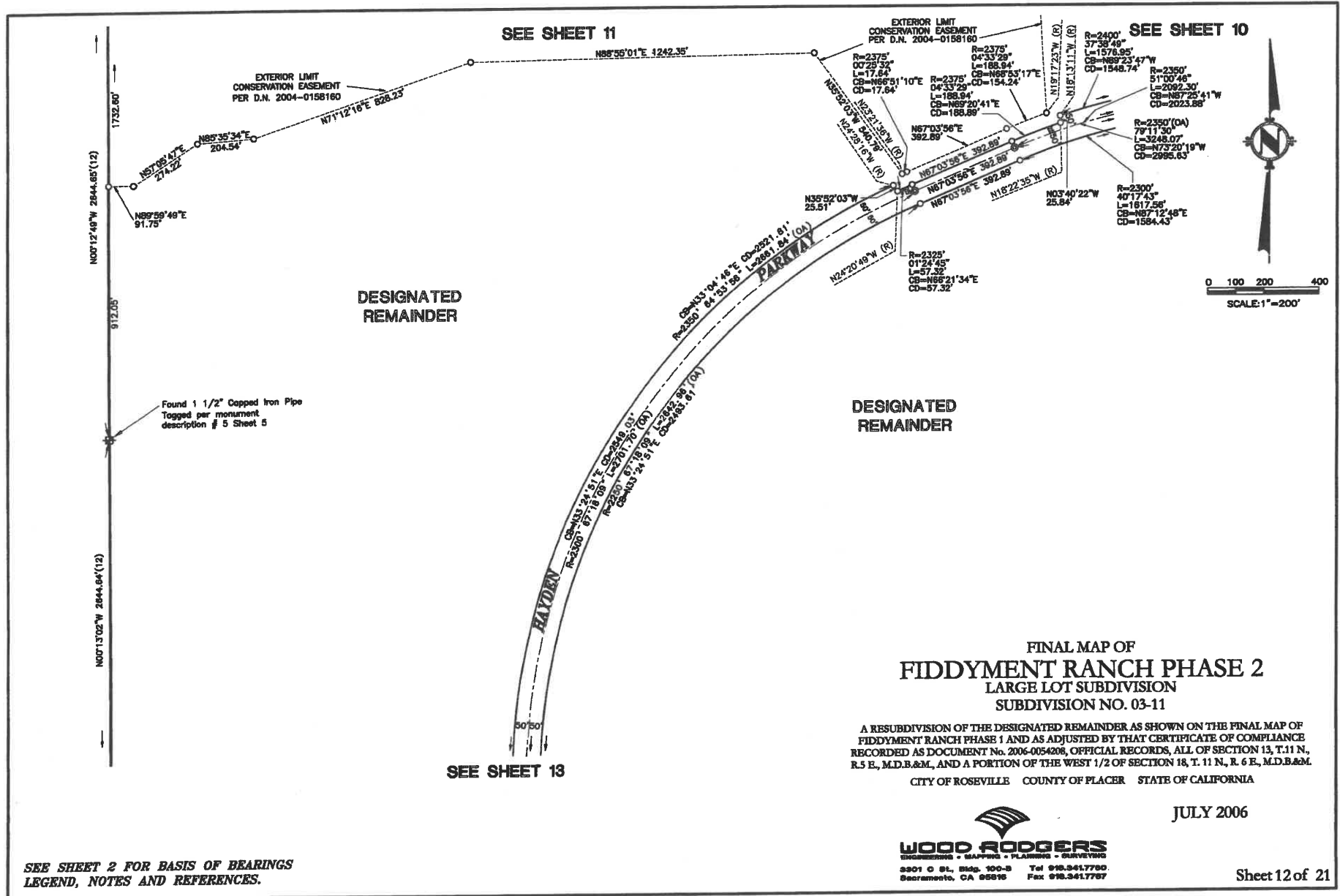
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Sacramento, CA 95816 Fax 916.341.7787

**SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.**









SEE SHEET 12

**DESIGNATED  
REMAINDER**

FINAL MAP OF  
**FIDDYMENT RANCH PHASE 2**  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11

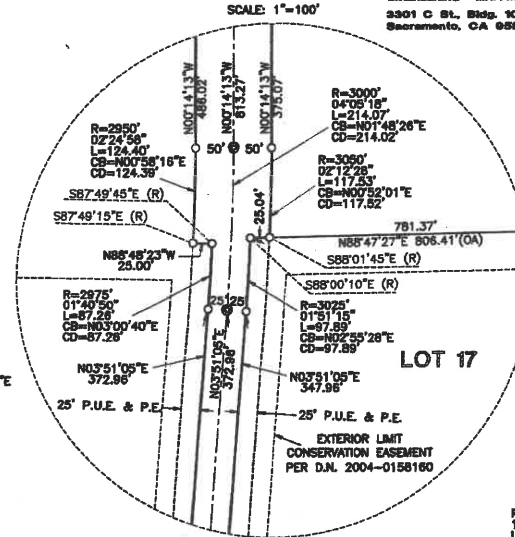
A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N., R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T. 11 N., R. 6 E., M.D.B.&M. CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

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DETAIL 13-A

SCALE: 1"=100'



SEE SHEET 7

LOT 9-A

SEE SHEET 14

SEE SHEET 6

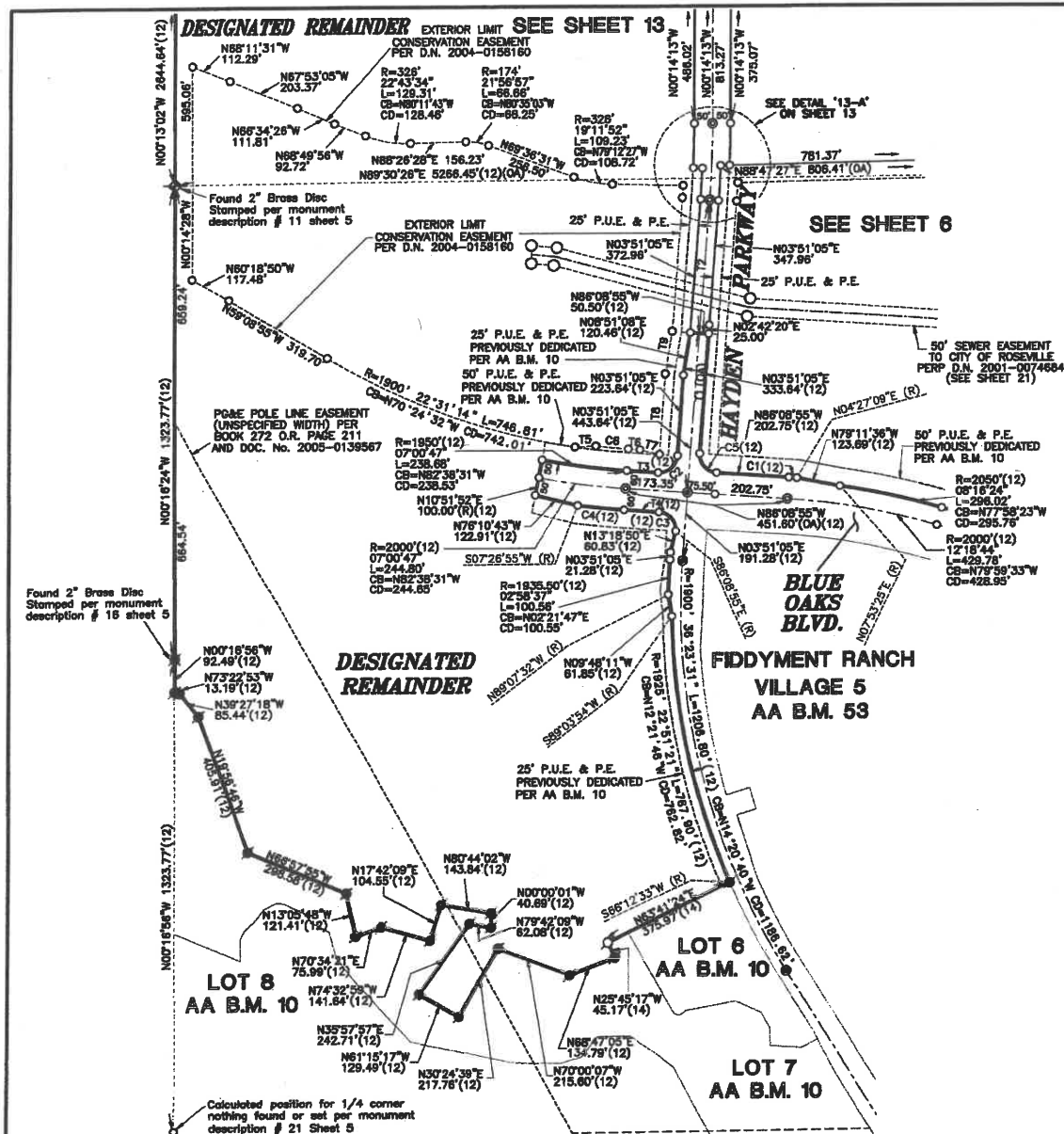
Found 2" Brass Disc  
Stamped per monument  
description # 11 sheet 5



0 100 200 400  
SCALE: 1"=200'

SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.

Sheet 13 of 21



**SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.**

| CURVE TABLE THIS SHEET ONLY |         |           |          |                |              |
|-----------------------------|---------|-----------|----------|----------------|--------------|
| #                           | RADIUS  | DELTA     | LENGTH   | CHORD BEARING  | CHORD LENGTH |
| C1                          | R=2080' | 00°36'04" | L=21.81' | CB=N85°50'53"W | CD=21.81'    |
| C2                          | R=50'   | 90°00'00" | L=78.54' | CB=N45°11'05"E | CD=70.71'    |
| C3                          | R=50'   | 03°52'50" | L=78.54' | CB=N45°11'05"E | CD=70.71'    |
| C4                          | R=1080' | 03°52'50" | L=29.33' | CB=N85°50°00'W | CD=29.33'    |
| C5                          | R=50'   | 90°00'00" | L=78.54' | CB=N41°08'55"W | CD=70.71'    |
| C6                          | R=1890' | 02°44'18" | L=90.33' | CB=N64°46'48"W | CD=90.32'    |

| LINE # | BEARING     | DISTANCE |
|--------|-------------|----------|
| T1     | N03°51'05"E | 1007.88  |
| T2     | N03°51'05"E | 372.96   |
| T3     | N88°08'55"W | 87.85    |
| T4     | N88°08'55"W | 97.85    |
| T5     | N87°36'30"E | 58.44    |
| T6     | N88°08'55"W | 32.63    |
| T7     | N76°39'55"W | 56.48    |
| T8     | N03°51'05"E | 223.14   |
| T9     | N08°36'54"E | 120.41   |



0 100 200 400  
SCALE: 1"=200'

FINAL MAP OF  
FIDDYMONT RANCH PHASE 2  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11

A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N., R.5 E., M.D.B.&M. AND A PORTION OF THE WEST 1/2 OF SECTION 18, T.11 N., R.6 E., M.D.B.&M.

CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

JULY 2006

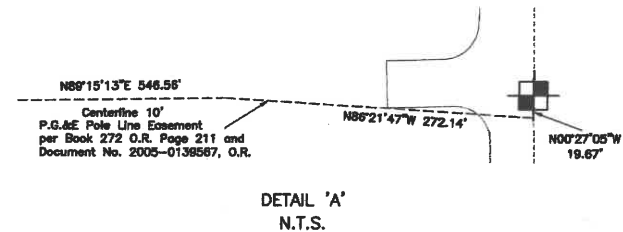


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SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.

| #  | RADIUS  | DELTA      | CURVE TABLE THIS SHEET ONLY<br>LENGTH | CHORD BEARING  | CHORD LENGTH |
|----|---------|------------|---------------------------------------|----------------|--------------|
| C1 | R=2090' | 170°44'0"  | L=822.95'                             | CB=N82°22'31"W | CD=820.95'   |
| C2 | R=2140' | 08°51'36"  | L=368.29'                             | CB=N85°59'02"W | CD=367.84'   |
| C3 | R=43'   | 165°56'28" | L=124.29'                             | CB=N2°14'18"W  | CD=85.32'    |
| C4 | R=45'   | 41°24'35"  | L=32.52'                              | CB=N37°51'38"E | CD=31.82'    |
| C5 | R=333'  | 17°58'24"  | L=104.46'                             | CB=N08°10'08"E | CD=104.03'   |
| C6 | R=2090' | 08°51'36"  | L=368.29'                             | CB=N85°59'02"W | CD=369.24'   |
| C7 | R=2090' | 07°13'02"  | L=263.28'                             | CB=N77°26'42"W | CD=263.08'   |

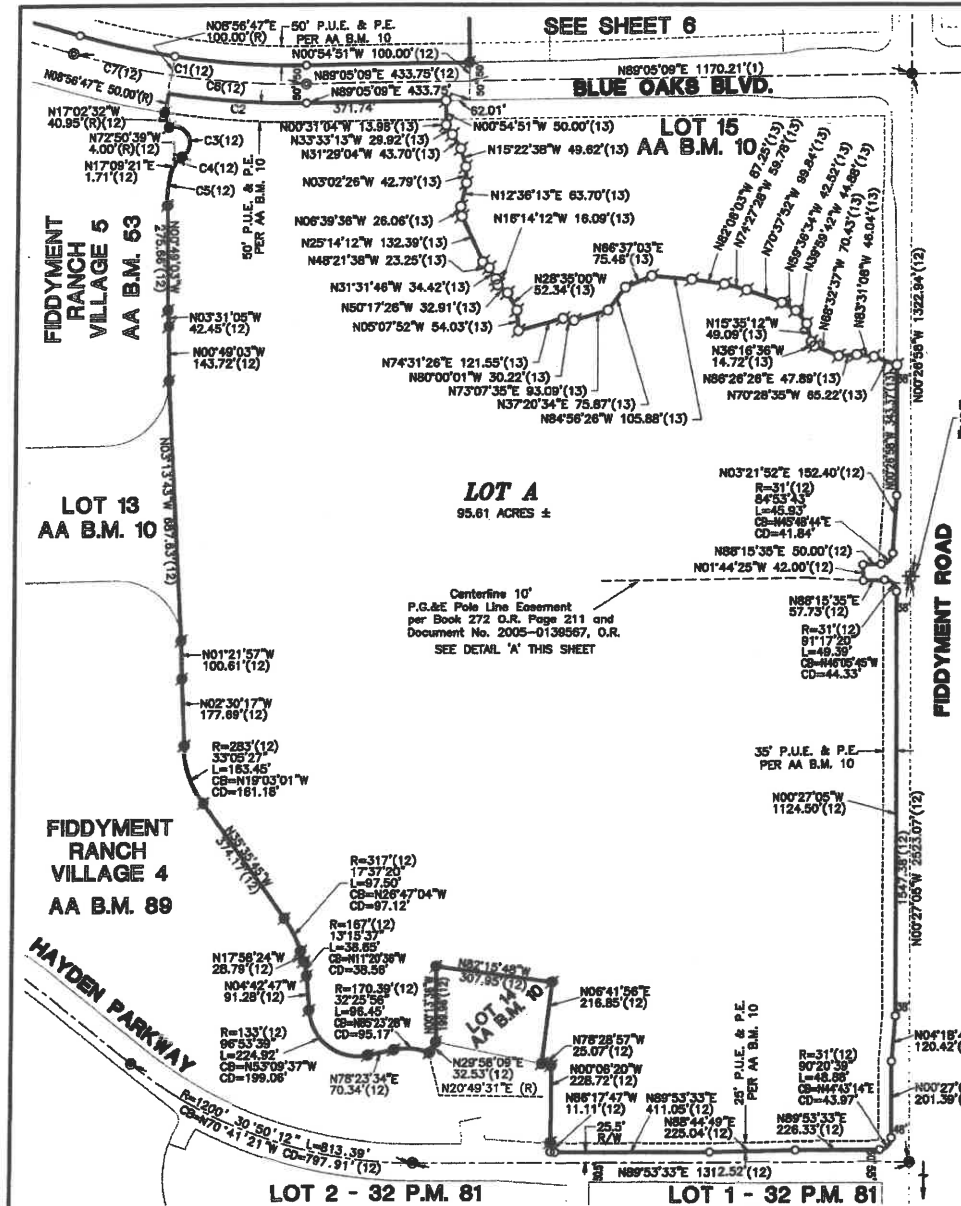
Found 3" Brass Disc in Monument Well  
Stamped per monument description  
# 24 Sheet 5FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF  
FIDDYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE  
RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N.,  
R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T. 11 N., R. 6 E., M.D.B.&M.

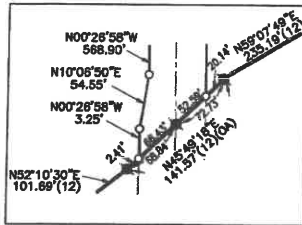
CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

JULY 2006

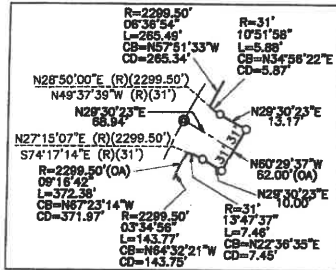
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Sacramento, CA 95816 Fax 916.841.7767

SCALE: 1"=200'

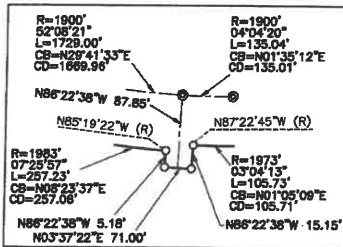




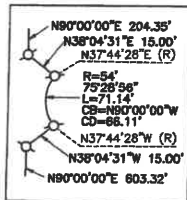
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(SHEET 6)**  
N.T.S.



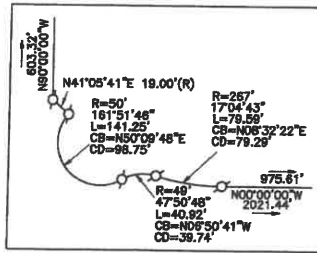
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(SHEET 7)**  
N.T.S.



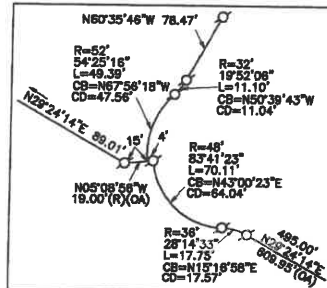
**DETAIL 7-C  
(SHEET 7)**  
N.T.S.



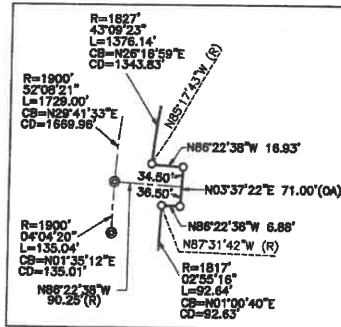
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(SHEET 7)**  
N.T.S.



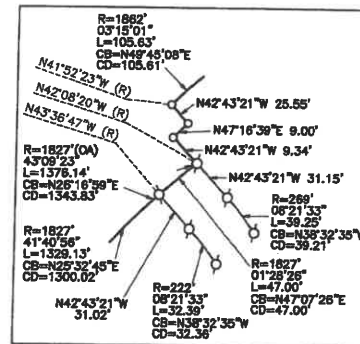
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(SHEET 7)**  
N.T.S.



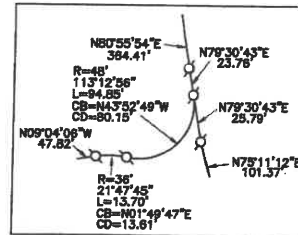
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(SHEET 7)**  
N.T.S.



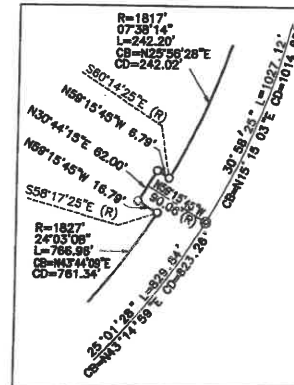
**DETAIL 8-A  
(SHEET 8)**  
N.T.S.



**DETAIL 8-B  
(SHEET 8)**  
N.T.S.

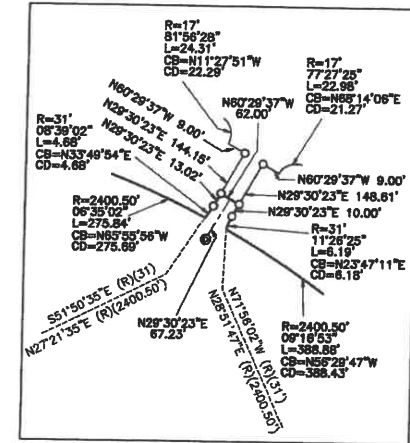


**DETAIL 9-A  
(SHEET 9)**  
N.T.S.

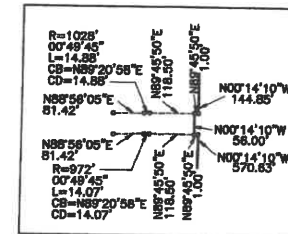


**DETAIL 10-B  
(SHEET 10)**  
N.T.S.

SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.



**DETAIL 10-A  
(SHEET 10)**  
N.T.S.



**DETAIL 10-C  
(SHEET 10)**  
N.T.S.

**FINAL MAP OF  
FIDDYMENT RANCH PHASE 2  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11**

A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N., R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T.11 N., R.6 E., M.D.B.&M.

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SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.

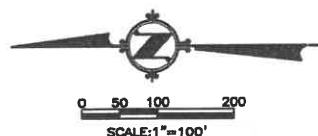
SEE SHEET 8

LOT 19

LOT 9-C  
25.83 ACRES ±LOT 36  
2.73 ACRES ±

LOT 9-B

LOT 9-A



FINAL MAP OF  
**FIDDYMENT RANCH PHASE 2**  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11

A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N., R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T.11 N., R.6 E., M.D.B.&M.

CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

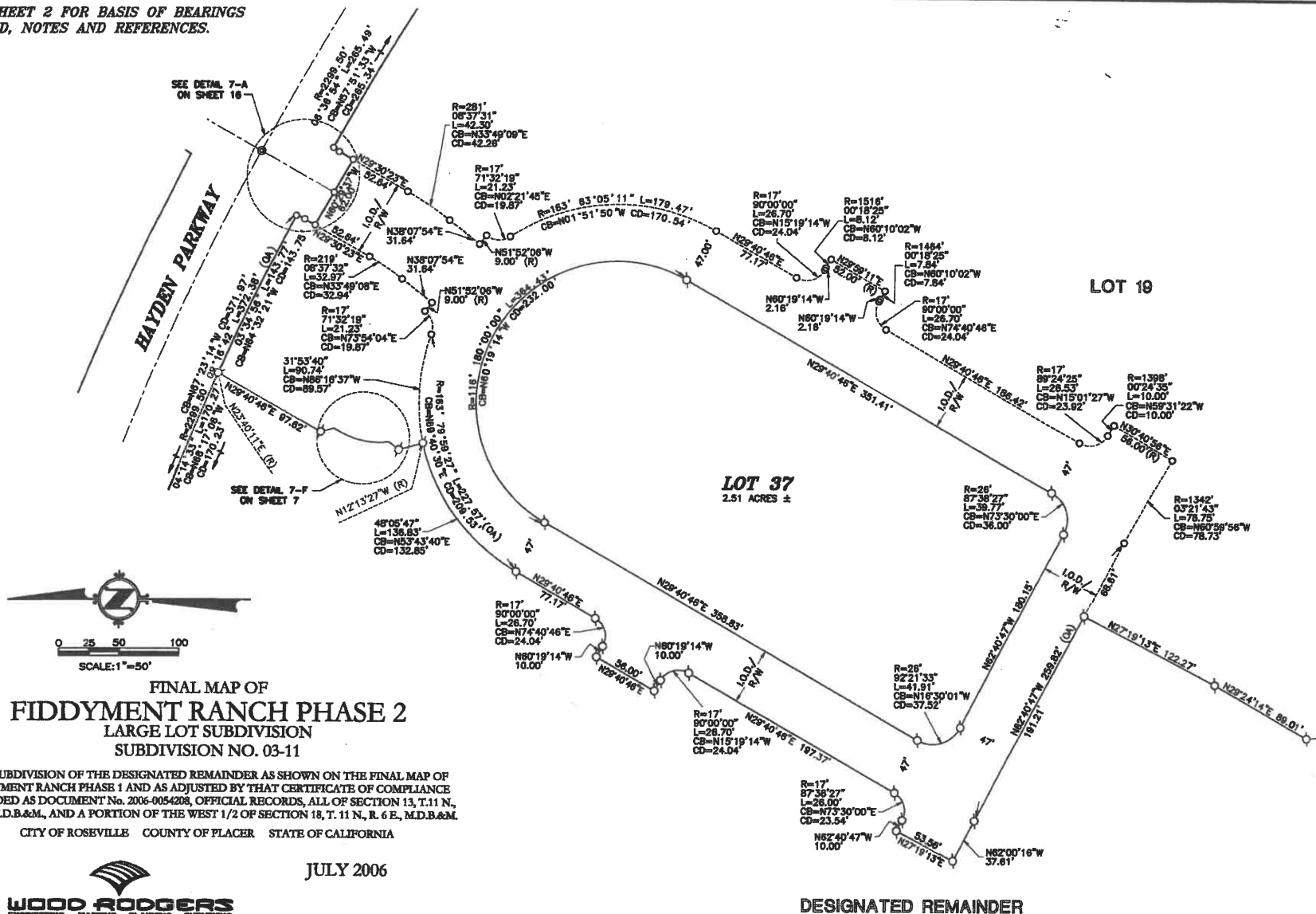
JULY 2006

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SEE SHEET 13

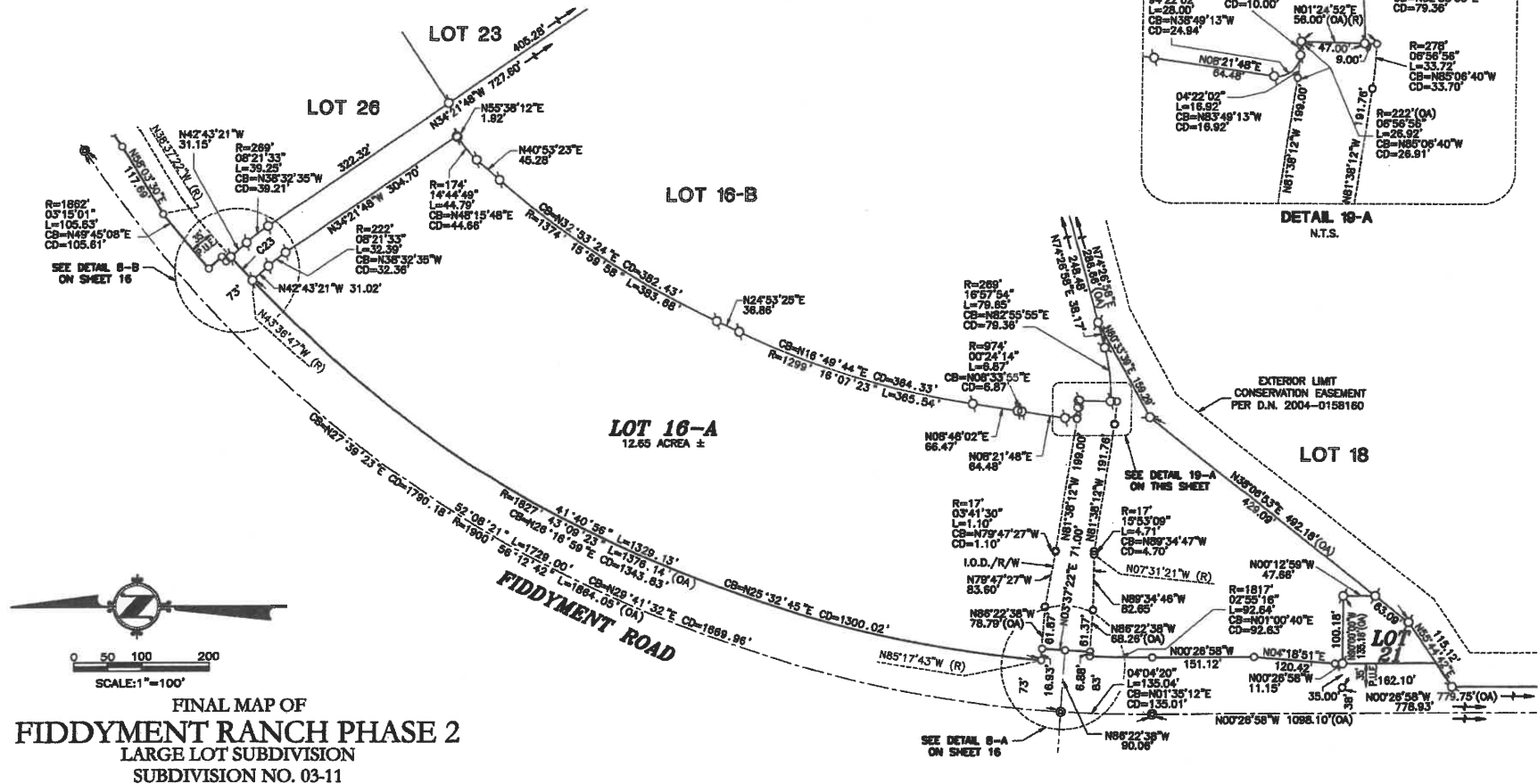
Sheet 17 of 21

SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.





SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.



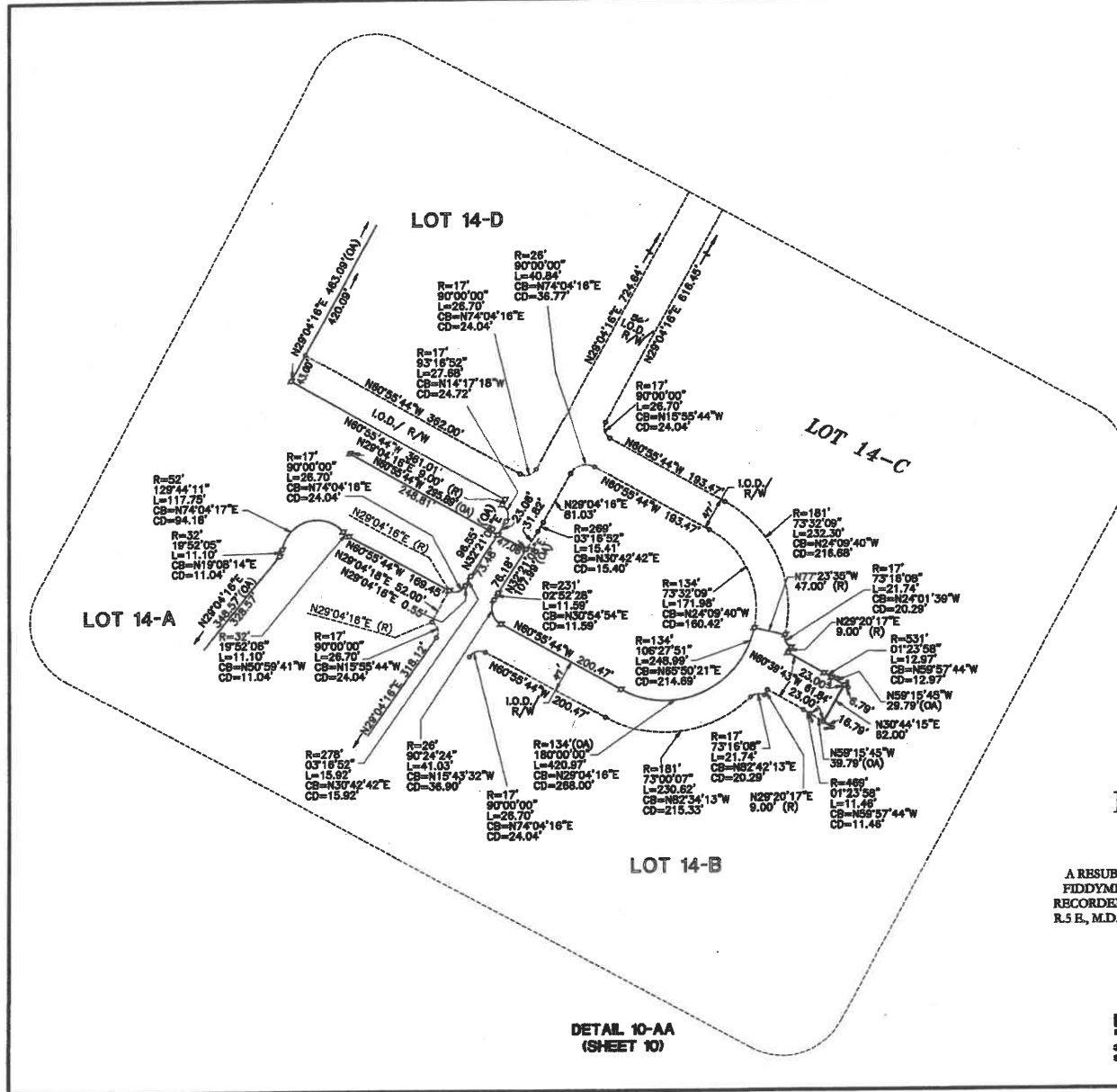
A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N., R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T.11 N., R. 6 E., M.D.B.&M.

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SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.



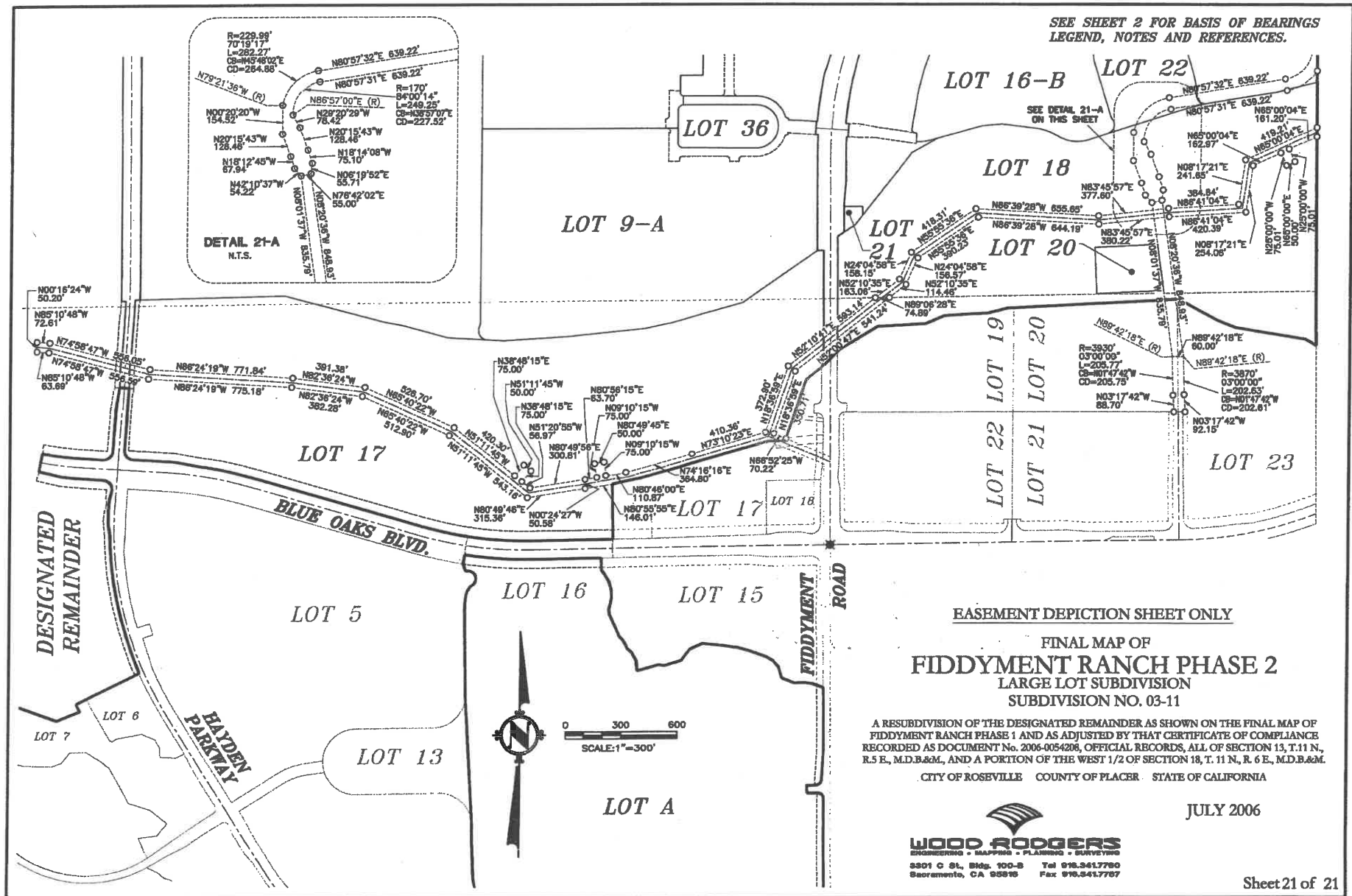
FINAL MAP OF  
**FIDDYMENT RANCH PHASE 2**  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11

A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT No. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N., R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 18, T. 11 N., R. 6 E., M.D.B.&M. CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

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**SEE SHEET 2 FOR BASIS OF BEARINGS  
LEGEND, NOTES AND REFERENCES.**



EASEMENT DEPICTION SHEET ONLY

FINAL MAP OF  
FIDDYMEN'T RANCH PHASE 2  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 03-11

A RESUBDIVISION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF FIDDEYMENT RANCH PHASE 1 AND AS ADJUSTED BY THAT CERTIFICATE OF COMPLIANCE RECORDED AS DOCUMENT NO. 2006-0054208, OFFICIAL RECORDS, ALL OF SECTION 13, T.11 N., R.5 E., M.D.B.&M., AND A PORTION OF THE WEST 1/2 OF SECTION 13, T. 11 N., R. 6 E., M.D.B.&M.

CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

JULY 2006

  
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Sheet 21 of 21

## OWNER'S STATEMENT

THE UNDERSIGNED HEREBY CERTIFY THAT THEY ARE THE ONLY PERSONS HAVING ANY RECORD TITLE INTEREST IN THE REAL PROPERTY INCLUDED WITHIN THE BOUNDARIES OF THIS SUBDIVISION MAP, FINAL MAP OF FIDDYMMENT RANCH PHASE 3 LARGE LOT SUBDIVISION AS SHOWN UPON THIS MAP, AND DO HEREBY CONSENT TO THE PREPARATION AND RECORDING OF SAID MAP AND THAT THE CONSENT OF NO OTHER PERSON IS NECESSARY. WE HEREBY OFFER FOR DEDICATION AND DO HEREBY DEDICATE FOR SPECIFIC PURPOSES THE FOLLOWING:

THE REAL PROPERTY DESCRIBED BELOW IS IRREVOCABLY OFFERED IN FEE FOR PUBLIC PURPOSES:

- A. LOT 9 AS A PUBLIC PARK.
- B. AS PUBLIC RIGHT-OF-WAY, THE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "IOD/RW" (IRREVOCABLE OFFER OF DEDICATION OF RIGHT OF WAY).
- C. LOTS 1 AND 5 AS PUBLIC OPEN SPACE.

THE REAL PROPERTY DESCRIBED BELOW IS IRREVOCABLY OFFERED AS AN EASEMENT FOR PUBLIC PURPOSES:

- A. PUBLIC EASEMENTS FOR THE INSTALLATION, CONSTRUCTION AND MAINTENANCE OF, BUT NOT LIMITED TO, WATER, SANITARY SEWER, GAS AND DRAINAGE PIPES; ELECTROLIERS, TRAFFIC CONTROL APPURTENANCES, AND FOR ELECTRIC, TELEVISION, AND TELEPHONE SERVICES, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO, ON, OVER, UNDER AND ACROSS THE STRIPS OF LAND SHOWN HEREON AND DESIGNATED AS "IOD/PUE" (IRREVOCABLE OFFER OF DEDICATION/PUBLIC UTILITY EASEMENT) AND "IOD/RW" (IRREVOCABLE OFFER OF DEDICATION/RIGHT OF WAY).
- B. PUBLIC EASEMENT FOR ACCESS, CONSTRUCTION, AND MAINTENANCE OF TRAIL FACILITIES ON, OVER, AND ACROSS THAT 50 FOOT STRIP OF LAND SHOWN HEREON AND DESIGNATED "TRAIL ESMT" (PUBLIC TRAIL EASEMENT).
- C. PUBLIC EASEMENT FOR INSTALLATION AND MAINTENANCE OF A BUS SHELTER TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER AND ACROSS THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "BUS SHELTER EASEMENT".
- D. PUBLIC EASEMENT FOR PEDESTRIAN ACCESS ACROSS THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "PE" (PEDESTRIAN EASEMENT).

THE REAL PROPERTY BELOW IS BEING DEDICATED AS AN EASEMENT FOR PUBLIC PURPOSES:

- A. PUBLIC EASEMENT FOR THE INSTALLATION AND MAINTENANCE OF SANITARY SEWER PIPES AND ALL APPURTENANCES THERETO ON, OVER, UNDER, AND ACROSS THAT STRIP OF LAND SHOWN HEREON AND DESIGNATED AS "SSE" (SANITARY SEWER EASEMENT).

THE REAL PROPERTY DESCRIBED BELOW IS RESERVED FOR PUBLIC PURPOSES:

- A. LOT 8 IS HEREBY RESERVED TO BE DEDICATED IN FEE IN THE FUTURE AS A PUBLIC SCHOOL SITE.

ATC REALTY ONE, LLC  
A DELAWARE LIMITED LIABILITY COMPANY

BY: David L. Ash  
ITS: SENIOR VICE PRESIDENT

FINAL MAP OF  
FIDDYMMENT RANCH PHASE 3

LARGE LOT SUBDIVISION  
SUBDIVISION NO. PL-0364

BEING THE DESIGNATED REMAINDER AND LOT 19 OF THAT CERTAIN FINAL MAP ENTITLED "FIDDYMMENT RANCH PHASE 2A, FILED IN BOOK DD OF MAPS, AT PAGE 88 OF O.R.P.C. AND SITUATE IN SECTIONS 13 AND 24, T11N., R5E., M.D.M. CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

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SEPTEMBER 2019

Sheet 1 of 10  
1027.152

## CITY ENGINEER'S STATEMENT

I HEREBY STATE THAT I HAVE EXAMINED THIS FINAL MAP OF FIDDYMMENT RANCH PHASE 3 LARGE LOT SUBDIVISION AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP ON FILE AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.

Marc Stout 9/5/19  
CITY ENGINEER, CITY OF ROSEVILLE  
R.C.E. #69879 EXPIRATION DATE 09/30/2020

I HEREBY STATE THAT I AM SATISFIED THAT THIS FINAL MAP OF FIDDYMMENT RANCH PHASE 3 LARGE LOT SUBDIVISION IS TECHNICALLY CORRECT.

FOR MARC STOUT, CITY ENGINEER, CITY OF ROSEVILLE

Timothy G. Blum  
TIMOTHY G. BLUM, P.L.S. 8278  
EXPIRATION DATE: 12/31/2019

9/9/19  
DATE



## NOTARY'S ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

San Francisco  
STATE OF CALIFORNIA ) SS  
COUNTY OF San Francisco

ON 09 DAY OF August, 2019 BEFORE ME, Auxiliadora Ros  
A NOTARY PUBLIC PERSONALLY APPEARED

David L. Ash WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL: Auxiliadora Ros  
PRINTED NAME: Auxiliadora Ros

MY PRINCIPLE PLACE OF BUSINESS IS IN THE  
COUNTY OF: San Francisco

MY COMMISSION EXPIRES: March 25, 2021

MY COMMISSION No.: 4188278

## CITY CLERK'S STATEMENT

I HEREBY STATE THAT THE CITY COUNCIL, CITY OF ROSEVILLE HAS APPROVED THIS FINAL MAP OF FIDDYMMENT RANCH PHASE 3 LARGE LOT SUBDIVISION AND HAS ACCEPTED ON BEHALF OF THE PUBLIC THE SANITARY SEWER EASEMENT OFFERED HEREON, BUT HAS REJECTED AT THIS TIME, BUT RESERVES THE RIGHT TO ACCEPT AT A LATER DATE, ON BEHALF OF THE PUBLIC, ALL IRREVOCABLE OFFERS OF LANDS, RIGHTS-OF-WAY AND EASEMENTS OFFERED HEREON, IN ACCORDANCE WITH THE TERMS OF THOSE OFFERS AND HAS APPROVED THE ABANDONMENT OF THE IRREVOCABLE OFFERS OF DEDICATION FOR THE RIGHTS-OF-WAY AND PUBLIC UTILITY EASEMENTS LISTED WITHIN NOTE 5 ON SHEET 2.

09/9/19  
DATE

CITY CLERK, CITY OF ROSEVILLE  
BY: Dennis L. Barber  
ASSISTANT CITY CLERK

## RECORDER'S STATEMENT

FILED THIS 8th DAY OF November, 2019, AT 9:44 A.M.  
IN BOOK EE OF MAPS, AT PAGE 74 AT THE  
REQUEST OF WOOD RODGERS, INC.

FEES: \$ 110.00

DOCUMENT NO.: 2019-009384

BY: Ryan Ronco  
RYAN RONCO  
COUNTY RECORDER  
COUNTY OF PLACER

BY: Dennis L. Barber  
DEPUTY RECORDER

## SURVEYOR'S STATEMENT

THIS FINAL MAP OF FIDDYMMENT RANCH PHASE 3 LARGE LOT SUBDIVISION WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF ATC REALTY ONE, LLC, A DELAWARE LIMITED LIABILITY COMPANY, IN MAY 2019. I HEREBY STATE THAT THIS FINAL MAP SUBSTANTIALLY CONFORMS TO THE CONDITIONALLY APPROVED TENTATIVE MAP; THAT ALL THE MONUMENTS SHOWN HEREON ARE OF THE CHARACTER AND WILL OCCUPY THE POSITIONS AS INDICATED, OR THAT THEY WILL BE SET BY SEPTEMBER 31, 2021 AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

WOOD RODGERS, INC.



DENNIS L. BARBER  
P.L.S. 8067 EXP. 12/31/2019

09/27/19  
DATE

**REFERENCES:**

- |                  |                                                               |
|------------------|---------------------------------------------------------------|
| (1) BB MAPS 24   | FINAL MAP OF FIDDYMENT RANCH PHASE 2 - LARGE LOT SUBDIVISION  |
| (2) DD MAPS 9    | FINAL MAP OF FIDDYMENT RANCH PHASE 2 - VILLAGES F-9 & F-19    |
| (3) DD MAPS 73   | FINAL MAP OF FIDDYMENT RANCH PHASE 2 - VILLAGE F-13B1         |
| (4) 2015-0081570 | GRANT DEED TO CITY OF ROSEVILLE                               |
| (5) DD MAPS 88   | FINAL MAP OF FIDDYMENT RANCH PHASE 2A - LARGE LOT SUBDIVISION |

**BASIS OF BEARINGS**

THE BASIS OF BEARINGS FOR THIS SURVEY IS THE NORTH LINE OF SECTION 13, T.11N., R.5E., M.D.M. SAID BEARING IS TAKEN AS NORTH 89°26'37" EAST PER THE FINAL MAP OF FIDDYMENT RANCH PHASE 2 - LARGE LOT SUBDIVISION, FILED IN BOOK 88 OF MAPS, AT PAGE 24, O.R.P.C.

**LEGEND**

- |              |                                                                        |
|--------------|------------------------------------------------------------------------|
|              | FOUND 5/8" REBAR WITH CAP STAMPED "LS 6815" PER DD MAPS 9              |
|              | FOUND 5/8" REBAR WITH CAP STAMPED "LS 8067" PER DD MAPS 73             |
|              | FOUND MONUMENT AS DESCRIBED                                            |
|              | FOUND SECTION CORNER AS DESCRIBED                                      |
|              | FOUND QUARTER CORNER AS DESCRIBED                                      |
|              | FOUND 5/8" REBAR WITH CAP STAMPED "LS 8067" PER DD MAPS 88             |
|              | BRASS DISK STAMPED "LS 6046" IN MONUMENT WELL TO BE SET PER BB MAPS 24 |
|              | FOUND BRASS DISK STAMPED "LS 6046" IN MONUMENT WELL PER AA MAPS 10     |
|              | FOUND BRASS DISK STAMPED "LS 8067" IN MONUMENT WELL PER DD MAPS 73     |
|              | FOUND BRASS DISK STAMPED "LS 8067" IN MONUMENT WELL                    |
|              | SET 5/8" REBAR WITH CAP STAMPED "LS 8067"                              |
| (CL)         | CENTERLINE DIMENSION                                                   |
| IOD          | IRREVOCABLE OFFER OF DEDICATION                                        |
| N.A.P.O.T.S. | NOT A PART OF THIS SUBDIVISION                                         |
| (OA)         | OVERALL DIMENSION                                                      |
| O.R.P.C.     | OFFICIAL RECORDS OF PLACER COUNTY                                      |
| PE           | PEDESTRIAN EASEMENT                                                    |
| PUE          | PUBLIC UTILITY EASEMENT                                                |
| (R)          | RADIAL BEARING                                                         |
| REF          | INDICATES REFERENCE NUMBER                                             |
| RW           | RIGHT-OF-WAY                                                           |
| SSE          | SANITARY SEWER EASEMENT                                                |

**NOTES**

- ALL CURVES DIMENSIONED WITH RADIUS, DELTA, ARC LENGTH, CHORD BEARING, AND CHORD LENGTH. CHORD LENGTHS MAY CONTAIN SOME ROUNDING ERROR.
- ALL DISTANCES SHOWN HEREON ARE EXPRESSED IN FEET AND DECIMALS THEREOF.
- DUE TO ROUNDING THE SUM OF THE INDIVIDUAL DIMENSIONS MAY NOT EQUAL THE OVERALL DIMENSION.
- TOTAL AREA FOR THIS "FINAL MAP OF FIDDYMENT RANCH PHASE 3 LARGE LOT SUBDIVISION" SUBDIVISION IS 377.88± ACRES, CONSISTING OF 6 DEVELOPMENT LOTS, 1 PUBLIC PARK LOT, 1 SCHOOL SITE LOT, AND 2 OPEN SPACE LOTS.
- PURSUANT TO SECTION 86434(g) OF THE GOVERNMENT CODE, THE FOLLOWING PUBLIC IRREVOCABLE OFFERS OF DEDICATION/RIGHTS OF WAY (IOD/RW) AND PUBLIC UTILITY EASEMENTS ARE HEREBY ABANDONED:
  - THOSE PORTIONS OF THE IOD/RW FOR PRUETT DRIVE AS DEPICTED ON THE MAP ENTITLED "FIDDYMENT RANCH PHASE 2A - LARGE LOT SUBDIVISION", FILED IN BOOK DD OF MAPS, AT PAGE 88, O.R.P.C., WHICH LIE WITHIN THE BOUNDARY OF THIS MAP THAT ARE NOT SHOWN HEREON.
  - THOSE PORTIONS OF THE RIGHT-OF-WAY FOR HAYDEN PARKWAY AND THE PUBLIC UTILITY EASEMENT ADJACENT THERETO AS DEPICTED ON THE MAP ENTITLED "FIDDYMENT PHASE 2 - LARGE LOT MAP SUBDIVISION", FILED IN BOOK BB OF MAPS, AT PAGE 24, O.R.P.C., WHICH LIE WITHIN THE BOUNDARY OF THIS MAP THAT ARE NOT SHOWN HEREON.
- THE FOLLOWING TABLE IS TO RELATE THE LOT NUMBERS SHOWN HEREON TO THAT OF THE APPROVED TENTATIVE MAP AND THE WEST ROSEVILLE SPECIFIC PLAN:

| LOT NUMBERING |                                                      |                              |
|---------------|------------------------------------------------------|------------------------------|
| FINAL MAP     | TENTATIVE MAP                                        | WEST ROSEVILLE SPECIFIC PLAN |
| 1             | F-80                                                 | F-80                         |
| 2             | F-10A-1/F-10A-2/F-10B-1/F-10B-2/F-10C-1/F-10C-2/F-94 | F-10A/F-10B/F-10C/F-94       |
| 3             | F-6A-F-6A-2/F-6B/F-6D                                | F-6A-F-6B/F-6D               |
| 4             | F-6C-1/F-6C-2                                        | F-6C                         |
| 5             | F-85                                                 | F-85                         |
| 6             | F-8A                                                 | F-8A                         |
| 7             | F-8B                                                 | F-8B                         |
| 8             | F-71                                                 | F-71                         |
| 9             | F-51                                                 | F-51                         |
| 10            | F-11B                                                | F-11B                        |

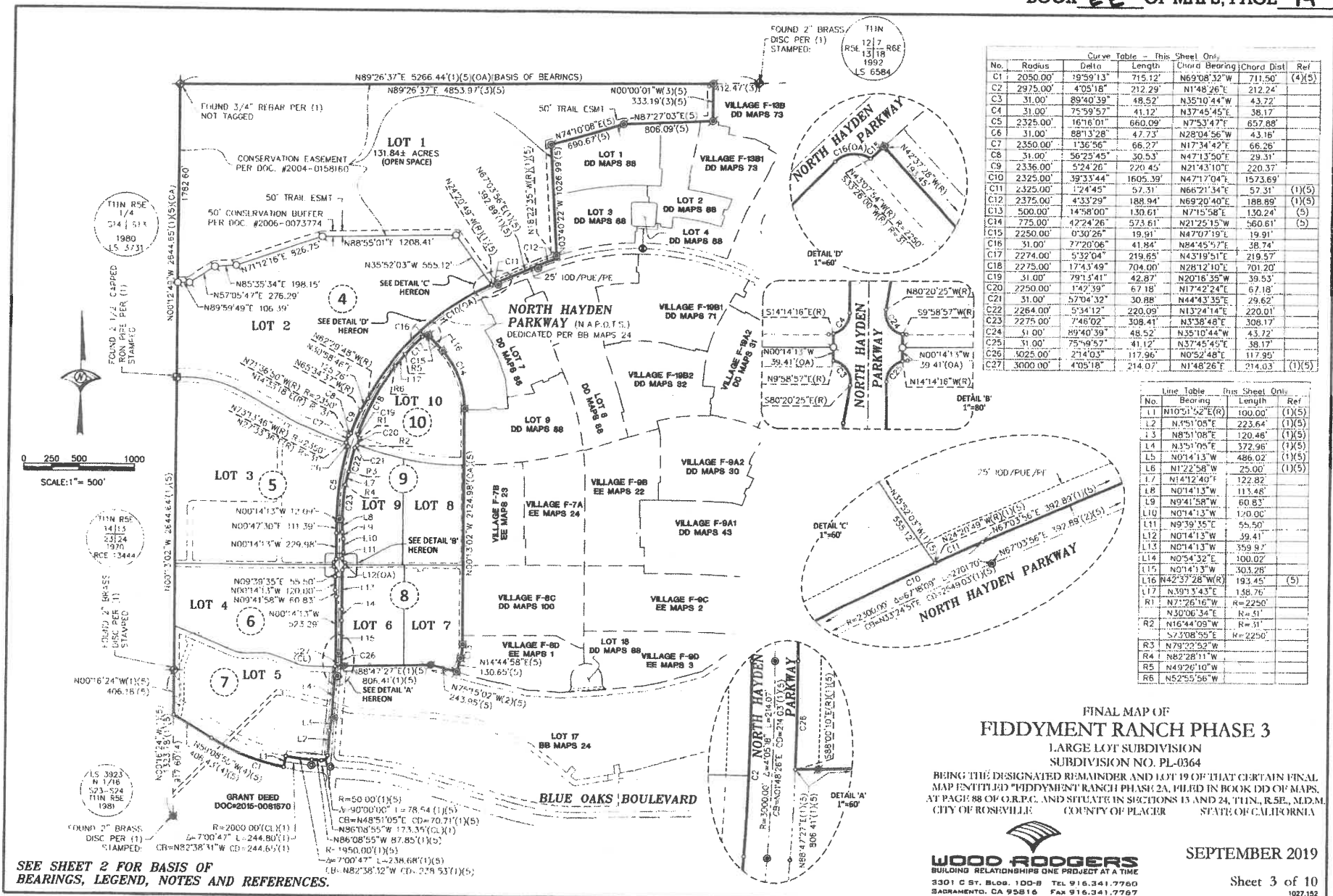
FINAL MAP OF  
**FIDDYMENT RANCH PHASE 3**  
 LARGE LOT SUBDIVISION  
 SUBDIVISION NO. PL-0364

BEING THE DESIGNATED REMAINDER AND LOT 19 OF THAT CERTAIN FINAL MAP ENTITLED "FIDDYMENT RANCH PHASE 2A, FILED IN BOOK DD OF MAPS, AT PAGE 88 OF O.R.P.C. AND SITUATE IN SECTIONS 13 AND 24, T.11N., R.5E., M.D.M. CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

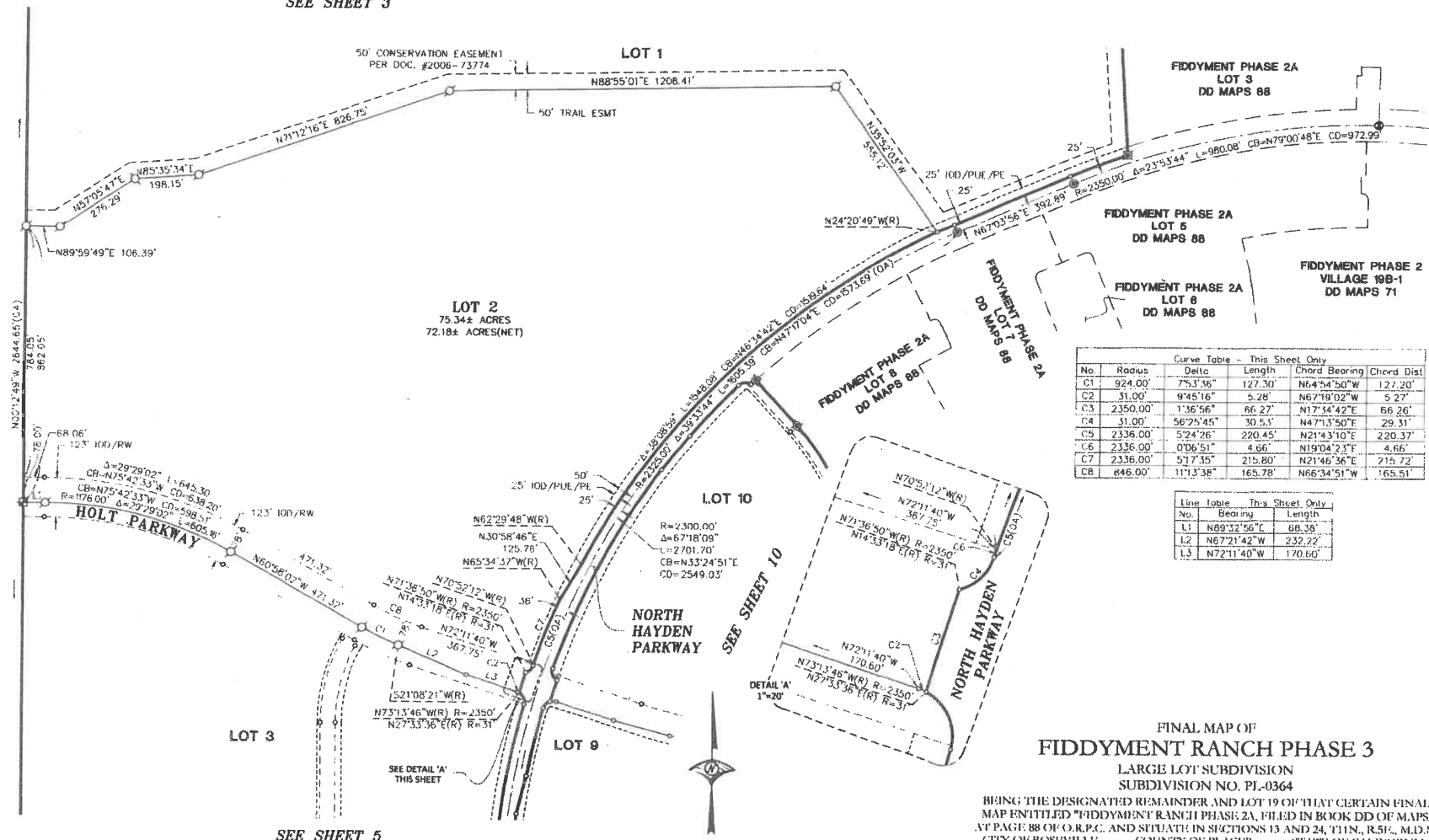
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SEPTEMBER 2019

Sheet 2 of 10  
1027152



SEE SHEET 3



| Curve Table - This Sheet Only |          |           |         |               |            |
|-------------------------------|----------|-----------|---------|---------------|------------|
| No.                           | Radius   | Delta     | Length  | Chord Bearing | Chord Dist |
| C1                            | 924.00'  | 75°3'36"  | 127.30' | N64°54'50"W   | 127.20'    |
| C2                            | 31.00'   | 9°45'56"  | 5.28'   | N67°19'02"W   | 5.27'      |
| C3                            | 2350.00' | 1°36'56"  | 66.27'  | N17°54'42"E   | 66.26'     |
| C4                            | 31.00'   | 56°25'45" | 30.53'  | N47°13'50"E   | 29.31'     |
| C5                            | 2336.00' | 5°24'26"  | 220.45' | N21°43'10"E   | 220.37'    |
| C6                            | 2336.00' | 0°06'51"  | 4.66'   | N19°04'23"E   | 4.66'      |
| C7                            | 2336.00' | 51°7'35"  | 215.80' | N21°46'36"E   | 215.72'    |
| C8                            | 846.00'  | 111°3'38" | 165.78' | N66°34'51"W   | 165.51'    |

| Line Table - This Sheet Only |             |         |
|------------------------------|-------------|---------|
| No.                          | Bearing     | Length  |
| L1                           | N89°32'56"E | 68.38'  |
| L2                           | N67°21'42"W | 232.22' |
| L3                           | N72°11'40"W | 170.60' |

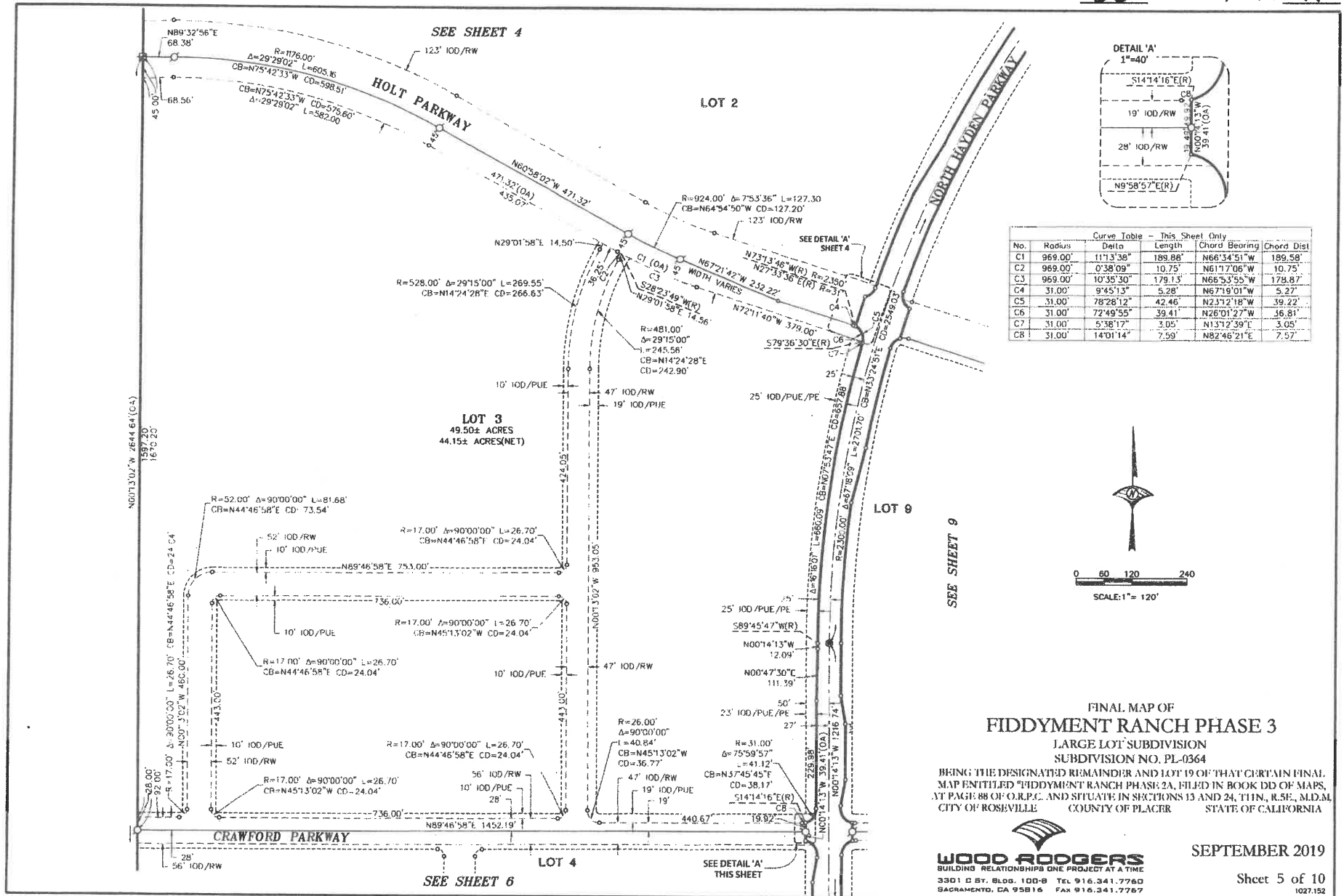
FINAL MAP OF  
**FIDDYMMENT RANCH PHASE 3**  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. PL-0364

BEING THE DESIGNATED REMAINDER AND LOT 19 OF THAT CERTAIN FINAL MAP ENTITLED "FIDDYMMENT RANCH PHASE 2A, FILED IN BOOK DD OF MAPS, AT PAGE 88 OF O.R.P.C. AND SITUATE IN SECTIONS 13 AND 24, T11N., R5E., M.D.M. CITY OF ROSHVILLE COUNTY OF PLACER STATE OF CALIFORNIA

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SEPTEMBER 2019

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1027.192





SEE SHEET 5

LOT 3

CRAWFORD PARKWAY

LOT 4  
27.10± ACRES  
26.17± ACRES (NET)

LOT 5

SEE SHEET 7

LOT 6

LOT 6

SEE SHEET 8

| Curve Table - This Sheet Only |          |           |         |               |            |
|-------------------------------|----------|-----------|---------|---------------|------------|
| No.                           | Radius   | Delta     | Length  | Chord Bearing | Chord Dist |
| C1                            | 276.00'  | 22°43'36" | 109.48' | N80°11'44"W   | 108.76'    |
| C2                            | 276.00'  | 21°16'07" | 102.45' | N79°27'59"W   | 101.87'    |
| C3                            | 276.00'  | 1°27'29"  | 7.02'   | N89°10'13"E   | 7.02'      |
| C4                            | 224.00'  | 21°57'01" | 85.82'  | N80°35'01"W   | 85.29'     |
| C5                            | 276.00'  | 19°11'52" | 92.48'  | N79°12'27"W   | 92.05'     |
| C6                            | 3000.00' | 4°05'18"  | 214.07' | N1°48'26"E    | 214.03'    |
| C7                            | 31.00'   | 89°40'39" | 48.52'  | N35°10'44"W   | 43.72'     |
| C8                            | 31.00'   | 34°35'30" | 18.72'  | N62°43'18"W   | 18.43'     |
| C9                            | 31.00'   | 55°05'09" | 29.80'  | N17°52'59"W   | 28.67'     |
| C10                           | 2975.00' | 2°24'28"  | 125.02' | N0°58'01"E    | 125.01'    |

| Line Table - This Sheet Only |             |         |
|------------------------------|-------------|---------|
| No.                          | Bearing     | Length  |
| L1                           | N67°13'35"E | 14.94'  |
| L2                           | N67°12'28"W | 15.12'  |
| L3                           | N49°13'48"E | 28.23'  |
| L4                           | N40°46'12"W | 20.00'  |
| L5                           | N49°13'48"E | 18.29'  |
| L6                           | N67°12'28"W | 31.78'  |
| L7                           | N37°52'25"W | 19.37'  |
| L8                           | N68°49'56"W | 27.57'  |
| L9                           | N22°17'51"E | 32.20'  |
| L10                          | N67°42'29"W | 20.00'  |
| L11                          | N22°17'51"E | 31.81'  |
| L12                          | N68°52'41"W | 54.06'  |
| L13                          | N81°14'31"W | 109.52' |



0 40 80 160  
SCALE: 1" = 80'

FINAL MAP OF  
FIDDYMONT RANCH PHASE 3  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. PL-0364

BEING THE DESIGNATED REMAINDER AND LOT 19 OF THAT CERTAIN FINAL MAP ENTITLED "FIDDYMONT RANCH PHASE 2A, FILED IN BOOK DD OF MAPS, AT PAGE 88 OF O.R.P.C. AND SITUATE IN SECTIONS 13 AND 24, T11N, R5E, MDM, CITY OF ROSEVILLE, COUNTY OF PLACER, STATE OF CALIFORNIA

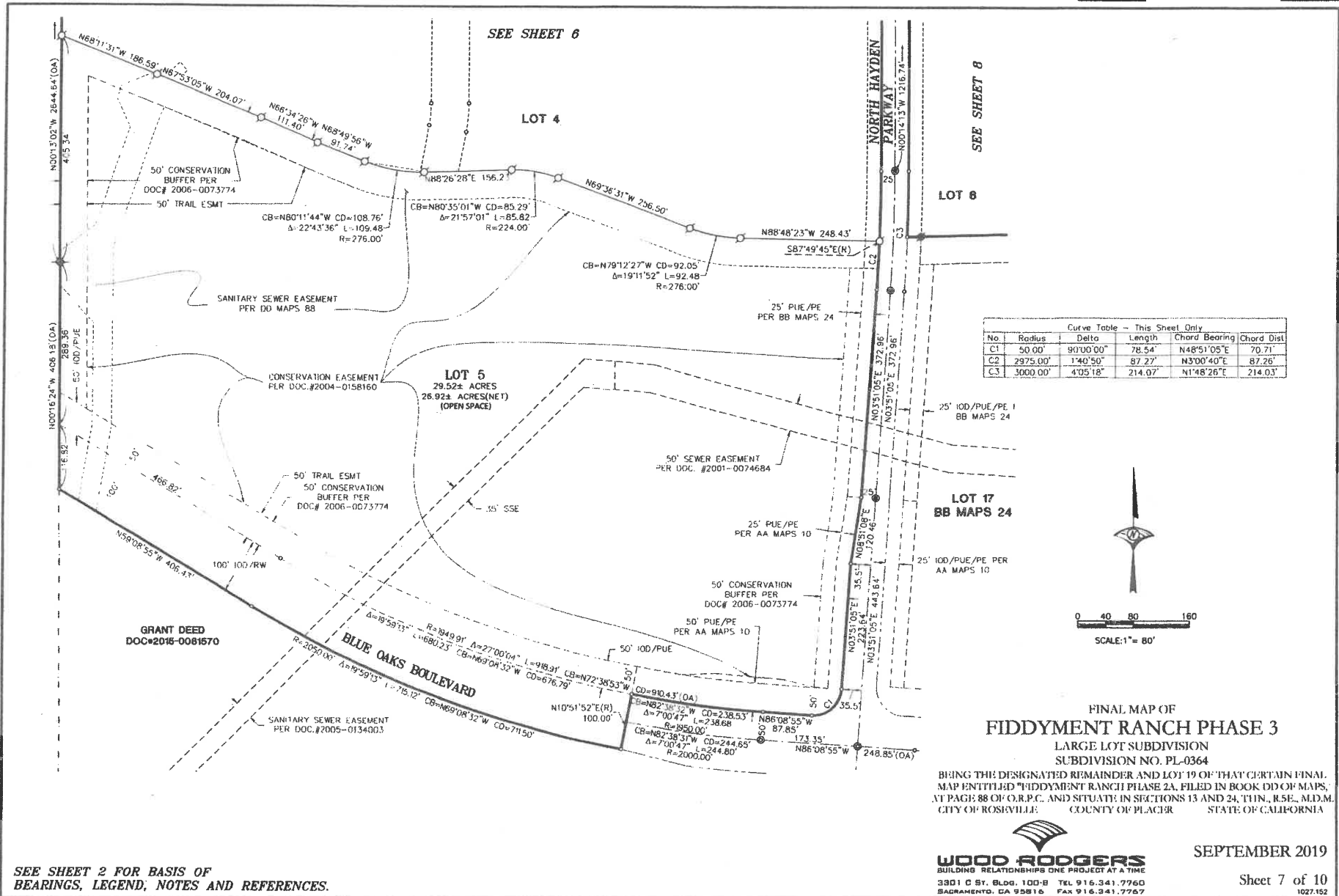
**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME  
3301 D ST., BLDG. 100-B TEL 916.341.7760  
SACRAMENTO, CA 95816 FAX 916.341.7767

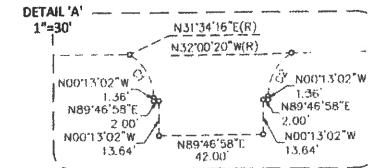
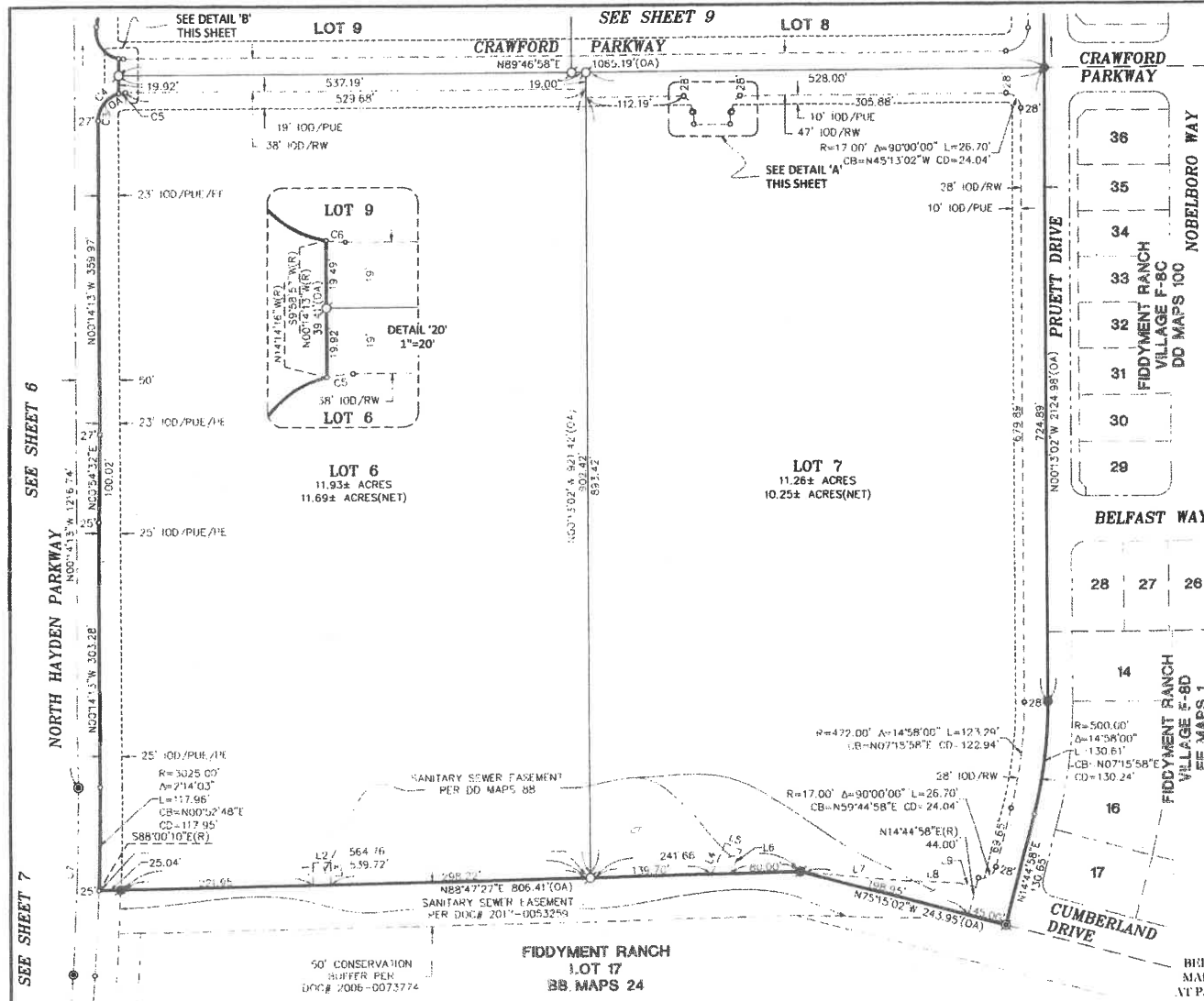
SEPTEMBER 2019

Sheet 6 of 10

1027.152

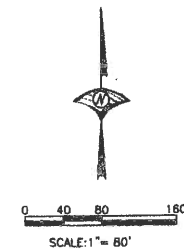
SEE SHEET 2 FOR BASIS OF  
BEARINGS, LEGEND, NOTES AND REFERENCES.





| Curve Table - This Sheet Only |          |           |         |               |            |
|-------------------------------|----------|-----------|---------|---------------|------------|
| No.                           | Radius   | Delta     | Length  | Chord Bearing | Chord Dist |
| C1                            | 20.00'   | 58°12'42" | 20.32'  | N29°19'23"W   | 19.46'     |
| C2                            | 20.00'   | 58°12'42" | 20.32'  | N28°53'19"E   | 19.46'     |
| C3                            | 31.00'   | 90°01'11" | 48.71'  | N44°46'22"E   | 43.85'     |
| C4                            | 31.00'   | 75°59'57" | 41.12'  | N37°45'45"E   | 38.17'     |
| C5                            | 31.00'   | 14°01'14" | 7.59'   | N82°46'21"E   | 7.57'      |
| C6                            | 31.00'   | 1°01'59"  | 5.52'   | N85°07'03"W   | 5.51'      |
| C7                            | 3000.00' | 4°05'18"  | 214.01' | N1°48'26"E    | 214.03'    |

| Line No. | Table Bearing | This Sheet Only Length |
|----------|---------------|------------------------|
| L1       | N0°42'01"W    | 26.03'                 |
| L2       | N89°17'59"E   | 20.00'                 |
| L3       | N0°19'06"E    | 25.86'                 |
| L4       | N23°07'50"E   | 39.14'                 |
| L5       | N66°52'10"W   | 20.00'                 |
| L6       | N23°07'50"E   | 30.09'                 |
| L7       | N84°59'38"W   | 120.94'                |
| L8       | N84°11'02"W   | 80.73'                 |
| L9       | N75°15'00"W   | 19.46'                 |



FINAL MAP OF  
FIDDYMENT RANCH PHASE 3  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. PL-0364

BEING THE DESIGNATED REMAINDER AND LOT 19 OF THAT CERTAIN FINAL  
MAP ENTITLED "HIDDYMENT" RANCH PHASE 2A, FILED IN BOOK 110 OF MAPS,  
AT PAGE 88 OF O.R.P.C. AND SITUATE IN SECTIONS 13 AND 24, T11N., R5E., M.D.M.  
CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA



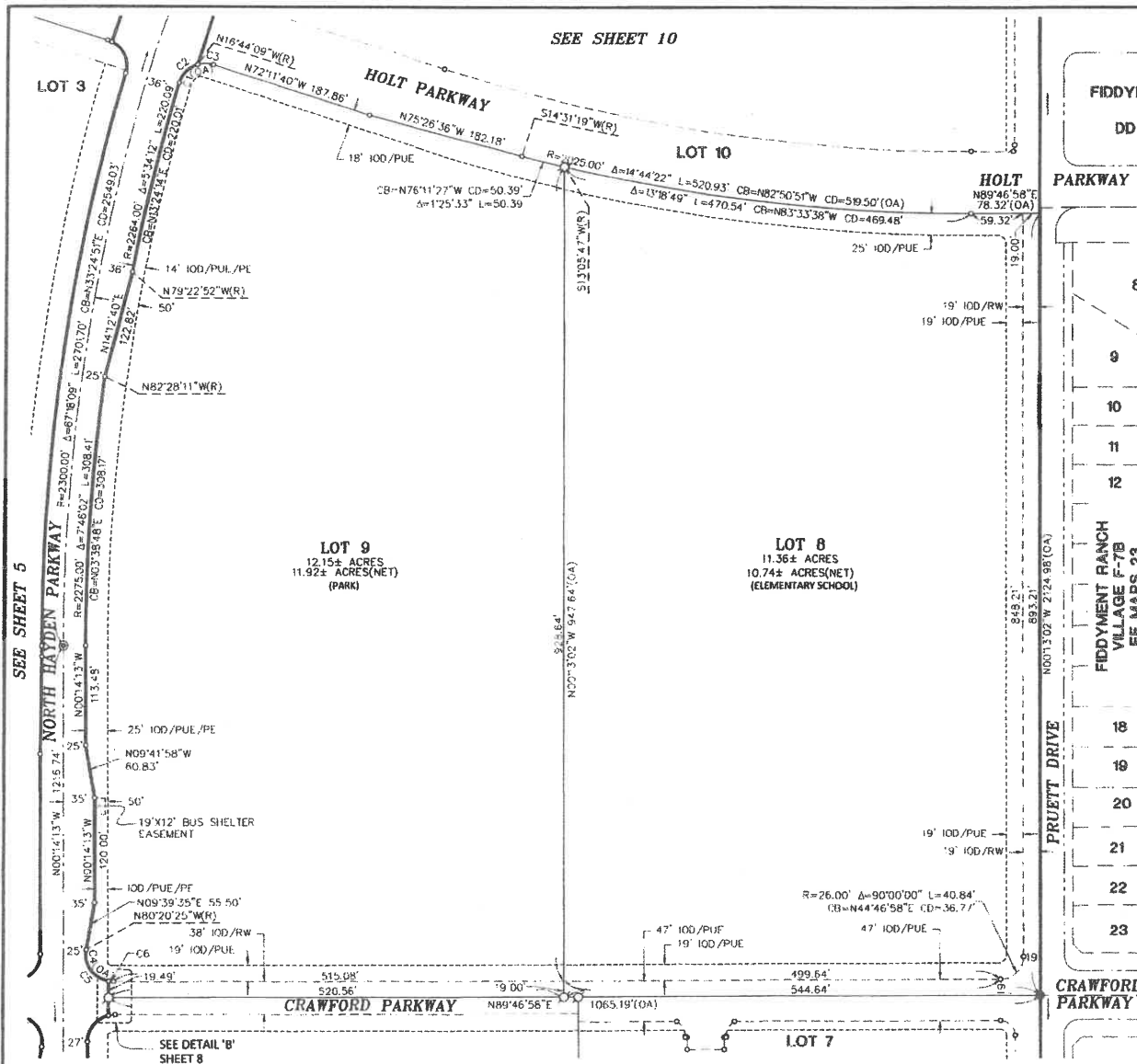
**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME

3301 C ST. 8LDG. 100-B TEL 916.341.7760  
SACRAMENTO, CA 95816 FAX 916.341.7767

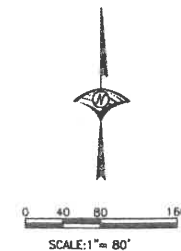
SEPTEMBER 2019

Sheet 8 of 10  
1027.152

SEE SHEET 2 FOR BASIS OF  
BEARINGS, LEGEND, NOTES AND REFERENCES.



| Curve Table - This Sheet Only |        |           |        |               |            |
|-------------------------------|--------|-----------|--------|---------------|------------|
| No.                           | Radius | Delta     | Length | Chord Bearing | Chord Dist |
| C1                            | 31.00' | 91°37'00" | 49.57' | N61°59'50"E   | 44.45'     |
| C2                            | 31.00' | 57°04'32" | 30.88' | N44°43'35"E   | 29.62'     |
| C3                            | 31.00' | 34°32'28" | 18.69' | N89°27'54"W   | 18.41'     |
| C4                            | 31.00' | 99°52'38" | 54.04' | N49°16'43"W   | 47.45'     |
| C5                            | 31.00' | 89°40'39" | 48.52' | N35°10'44"W   | 43.72'     |
| C6                            | 31.00' | 101°1'59" | 5.52'  | N85°07'03"W   | 5.51'      |



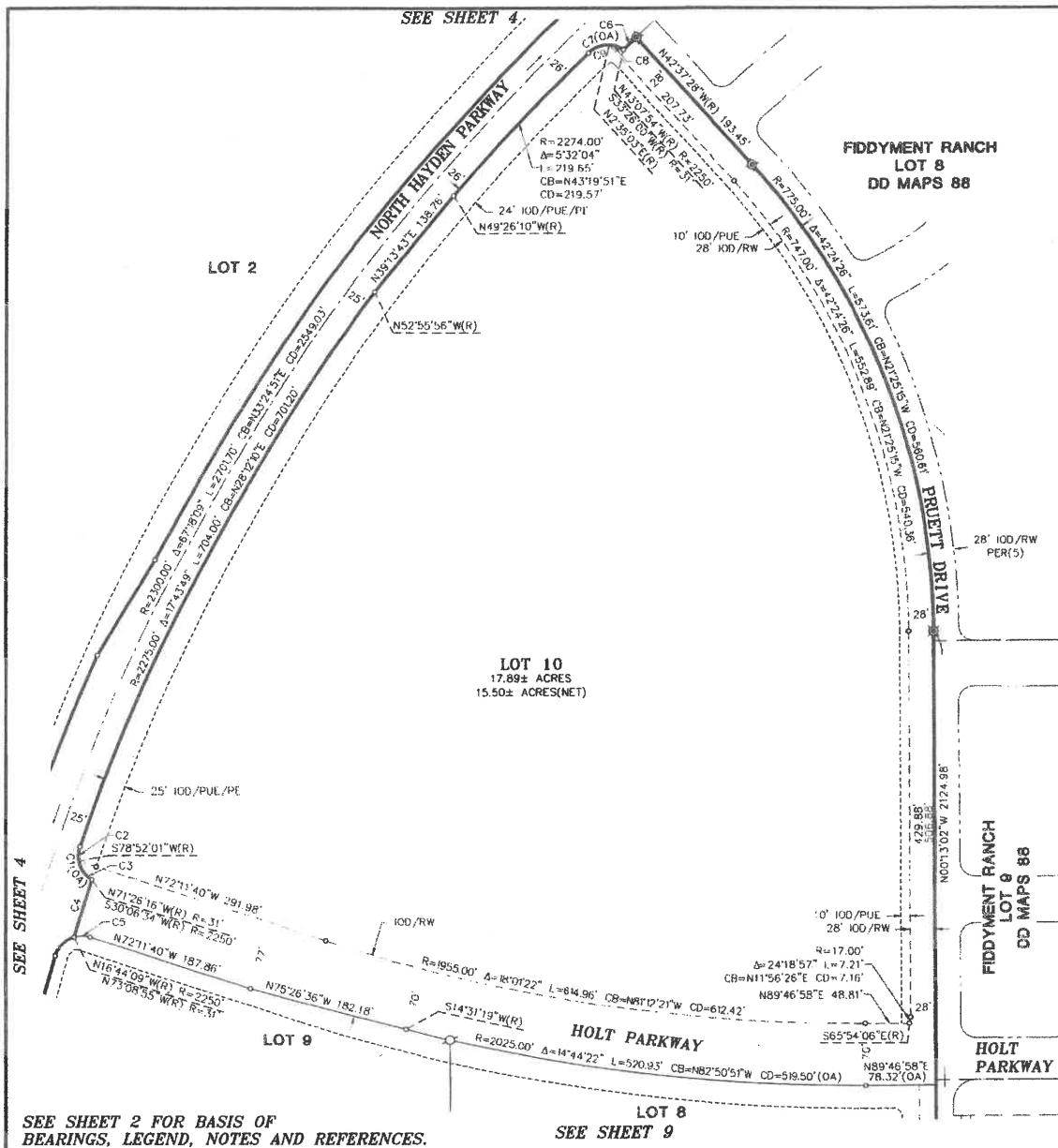
**FINAL MAP OF  
FIDDYMENT RANCH PHASE 3  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. PL-0364**

BEING THE DESIGNATED REMAINDER AND LOT 19 OF THAT CERTAIN FINAL MAP ENTITLED "FIDDYMENT RANCH PHASE 2A, FILED IN BOOK DD OF MAPS, AT PAGE 88 OF O.R.P.C. AND SITUATE IN SECTIONS 13 AND 24, T11N., R5E., M.D.M. CITY OF ROSIEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

**WOOD ROGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME  
3301 O ST. BLOS. 100-B TEL 916.341.7760  
SACRAMENTO, CA 95816 FAX 916.341.7757

SEPTEMBER 2019

Sheet 9 of 10  
1027.152



| Curve Table - The Sheet Only |          |           |        |               |           |
|------------------------------|----------|-----------|--------|---------------|-----------|
| No.                          | Radius   | Chord     | Length | Chord Bearing | Chord Dis |
| C1                           | 31.00'   | 79°13'41" | 42.87  | N20°16'35"W   | 39.53     |
| C2                           | 31.00'   | 30°28'14" | 16.49  | N4°06'08"W    | 16.29     |
| C3                           | 31.00'   | 48°45'27" | 26.38  | N35°30'42"W   | 25.59     |
| C4                           | 2250.00' | 1°42'39"  | 67.18  | N1°42'24"E    | 67.18     |
| C5                           | 31.00'   | 34°32'28" | 18.69  | N89°27'51"E   | 18.61     |
| C6                           | 2250.00' | 0°32'26"  | 67.18  | N0°30'19"E    | 19.81     |
| C7                           | 31.00'   | 72°20'26" | 41.84  | N84°52'55"E   | 38.74     |
| C8                           | 31.00'   | 30°50'57" | 16.69  | N1°59'29"W    | 16.49     |
| C9                           | 31.00'   | 46°29'10" | 25.15  | N69°20'28"E   | 24.47     |



0 40 80 160  
SCALE: 1" = 80'

FINAL MAP OF  
FIDDYMMENT RANCH PHASE 3  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. PL-0364

BRING THE DESIGNATED REMAINDER AND LOT 19 OF THAT CERTAIN FINAL  
MAP ENTITLED "FIDDYMENT RANCH PHASE 2A, FILED IN BOOK 00 OF MAPS,  
AT PAGE 88 OF O.R.P.C. AND SITUATE IN SECTIONS 13 AND 24, T11N., R5E., M.D.M.  
CITY OF ROSEVILLE COUNTY OF PLACER STATE OF CALIFORNIA

  
**WOOD RODGERS**  
BUILDING RELATIONSHIPS ONE PROJECT AT A TIME  
3301 C ST. 8LDG. 100-B TEL 916.341.7760  
SACRAMENTO, CA 95816 FAX 916.341.7767

SEPTEMBER 2019

Sheet 10 of 10

1027.



## COUNCIL COMMUNICATION

**CC #: 1004**

**File #: 0400-04-12-1**

**Title:** Westpark Phase 4, Westbrook Blvd. Extension - Notice of Completion

**Contact:** Ignacio Vizcarra 916-774-5578 [ivizcarra@roseville.ca.us](mailto:ivizcarra@roseville.ca.us)

**Meeting Date: 9/16/2020**

**Item #: 7.20.**

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council adopt the attached resolution accepting Westpark Phase 4, Westbrook Blvd. Extension, CWJ #190232, as complete and authorizing the City Engineer to execute the Notice of Completion.

### BACKGROUND

The Engineering Division has made a final inspection of the above project and has found the roadway infrastructure work complete in accordance with the improvement plans and City Specifications.

### FISCAL IMPACT

The actions requested as part of this action have no impact to the City's General Fund. Construction costs were paid by the developer.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a Notice of Completion meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Ignacio Vizcarra, Construction Inspector

Mike Isom, Development Services Director



---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-375

NOC

WP4\_Westbrook Blvd\_Extension Vicinity map-Exhibit A

Westpark Ph 4. Westbrook Blvd. Ext. Large Lot Map.

RESOLUTION NO. 20-375

RESOLUTION OF THE COUNCIL OF THE CITY OF ROSEVILLE ACCEPTING THE PUBLIC WORK KNOWN AS WESTPARK PHASE 4, WESTBROOK BOULEVARD EXTENSION PROJECT, APPROVING THE "NOTICE OF COMPLETION", AND AUTHORIZING AND DIRECTING THE CITY ENGINEER TO EXECUTE SAID NOTICE ON BEHALF OF THE CITY OF ROSEVILLE, THEREFORE, AND ACCEPTING A PORTION OF THOSE RESPECTIVE DEDICATIONS OFFERED ON THE RECORDED MAPS OF "THE FINAL MAP OF WESTPARK PHASE 4 LARGE LOT SUBDIVISION, SUBDIVISION NO. 000044" BE IT RESOLVED by the Council of the City of Roseville as follows:

1. The "Notice of Completion" on file in the City Clerk's Department relative to that public work known as the Westpark Phase 4, Westbrook Boulevard Extension is hereby approved and the public work accepted. -
2. A portion of the right-of-way and easements located adjacent thereto as offered for dedication on The Final Map of Westpark Phase 4, Large Lot Subdivision, Subdivision NO. 000044, recorded in Book CC of Maps, Page 29, in the office of the recorder of Placer County, is hereby accepted by the City in part as said dedications relates to the improvement plan set known as Westpark Phase 4, Westbrook Boulevard Extension. The remaining offers of dedication will be accepted at a later date as improvements are approved and accepted.
3. The City Engineer is hereby authorized and directed to execute said Notice on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville, this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
CITY CLERK



RECORDING REQUESTED BY AND WHEN  
RECORDED MAIL TO:

CITY CLERK  
CITY OF ROSEVILLE  
311 VERNON STREET  
ROSEVILLE, CA 95678

Exempt from recording fees  
Pursuant to Gov't Code §27383

---

**NOTICE OF COMPLETION**

NOTICE IS HEREBY GIVEN that the public work of improvement known as the \_\_\_\_\_ Project was completed and accepted by the City of Roseville on \_\_\_\_\_. The location is situated in the City of Roseville, County of Placer, State of California and is indicated on the attached map, marked as Exhibit "A" and incorporated herein by this reference. The real property herein described is owned by the City of Roseville, 311 Vernon Street, Roseville CA 95678.

The direct/general contractor on said project was \_\_\_\_\_.

The surety on said project was \_\_\_\_\_.

\_\_\_\_\_.

\_\_\_\_\_  
City of Roseville  
Owner

ATTEST:

\_\_\_\_\_  
Sonia Orozco, City Clerk

State of California     )  
County of Placer        )

I, \_\_\_\_\_, being first duly sworn, depose and say: I am the \_\_\_\_\_ of the City of Roseville, a municipal corporation in the State of California, owner of the property described in the above Notice. I am duly authorized to make this verification for and on behalf of the City of Roseville. I have read the Notice of Completion and know its contents and the facts stated therein are true.

\_\_\_\_\_

City of Roseville

|                                                                                                                                                                                                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

State of California     )  
County of Placer        )

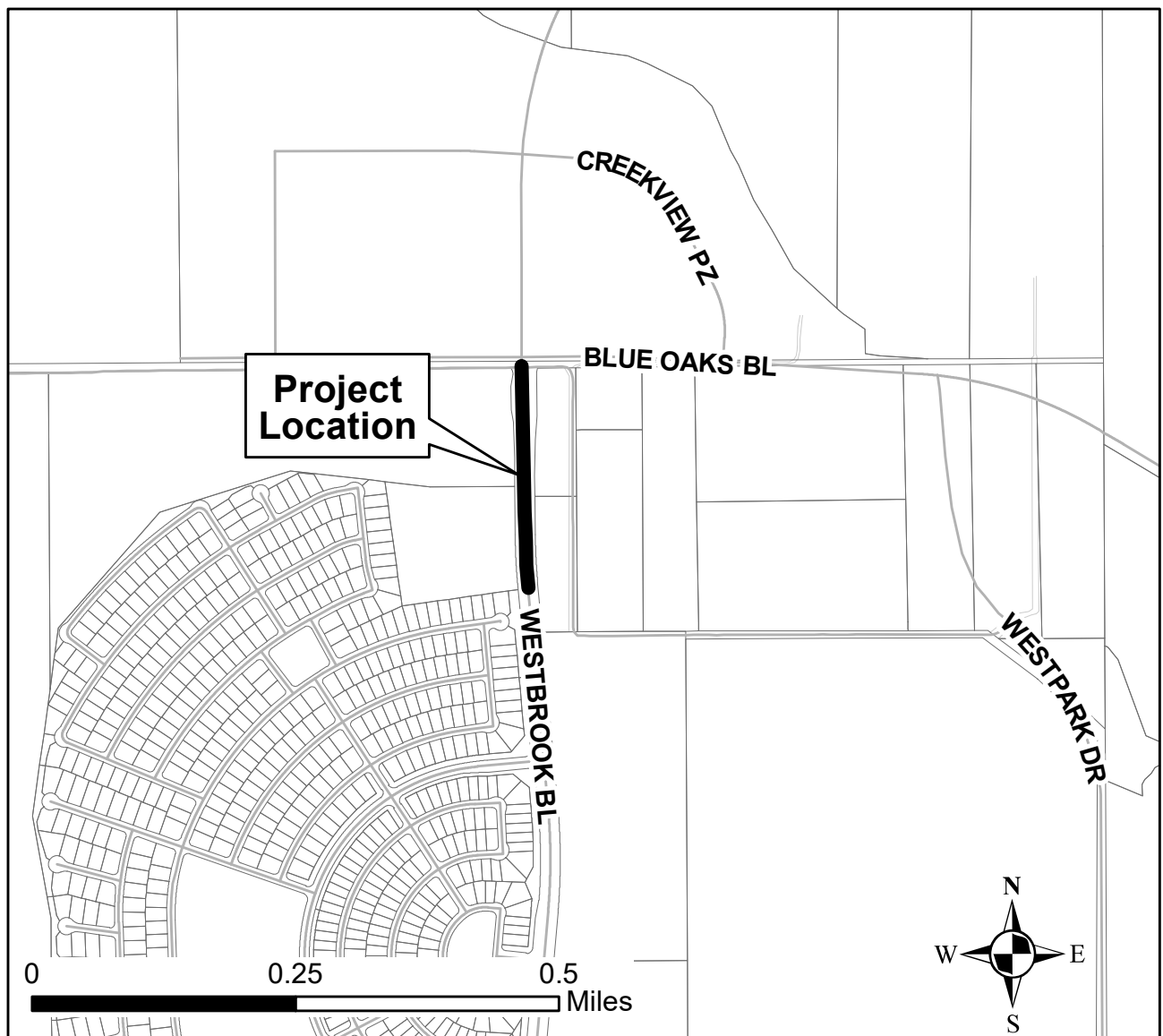
Subscribed and sworn to (or affirmed) before  
me on this \_\_\_\_\_ day of \_\_\_\_\_,  
20\_\_\_\_, \_\_\_\_\_  
proved to me on the basis of satisfactory  
evidence to be the person(s) who appeared  
before me.

*Place Notary Seal and/or Stamp Above*

\_\_\_\_\_  
*Signature of Notary Public*

# EXHIBIT A

## City of Roseville Westpark - Phase 4 Westbrook Blvd Extension



**OWNER'S STATEMENT**

THE UNDERSIGNED HEREBY CERTIFY THAT THEY ARE THE ONLY PERSONS HAVING ANY RECORD TITLE INTEREST IN THE REAL PROPERTY INCLUDED WITHIN THE SUBDIVISION SHOWN UPON THIS FINAL MAP OF "WESTPARK - PHASE 4" AND THEY HEREBY CONSENT TO THE PREPARATION AND RECORDATION OF THIS FINAL MAP AND HEREBY OFFER FOR DEDICATION AND DO HEREBY DEDICATE TO PARTICULAR PURPOSES THE FOLLOWING:

THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED AS EASEMENT FOR PUBLIC PURPOSES:

(A) PUBLIC EASEMENTS FOR THE INSTALLATION AND MAINTENANCE OF, BUT NOT LIMITED TO ELECTROLIERS, WATER AND GAS PIPES, SEWER AND DRAINAGE PIPES, AND FOR UNDERGROUND WIRE AND CONDUITS FOR ELECTRIC, TELEPHONE AND TELEVISION SERVICES AND TRAFFIC CONTROL APPURTENANCES TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER, UNDER AND ACROSS THOSE STRIPS OF LAND LYING CONTIGUOUS TO THE RIGHT OF WAY AS SHOWN HEREON AND DESIGNATED "P.U.E." (PUBLIC UTILITY EASEMENT).

(B) PUBLIC EASEMENTS FOR THE INSTALLATION AND MAINTENANCE OF, BUT NOT LIMITED TO ELECTROLIERS, WATER AND GAS PIPES, SEWER AND DRAINAGE PIPES, AND FOR UNDERGROUND WIRE AND CONDUITS FOR ELECTRIC, TELEPHONE AND TELEVISION SERVICES AND TRAFFIC CONTROL APPURTENANCES TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER UNDER AND ACROSS THOSE STRIPS OF LAND LYING BETWEEN THE REAR AND/OR SIDELINES OF THE LOT AND THE LINES SHOWN HEREON AND DESIGNATED "P.U.E." (PUBLIC UTILITY EASEMENT).

(C) AN EASEMENT FOR THE INSTALLATION AND MAINTENANCE OF SEWER AND WATER PIPES DESIGNATED "SEWER AND WATER EASEMENT".

THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED IN FEE FOR PUBLIC PURPOSES:

(A) AS PUBLIC RIGHT OF WAY (INCLUDING ALL IMPROVEMENTS THEREON) THE STREET SHOWN HEREON AS BROOKSTONE DRIVE.

THE REAL PROPERTY DESCRIBED BELOW IS IRREVOCABLY DEDICATED IN FEE FOR PUBLIC PURPOSES:

(A) LOT 1A & 1B SHOWN HEREON TO THE CITY OF ROSEVILLE FOR OPEN SPACE

(B) AS PUBLIC RIGHT OF WAY (INCLUDING ALL IMPROVEMENTS THEREON) THE STREET SHOWN HEREON AS WESTBROOK BOULEVARD.

WEST ROSEVILLE, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

[Signature]  
BY: JEFF JONES  
ITS: Manager

**NOTARY ACKNOWLEDGMENT**

STATE OF CALIFORNIA  
COUNTY OF PLACER

ON OCT. 26, 2011, BEFORE ME, SANDRA LESSARD, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED JEFF JONES AND [Signature], WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME IN THEIR AUTHORIZED CAPACITIES, AND THAT BY THEIR SIGNATURES ON THE INSTRUMENT, THE PERSONS OR THE ENTITY UPON BEHALF OF WHICH THE PERSONS ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT. WITNESS MY HAND AND OFFICIAL SEAL.

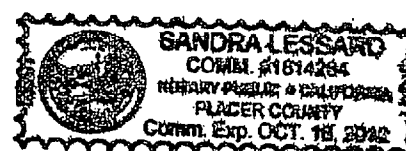
[Signature]  
SIGNATURE

PRINT NAME SANDRA LESSARD

MY PRINCIPAL PLACE OF BUSINESS IS PLACER COUNTY.

MY COMMISSION NUMBER IS: 1814284

MY COMMISSION EXPIRES ON: OCT. 18, 2012



# FINAL MAP OF WESTPARK - PHASE 4 LARGE LOT SUBDIVISION SUBDIVISION NO. 000044

BEING A SUBDIVISION OF A PORTION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF "WESTPARK PHASE 1 - LARGE LOT SUBDIVISION", SUBDIVISION NO. 03-08, FILED FOR RECORD IN BOOK AA OF MAPS, AT PAGE 4, PLACER COUNTY RECORDS, AND THE EAST HALF OF THE EAST HALF OF SECTION 22, BEING A PORTION OF SECTIONS 22, 23, 25 AND 26, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

CITY OF ROSEVILLE • PLACER COUNTY • CALIFORNIA

**Mackay & Somps**  
ENGINEERS PLANNERS SURVEYORS  
1552 Eureka Road, Suite 100, Roseville, CA 95661 (916) 773-1189

DECEMBER 2011

Sheet 1 of 9

18424-LLM

**TRUSTEE STATEMENT**

PLACER TITLE COMPANY, A CALIFORNIA CORPORATION, AS TRUSTEE UNDER DEED OF TRUST RECORDED ON APRIL 8, 2011, AS INSTRUMENT NO. 2011-0027982, OFFICIAL RECORDS PLACER COUNTY, AGAINST THE LAND HEREIN SHOWN CONSENTS TO THE MAKING AND FILING OF THIS MAP.

Placer title Company  
BY: [Signature]  
CELIA FRENCH V.P.  
PRINT NAME AND TITLE  
BY: [Signature]  
Julie Piccard, Asst. Secretary  
PRINT NAME AND TITLE

**NOTARY ACKNOWLEDGMENT**

STATE OF CALIFORNIA  
COUNTY OF PLACER

ON NOVEMBER 3, 2011, BEFORE ME, T.C. MURPHY, A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED CELIA FRENCH AND JULIE PICCARD, WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSONS WHOSE NAMES ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT THEY EXECUTED THE SAME IN THEIR AUTHORIZED CAPACITIES, AND THAT BY THEIR SIGNATURES ON THE INSTRUMENT, THE PERSONS OR THE ENTITY UPON BEHALF OF WHICH THE PERSONS ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT. WITNESS MY HAND AND OFFICIAL SEAL.

[Signature]  
SIGNATURE

PRINT NAME T.C. MURPHY

MY PRINCIPAL PLACE OF BUSINESS IS PLACER COUNTY.

MY COMMISSION NUMBER IS: 1949422

MY COMMISSION EXPIRES ON: Sept. 21, 2015

**SURVEYOR'S STATEMENT**

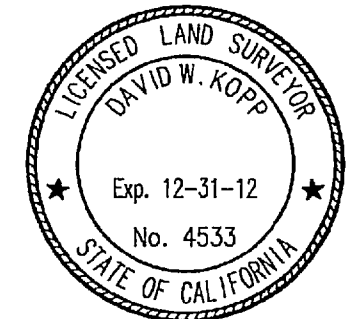
THIS FINAL MAP OF "WESTPARK - PHASE 4 LARGE LOT SUBDIVISION" WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCES AT THE REQUEST OF WEST ROSEVILLE, LLC, ON JANUARY 24, 2005. I HEREBY STATE THAT THIS FINAL MAP OF "WESTPARK - PHASE 4" SUBSTANTIALLY CONFORMS TO THE CONDITIONALLY APPROVED TENTATIVE MAP, AND THAT ALL THE MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED, OR THEY WILL BE SET IN THOSE POSITIONS ON OR BEFORE DECEMBER 1, 2012 AND THAT THE MONUMENTS ARE, OR WILL BE, SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

MACKAY & SOMPS CIVIL ENGINEERS, INC.

DAVID W. KOPP, P.L.S. 4533

EXPIRATION DATE: DECEMBER 31, 2012

DATE: 10/25/11

**CITY ENGINEER'S STATEMENT**

I HEREBY STATE THAT I HAVE EXAMINED THIS FINAL MAP OF "WESTPARK - PHASE 4 LARGE LOT SUBDIVISION" AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP ON FILE AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.

[Signature] DATE: 11-14-2011

RHON HERNDON, R.C.E. 50909  
ACTING CITY ENGINEER, CITY OF ROSEVILLE  
LICENSE EXPIRES: SEPTEMBER 30, 2013

I HEREBY STATE THAT I AM SATISFIED THIS THIS FINAL MAP OF "WESTPARK - PHASE 4 LARGE LOT SUBDIVISION" IS TECHNICALLY CORRECT.

FOR RHON HERNDON, ACTING CITY ENGINEER, CITY OF ROSEVILLE

[Signature] DATE: 11/14/11

TIMOTHY G. BLAIR  
PLS# 8278 EXPIRES DECEMBER 31, 2011

**CITY CLERK'S STATEMENT**

I HEREBY STATE THAT THE CITY COUNCIL, CITY OF ROSEVILLE, HAS APPROVED THIS FINAL MAP OF "WESTPARK - PHASE 4 LARGE LOT SUBDIVISION", AND HAS ACCEPTED ON BEHALF OF THE PUBLIC, SUBJECT TO IMPROVEMENT, THE RIGHTS OF WAY AND EASEMENTS HEREON OFFERED FOR DEDICATION IN ACCORDANCE WITH THE TERMS OF THAT OFFER. THE CITY COUNCIL REJECTS AT THIS TIME, BUT RESERVES THE RIGHT TO ACCEPT AT A LATER DATE, ON BEHALF OF THE PUBLIC ALL IRREVOCABLE OFFERS OF DEDICATION IN ACCORDANCE WITH THE TERMS OF THOSE OFFERS.

[Signature]  
CITY CLERK, CITY OF ROSEVILLE

DATE: 11/17/11

BY: [Signature]  
ASSISTANT CITY CLERK

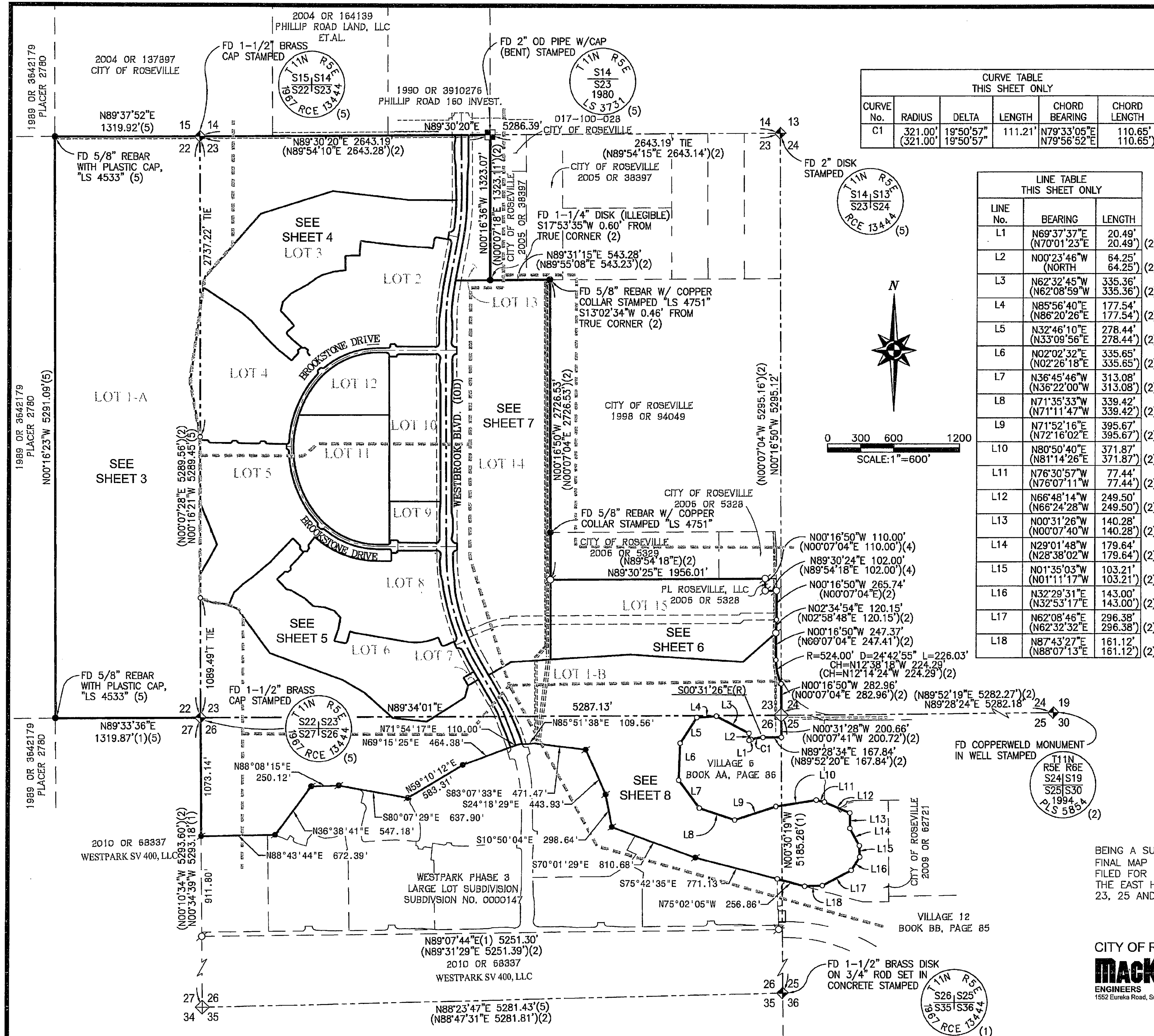
**RECORDER'S STATEMENT**

FILED THIS 28<sup>th</sup> DAY OF December, 2011, AT 1:35 PM.  
IN BOOK CC OF MAPS, AT PAGE 29 AT THE REQUEST OF  
PL ROSEVILLE, LLC

DOCUMENT NO. 2011- 0104206  
FEE: 732.00

JIM McCAULEY  
PLACER COUNTY RECORDER  
BY: C. Costa  
DEPUTY





## LEGEND:

- DIMENSION POINT
- ◆ FOUND SECTION CORNER OR QUARTER CORNER AS NOTED
- ◇ SECTION CORNER, NOTHING FOUND OR SET
- FOUND MONUMENT AS NOTED
- FOUND 5/8" REBAR WITH PLASTIC CAP STAMPED "LS 4533"
- ⊗ SET 3/4" GALVANIZED PIPE WITH PLASTIC CAP STAMPED "LS 4533"
- ⊗ SET 5/8" REBAR WITH PLASTIC CAP STAMPED "LS 4533"
- ⊗ SET COPPERWELD SURVEY MONUMENT WITH CENTER PUNCH IN MONUMENT WELL STAMPED "LS 4533"
- (1) "18" SURVEYS 49
- (2) "AA" MAPS 4 (WESTPARK-PHASE 1 LARGE LOT SUBD.)
- (3) "BB" MAPS 85 (WESTPARK VILLAGE 12)
- (4) DOC. NO. 2006-0005328
- (5) "18" SURVEYS 64
- AC. ACRES
- (OA) OVERALL
- (R) RADIAL BEARING
- P.U.E. PUBLIC UTILITY EASEMENT
- (W-81) SPECIFIC PLAN LOT DESIGNATION

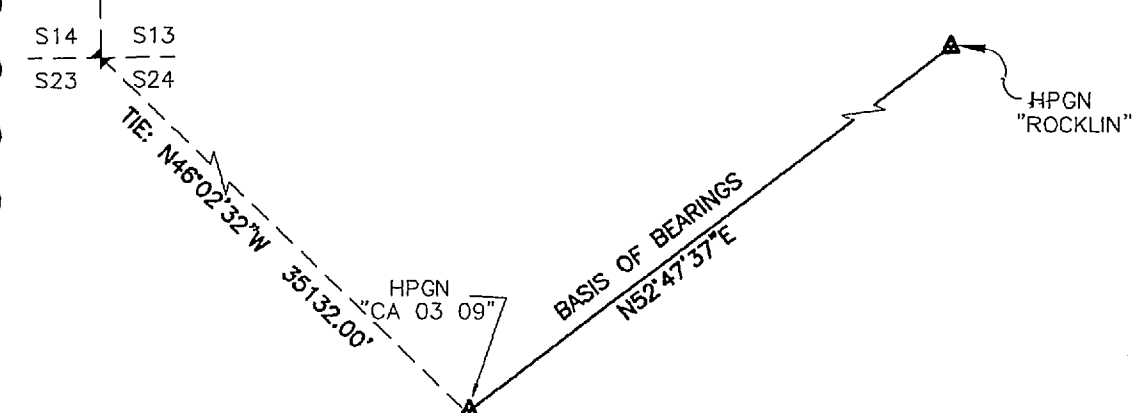
| LARGE LOT # | SPECIFIC PLAN # |
|-------------|-----------------|
| 1A          | W-81            |
| 1B          | W-83            |
| 2.00        | W-18a           |
| 3.00        | W-18b           |
| 4.00        | W-18c           |
| 5.00        | W-17c           |
| 6.00        | W-17b           |
| 7.00        | W-77            |
| 8.00        | W-17a           |
| 9.00        | W-30            |
| 10.00       | W-19            |
| 11.00       | W-50            |
| 12.00       | W-70            |
| 13.00       | W-60b           |
| 14.00       | W-60a           |
| 15.00       | W-61            |

## NOTES:

- DISTANCES ARE IN FEET AND DECIMALS THEREOF.

## BASIS OF BEARINGS:

THE BEARINGS SHOWN HEREON ARE BASED ON THE CALIFORNIA COORDINATE SYSTEM, ZONE 2 (NAD 83), AND SPECIFICALLY N52°47'37"E BETWEEN CALIFORNIA HIGH PRECISION GEODETIC NETWORK MONUMENTS "CA 03-09" AND "ROCKLIN". DISTANCES SHOWN HEREON ARE GROUND DISTANCES.



### FINAL MAP OF WESTPARK - PHASE 4 LARGE LOT SUBDIVISION SUBDIVISION NO. 000044

BEING A SUBDIVISION OF A PORTION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF "WESTPARK PHASE 1 - LARGE LOT SUBDIVISION", SUBDIVISION NO. 03-08, FILED FOR RECORD IN BOOK AA OF MAPS, AT PAGE 4, PLACER COUNTY RECORDS, AND THE EAST HALF OF THE EAST HALF OF SECTION 22, BEING A PORTION OF SECTIONS 22, 23, 25 AND 26, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

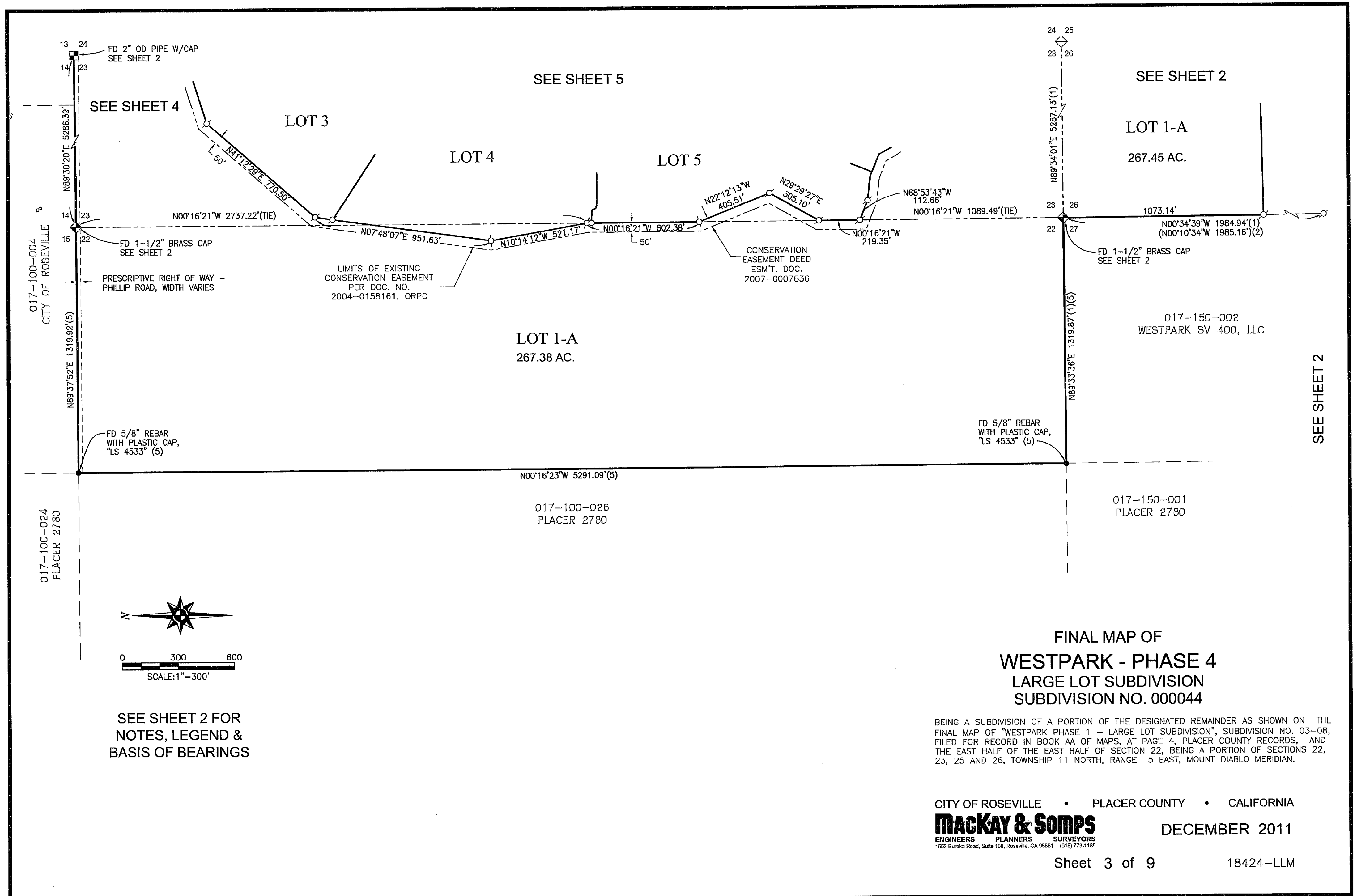
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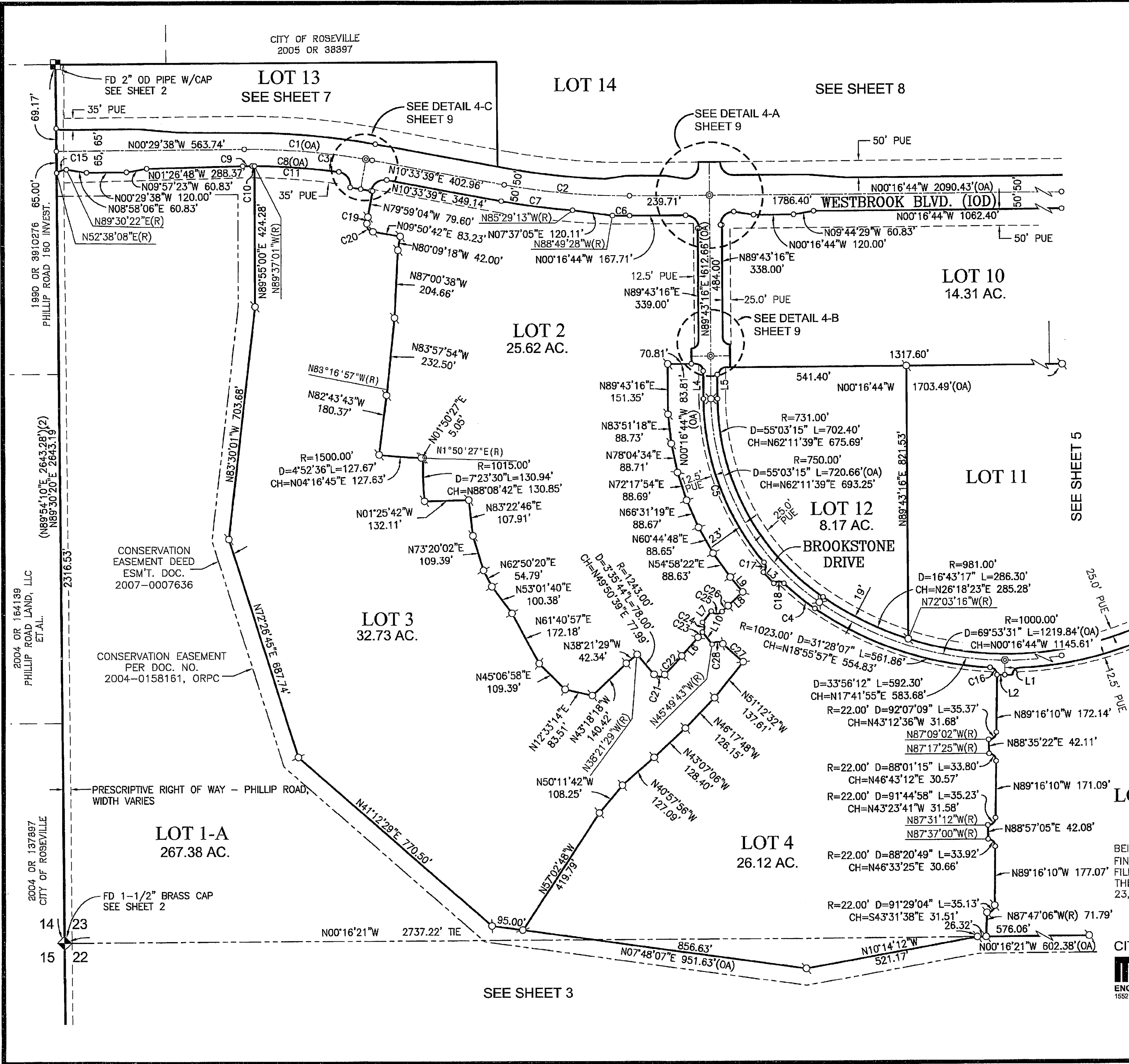
DECEMBER 2011

Sheet 2 of 9

18424-LLM



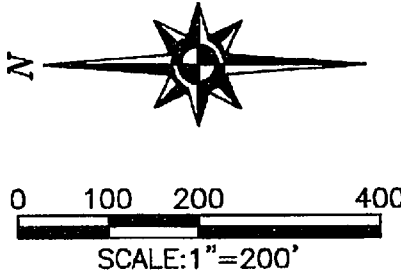




| LINE TABLE |             |        |
|------------|-------------|--------|
| LINE No.   | BEARING     | LENGTH |
| L1         | N89°16'10"W | 44.03' |
| L2         | N00°43'50"E | 23.00' |
| L3         | N46°47'35"E | 46.00' |
| L4         | N89°43'16"E | 83.66' |
| L5         | N89°43'16"E | 72.66' |
| L6         | N49°19'38"W | 74.35' |
| L7         | N52°15'57"W | 42.88' |
| L8         | N43°12'25"W | 59.71' |
| L9         | N50°11'19"E | 58.28' |
| L10        | N51°31'56"E | 46.72' |

| CURVE TABLE |          |           |         |               |
|-------------|----------|-----------|---------|---------------|
| CURVE No.   | RADIUS   | DELTA     | LENGTH  | CHORD BEARING |
| C1(OA)      | 2000.00' | 11°03'17" | 385.88' | N05°02'00"E   |
| C2          | 2000.00' | 10°50'23" | 378.38' | N05°08'27"E   |
| C3          | 2000.00' | 10°30'34" | 366.85' | N04°45'39"E   |
| C4          | 773.00'  | 8°52'53"  | 119.82' | N39°06'27"E   |
| C5          | 773.00'  | 39°40'59" | 535.38' | N69°52'46"E   |
| C6          | 2060.00' | 1°27'16"  | 52.29'  | N00°26'54"E   |
| C7          | 2050.00' | 6°02'52"  | 216.38' | N07°32'13"E   |
| C8(OA)      | 1950.00' | 7°40'20"  | 261.12' | N04°01'08"E   |
| C9          | 1000.00' | 1°37'47"  | 28.44'  | N00°37'55"W   |
| C10         | 1950.00' | 0°12'01"  | 6.82'   | N00°16'59"E   |
| C11         | 1950.00' | 7°28'19"  | 254.30' | N04°07'09"E   |
| C15         | 50.00'   | 36°52'14" | 32.18'  | N18°55'45"W   |
| C16         | 22.00'   | 87°31'55" | 33.61'  | N46°57'51"E   |
| C17         | 22.00'   | 86°45'18" | 33.31'  | N86°35'04"W   |
| C18         | 22.00'   | 86°45'18" | 33.31'  | N00°10'14"E   |
| C19         | 764.00'  | 1°30'59"  | 20.22'  | N80°44'34"W   |
| C20         | 22.00'   | 88°39'14" | 34.04'  | N54°10'19"E   |
| C21         | 22.00'   | 93°41'08" | 35.97'  | N01°12'13"E   |
| C22         | 1177.00' | 3°41'17"  | 75.76'  | N47°29'00"W   |
| C23         | 1223.00' | 0°56'52"  | 20.23'  | N48°51'12"W   |
| C24         | 22.00'   | 82°31'49" | 31.69'  | N89°38'41"W   |
| C25         | 22.00'   | 93°58'49" | 36.09'  | N02°35'21"E   |
| C26         | 1223.00' | 1°11'39"  | 25.49'  | N43°48'14"W   |
| C27         | 1031.00' | 4°32'14"  | 81.64'  | N41°54'10"E   |
| C28         | 22.00'   | 92°56'32" | 35.69'  | N02°17'59"W   |

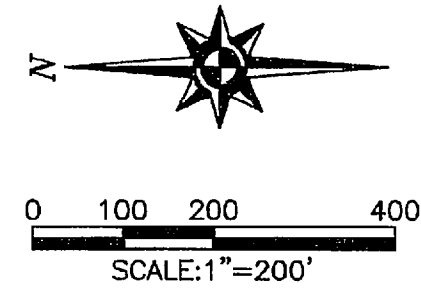
SEE SHEET 2 FOR  
NOTES, LEGEND &  
BASIS OF BEARINGS



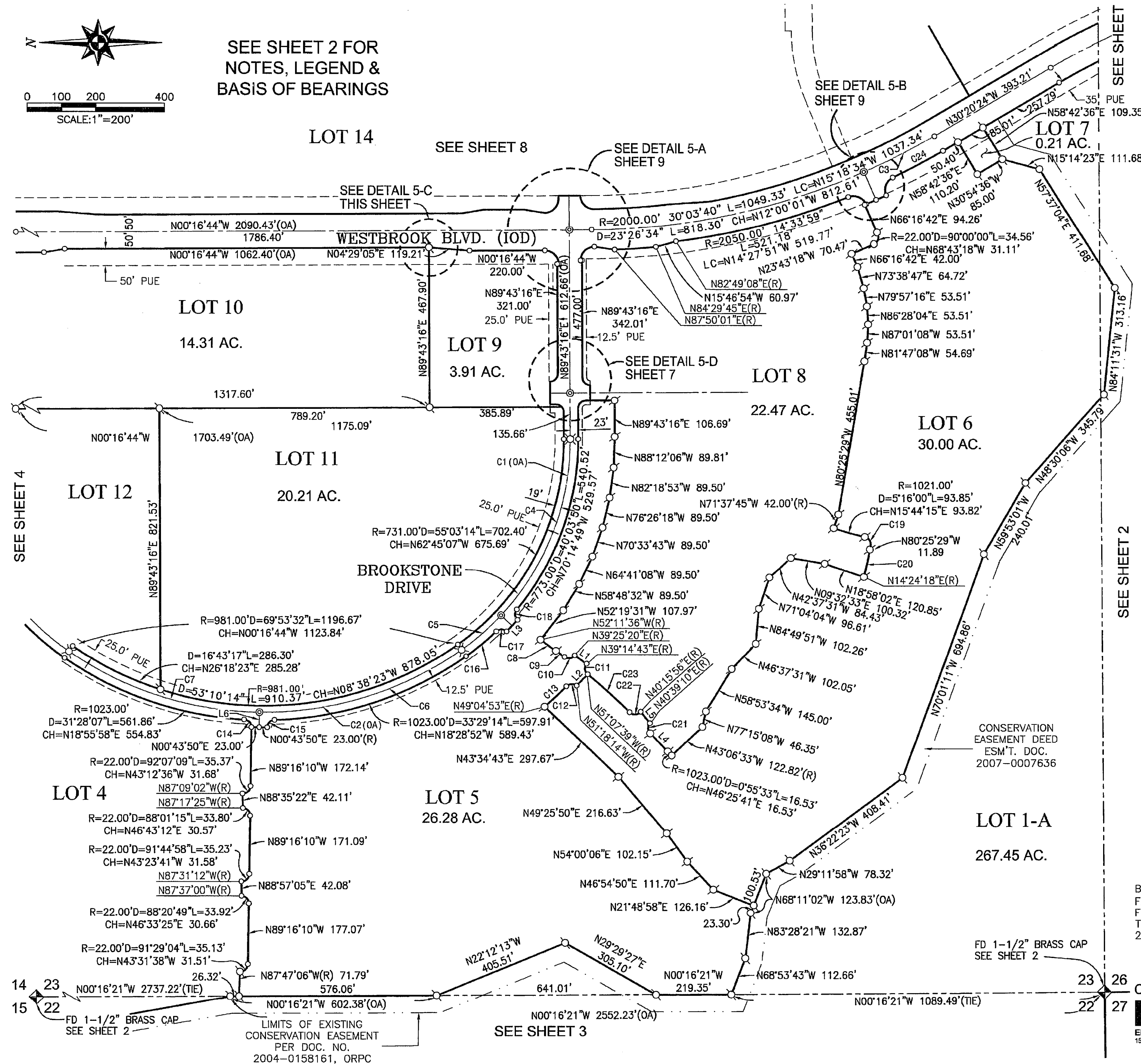
FINAL MAP OF  
WESTPARK - PHASE 4  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 000044

BEING A SUBDIVISION OF A PORTION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF "WESTPARK PHASE 1 - LARGE LOT SUBDIVISION", SUBDIVISION NO. 03-08, FILED FOR RECORD IN BOOK AA OF MAPS, AT PAGE 4, PLACER COUNTY RECORDS, AND THE EAST HALF OF THE EAST HALF OF SECTION 22, BEING A PORTION OF SECTIONS 22, 23, 25 AND 26, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

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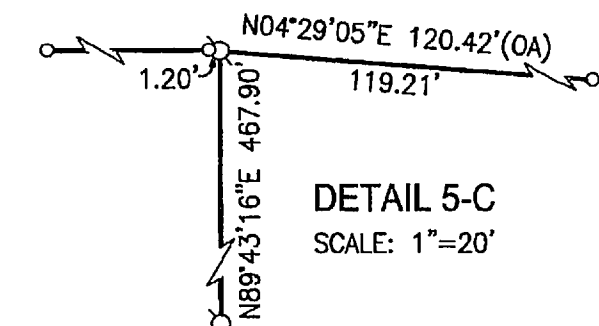


SEE SHEET 2 FOR  
NOTES, LEGEND &  
BASIS OF BEARINGS



| CURVE TABLE |         |           |         |               |              |
|-------------|---------|-----------|---------|---------------|--------------|
| CURVE No.   | RADIUS  | DELTA     | LENGTH  | CHORD BEARING | CHORD LENGTH |
| C1          | 750.00  | 55°03'15" | 720.66  | S62°45'07"E   | 693.25       |
| C2          | 1000.00 | 69°53'31" | 1219.84 | S00°16'44"E   | 1145.61      |
| C3          | 2000.00 | 6°37'06"  | 231.02  | S27°01'51"E   | 230.89       |
| C4          | 750.00  | 43°18'32" | 566.91  | S68°37'28"E   | 553.51       |
| C5          | 750.00  | 11°44'43" | 153.74  | S41°05'51"E   | 153.48       |
| C6          | 1000.00 | 35°57'19" | 627.54  | S17°14'50"E   | 617.29       |
| C7          | 1000.00 | 33°56'12" | 592.30  | S17°41'55"W   | 583.68       |
| C8          | 977.00  | 3°16'02"  | 55.71   | S36°10'23"W   | 55.71        |
| C9          | 1523.00 | 1°08'29"  | 30.34   | N35°08'36"E   | 30.34        |
| C10         | 22.00   | 86°15'31" | 33.12   | S07°26'55"E   | 30.08        |
| C11         | 22.00   | 90°22'22" | 34.70   | S84°03'32"W   | 31.21        |
| C12         | 22.00   | 84°29'56" | 32.45   | N03°33'12"W   | 29.58        |
| C13         | 1021.00 | 4°53'03"  | 87.03   | S43°21'38"E   | 87.01        |
| C14         | 22.00   | 87°31'55" | 33.61   | N46°57'52"E   | 30.44        |
| C15         | 22.00   | 87°31'55" | 33.61   | N45°30'13"W   | 30.44        |
| C16         | 773.00  | 8°30'01"  | 114.68  | S39°28'30"E   | 114.58       |
| C17         | 22.00   | 86°45'18" | 33.31   | N00°20'51"W   | 30.22        |
| C18         | 22.00   | 86°45'18" | 33.31   | S86°24'27"W   | 30.22        |
| C19         | 22.00   | 86°28'16" | 33.20   | N56°20'23"E   | 30.14        |
| C20         | 979.00  | 4°49'47"  | 82.53   | S78°00'35"E   | 82.50        |
| C21         | 22.00   | 84°41'16" | 32.52   | S88°18'32"W   | 29.64        |
| C22         | 22.00   | 94°49'54" | 36.41   | S02°19'07"E   | 32.40        |
| C23         | 1523.00 | 6°13'29"  | 165.46  | N41°59'06"E   | 165.38       |
| C24         | 2050.00 | 4°38'39"  | 166.16  | S28°01'04"E   | 166.12       |

| LINE TABLE |             |        |
|------------|-------------|--------|
| LINE No.   | BEARING     | LENGTH |
| L1         | S35°07'38"W | 42.11' |
| L2         | S45°29'01"E | 46.23' |
| L3         | N46°58'12"W | 46.00' |
| L4         | S45°57'54"W | 73.56' |
| L5         | S51°23'25"W | 42.78' |
| L6         | S89°16'10"E | 44.03' |



FINAL MAP OF  
**WESTPARK - PHASE 4**  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 000044

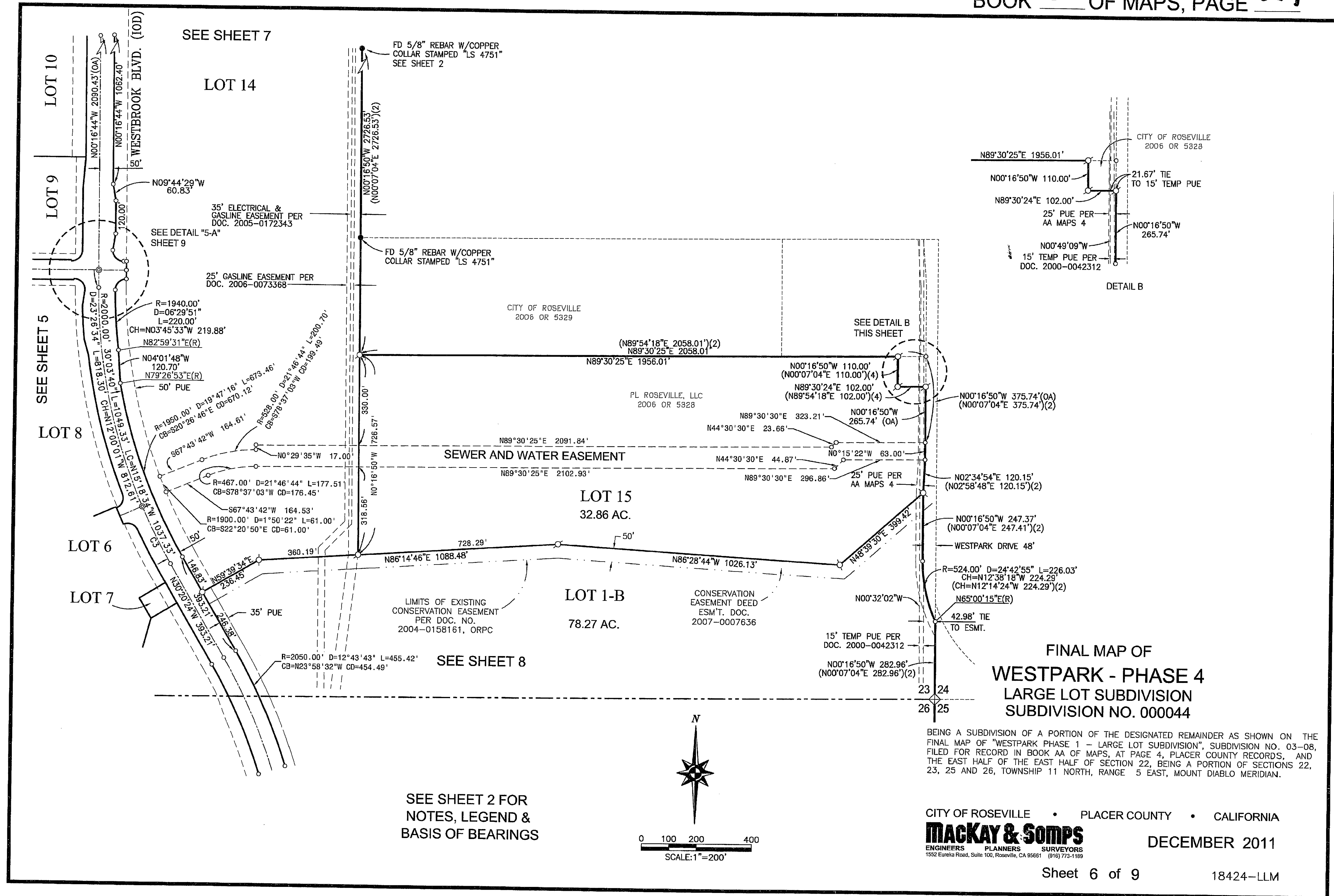
BEING A SUBDIVISION OF A PORTION OF THE DESIGNATED REMAINDER AS SHOWN ON THE FINAL MAP OF "WESTPARK PHASE 1 - LARGE LOT SUBDIVISION", SUBDIVISION NO. 03-08, FILED FOR RECORD IN BOOK AA OF MAPS, AT PAGE 4, PLACER COUNTY RECORDS, AND THE EAST HALF OF THE EAST HALF OF SECTION 22, BEING A PORTION OF SECTIONS 22, 23, 25 AND 26, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

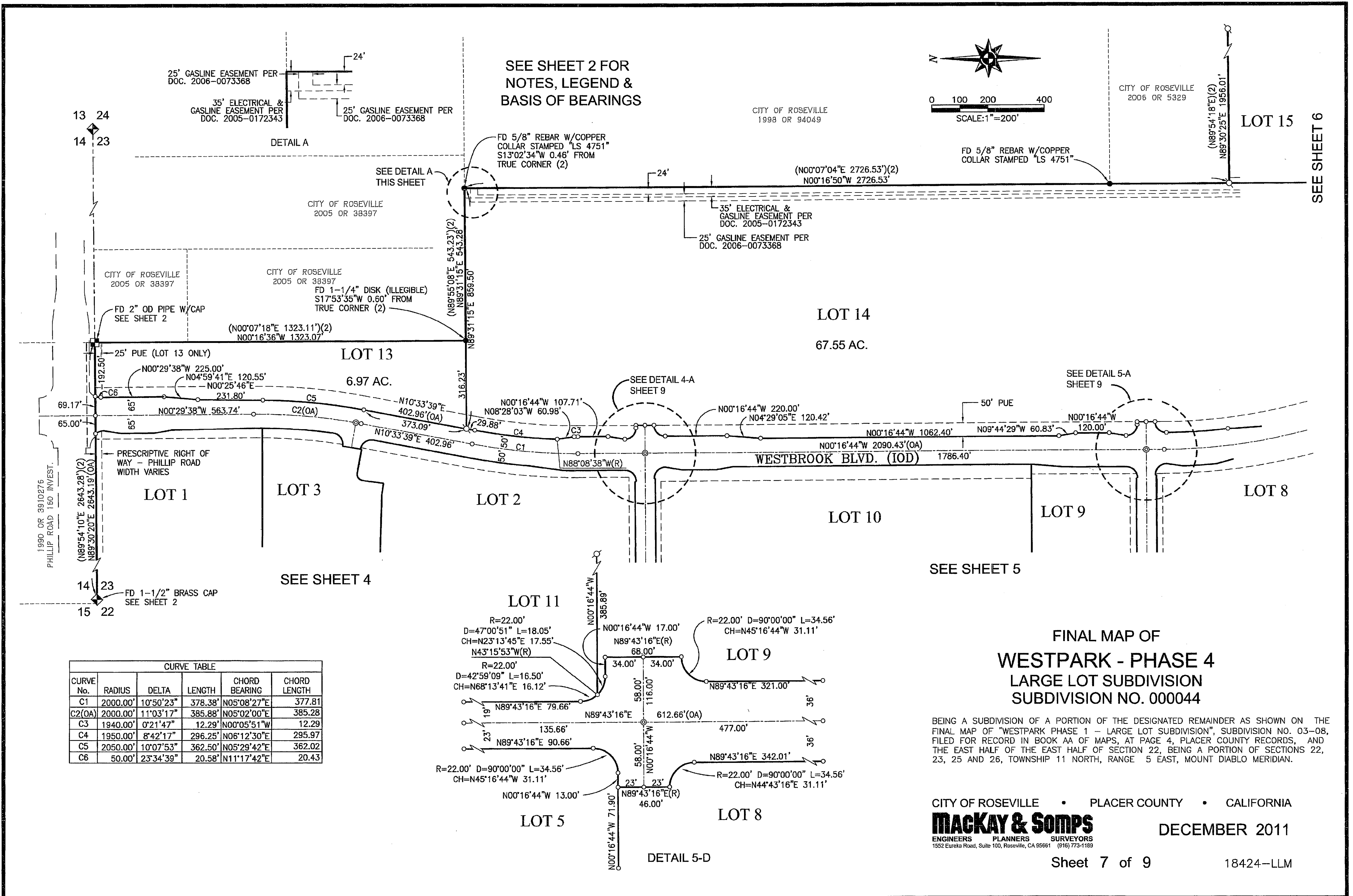
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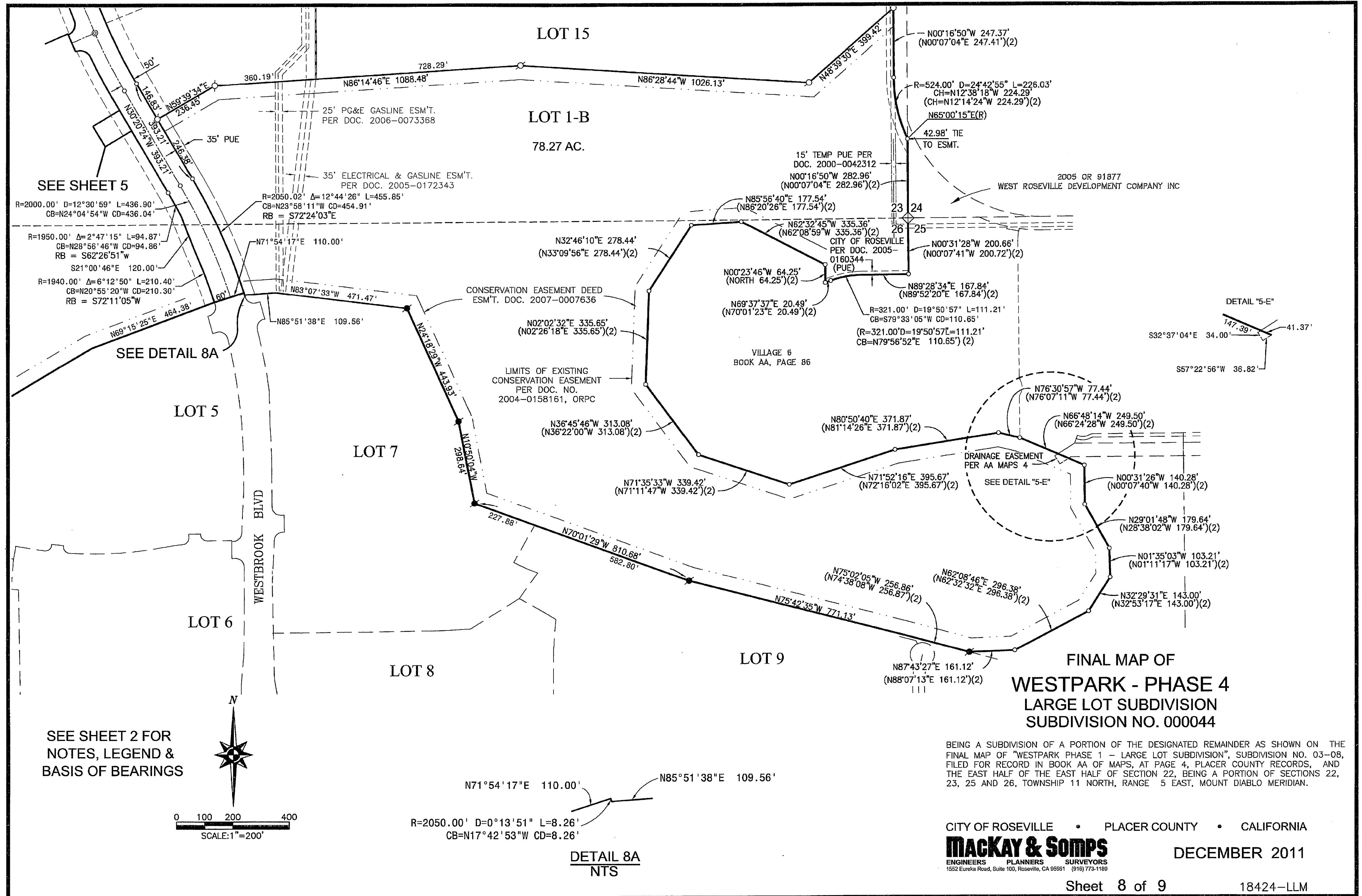
DECEMBER 2011

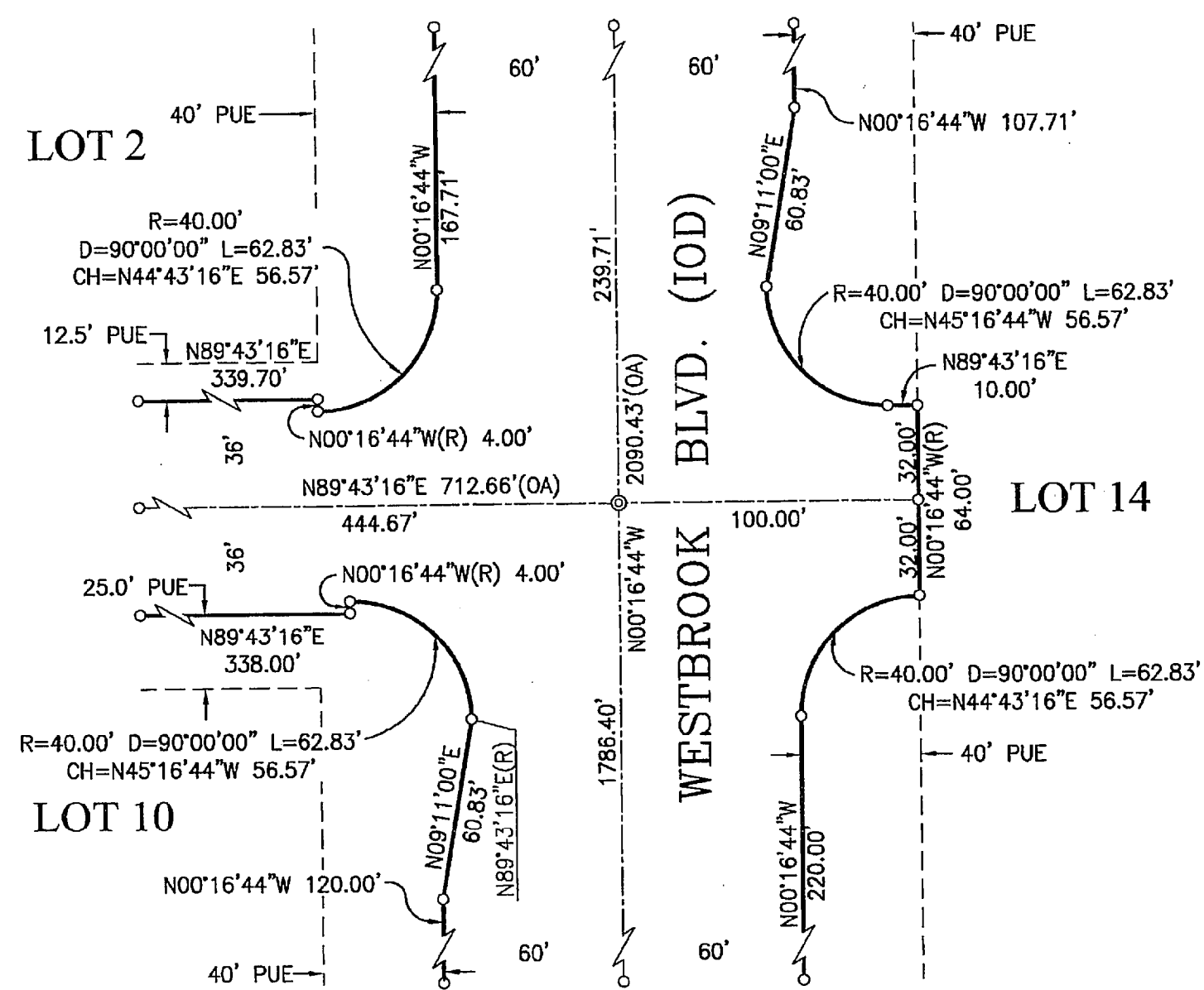




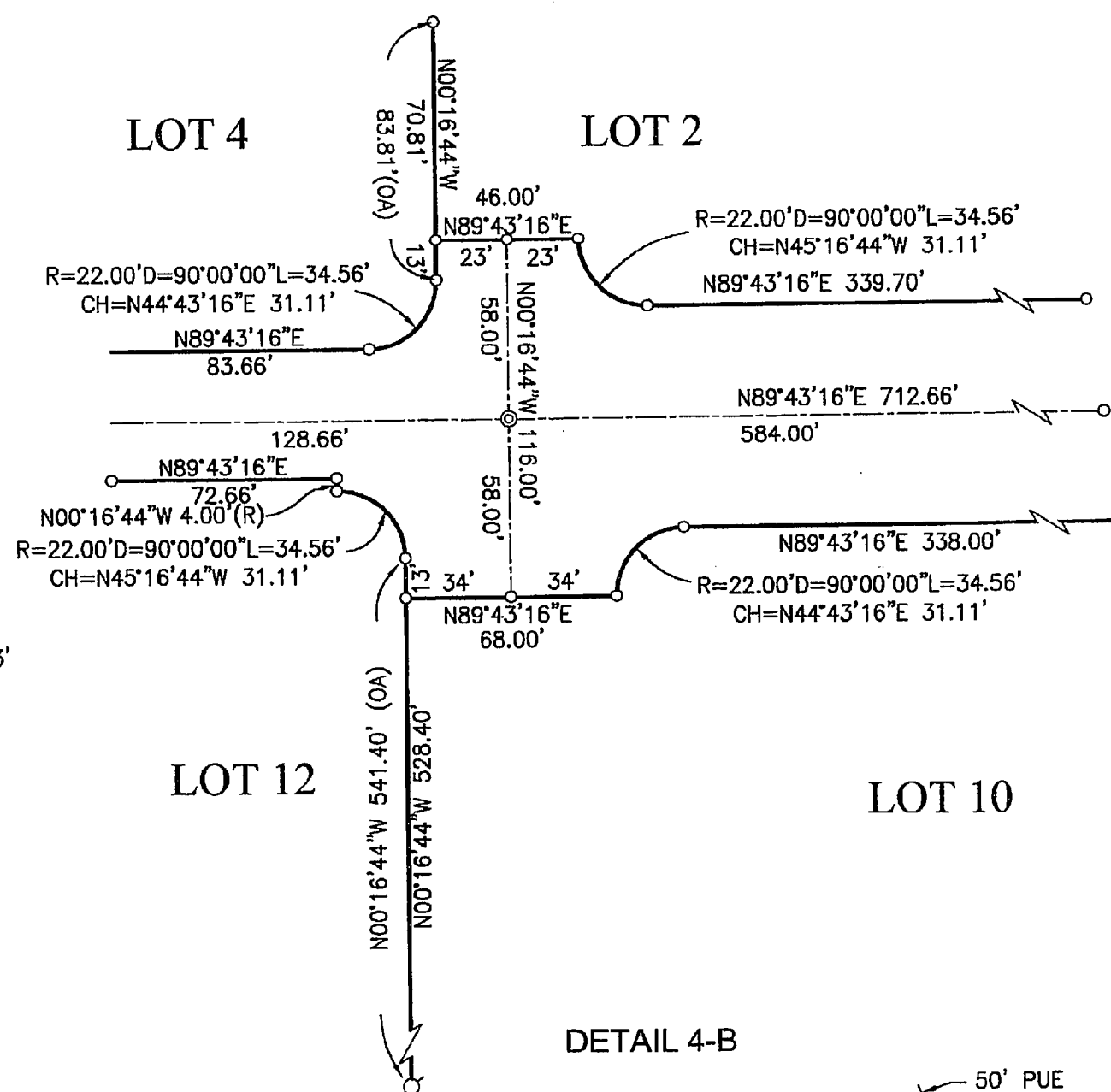




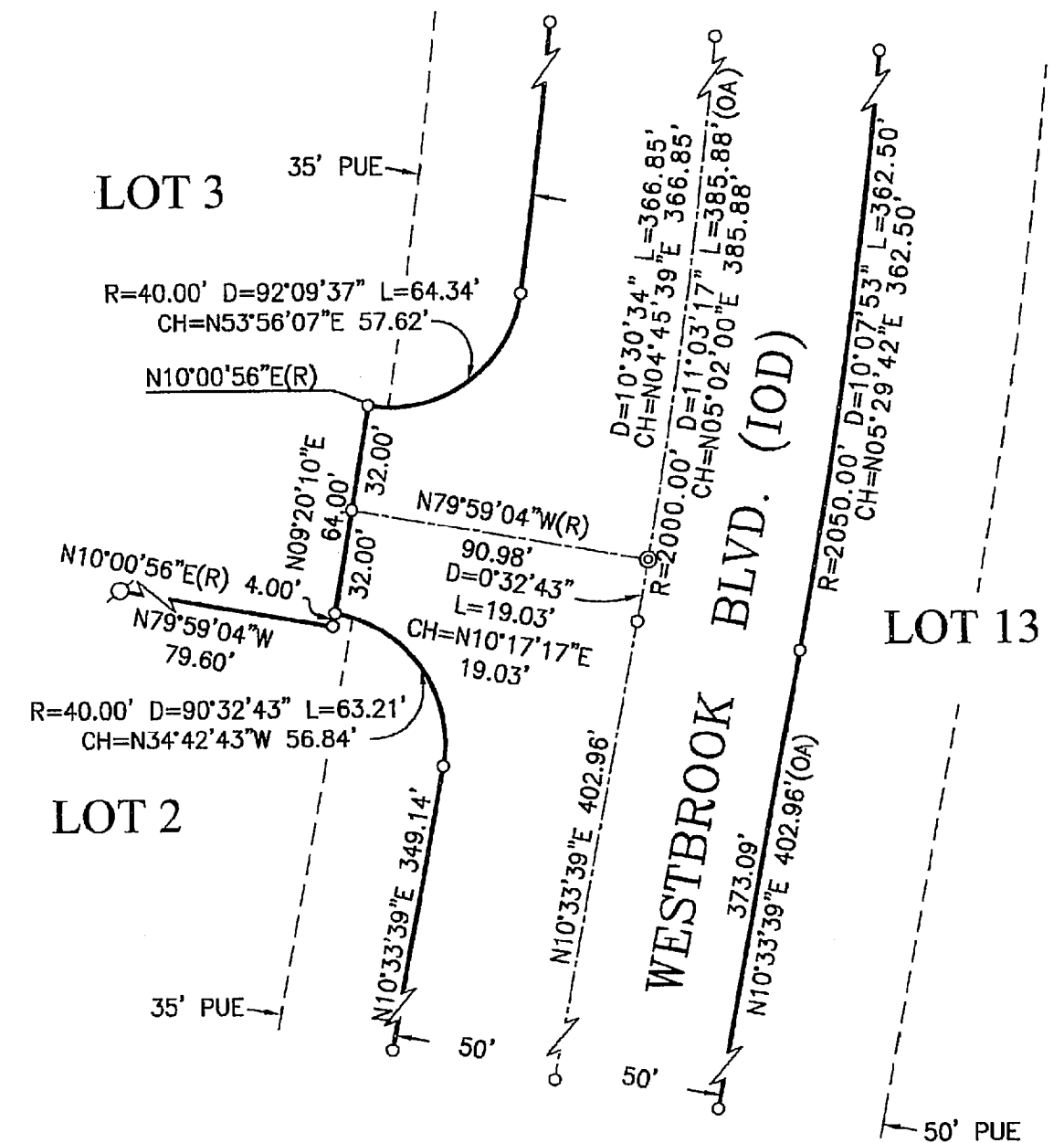




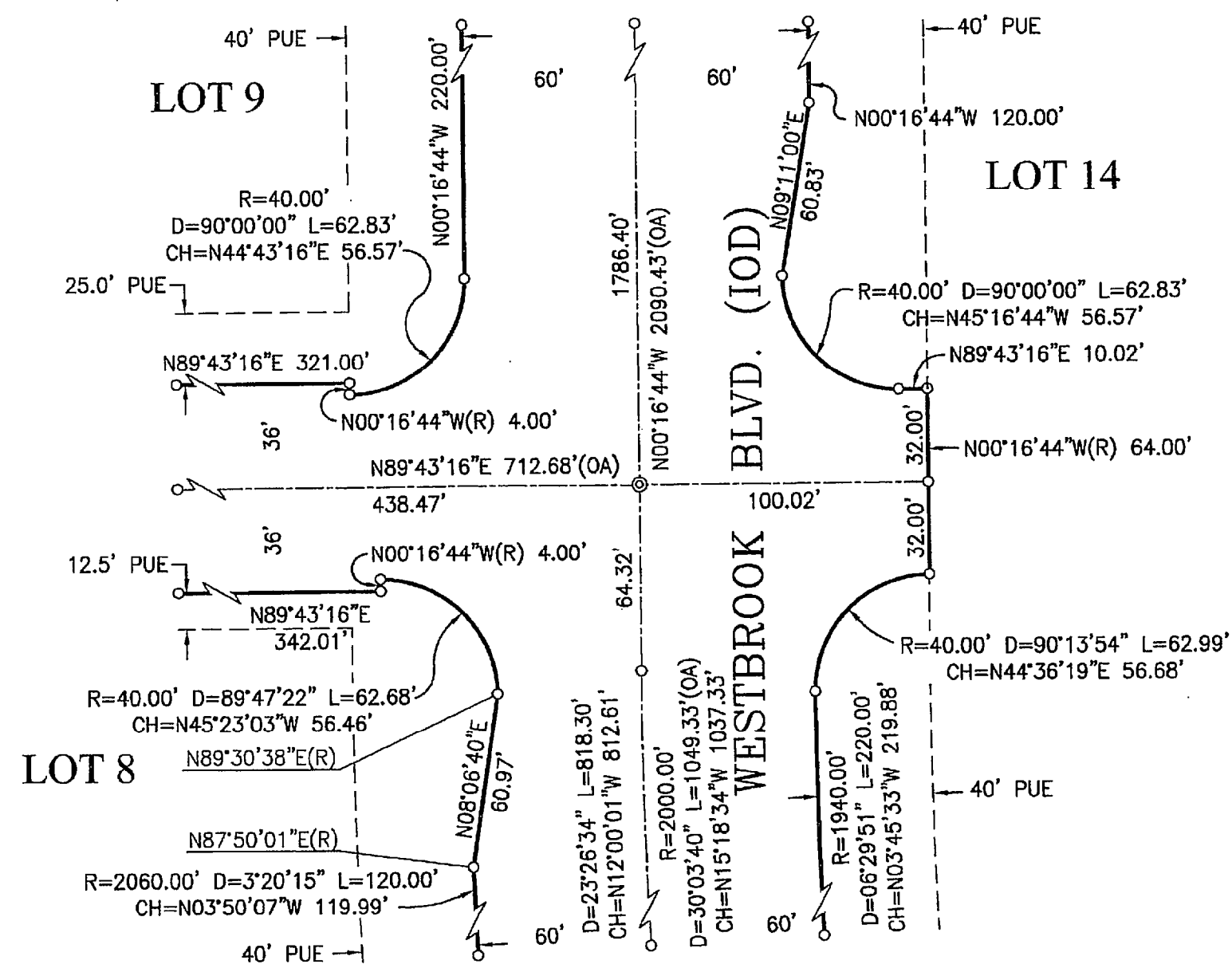
DETAIL 4-A



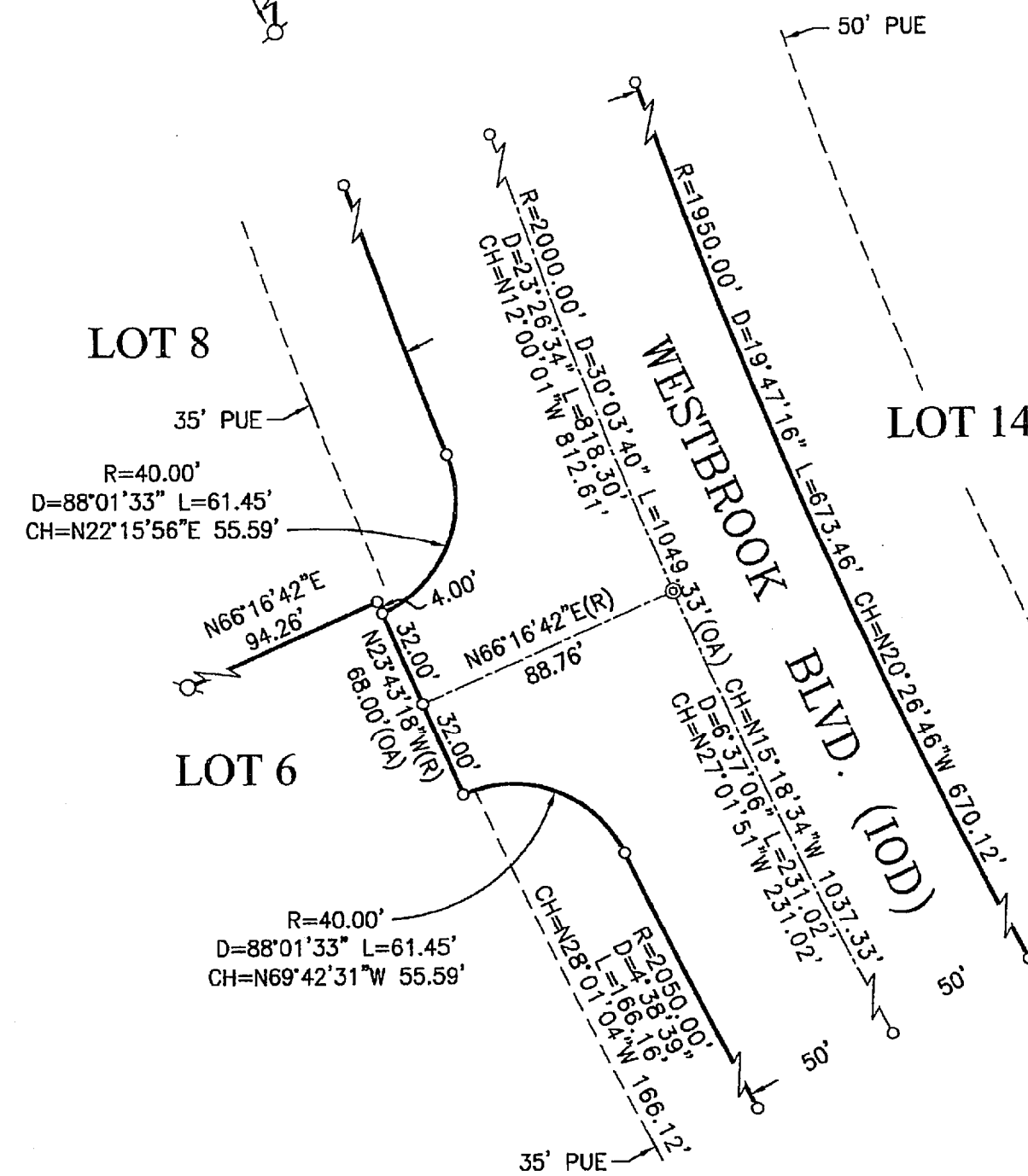
DETAIL 4-B



DETAIL 4-C



DETAIL 5-A



DETAIL 5-B

SEE SHEET 2 FOR  
NOTES, LEGEND &  
BASIS OF BEARINGS



FINAL MAP OF  
WESTPARK - PHASE 4  
LARGE LOT SUBDIVISION  
SUBDIVISION NO. 000044

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DECEMBER 2011

Sheet 9 of 9

18424-LLM



## COUNCIL COMMUNICATION

**CC #: 0981**

**File #: 0709-03 & 0201-01**

**Title:** Affordable Housing Fund Resale Program - Budget Adjustment

**Contact:** Melissa Hagan 916-774-5476 mhagan@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 7.21.**

### RECOMMENDATION TO COUNCIL

The Economic Development Department Housing Division is requesting that City Council adopt an ordinance approving a budget adjustment for \$200,000 to fund Affordable Resale Purchase Program loans from the Affordable Housing (In-Lieu) Fund.

### BACKGROUND

The Affordable Housing (In-Lieu) Fund was established in 2004 and has a two-fold purpose. Originally the fund was established to collect In-Lieu fees from developers in place of constructing required affordable housing. The fund also collects payoffs from developer-subsidized loans (non-City funds) through the Affordable Purchase Program. Affordable Purchase Program loans can be reinvested in the City's Affordable Resale Program when another qualified purchaser applies to purchase the home.

Staff anticipates funding a total of three (3) Affordable Resale loans during FY2020-21. The loans will be funded to qualified affordable purchasers and are anticipated as follows: 1 (one) loan for a Middle Income buyer at \$50,000; 2 (two) loans for Low Income Buyers at \$75,000 each. Therefore, the total budget adjustment requested is \$200,000. Between the \$115,000 budgeted in revenues for FY2020-21 and existing fund balance, there is no need to budget additional revenues to cover the cost of the loans.

### FISCAL IMPACT

The source of funds for the Affordable Resale Program is from developer-subsidized loan payoffs in the Affordable Housing Fund as well as payoffs from the Resale program and therefore does not impact the General Fund.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378.

A budget adjustment for the Affordable Housing Fund Resale Program meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Melissa Hagan, Administrative Analyst

Laura Matteoli, Economic Development Director



---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Ordinance No. 6265

Budget Adjustment



ORDINANCE NO. 6265

ORDINANCE OF THE COUNCIL OF THE CITY OF ROSEVILLE  
AUTHORIZING CERTAIN AMENDMENTS TO THE FISCAL YEAR 2020-21  
BUDGET AND DECLARING THIS ORDINANCE TO BE IMMEDIATELY  
EFFECTIVE AS AN APPROPRIATION MEASURE

THE CITY OF ROSEVILLE ORDAINS:

SECTION 1. The City of Roseville Annual Budget, Fiscal Year 2020-21, is hereby amended by transferring appropriation to and from the activities indicated below:

Appropriate funds for Affordable Resale Purchase programs loans from the Affordable Housing (In-Lieu) fund, per request of the Housing Department, as listed on the attached Request for Budget Adjustment totaling \$200,000.

SECTION 2. This ordinance is hereby declared to be an appropriation measure, immediately effective pursuant to the provisions of Section 5.03 of the Charter.

SECTION 3. The City Clerk is hereby authorized and directed to post a true copy of the foregoing ordinance in each of three (3) conspicuous locations in the City and she shall immediately after such posting enter in the ordinance book, under the record of the ordinance, a certificate under her hand stating the time and place of such publication by posting.

PASSED AND ADOPTED by the Council of the City of Roseville, this  
\_\_\_\_\_ day of \_\_\_\_\_, 2020, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk



## REQUEST FOR BUDGET ADJUSTMENT

REQUESTER NAME & TITLE: Melissa Hagan, Administrative Analyst II FISCAL YEAR: FY2020-21  
 PREPARER NAME & TITLE: Melissa Hagan, Administrative Analyst II COUNCIL DATE (if applicable): 9/16/20  
 DEPARTMENT/DIVISION: Economic Development - Housing ORDINANCE: \_\_\_\_\_

### EXPENDITURES/EXPENSES/TRANSFERS OUT

| ACCOUNT STRING |         |        |         | BUDGET (\$) | DESCRIPTION                                        |
|----------------|---------|--------|---------|-------------|----------------------------------------------------|
| Fund           | Account | Center | Project | Adjustment  |                                                    |
| 2824           | 5574    | 54011  |         | 200,000     | Loans for the Affordable Resale Purchasing Program |
|                |         |        |         |             |                                                    |
|                |         |        |         |             |                                                    |
|                |         |        |         |             |                                                    |
|                |         |        |         |             |                                                    |
| TOTAL          |         |        |         | 200,000     |                                                    |

### REVENUES/TRANSFERS IN

| ACCOUNT STRING |         |        |         | BUDGET (\$) | DESCRIPTION |
|----------------|---------|--------|---------|-------------|-------------|
| Fund           | Account | Center | Project | Adjustment  |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
| TOTAL          |         |        |         | -           |             |

|                |         |
|----------------|---------|
| NET ADJUSTMENT | 200,000 |
|----------------|---------|

### FUND BALANCE

| ACCOUNT STRING |         |        |         | BUDGET (\$) | DESCRIPTION                            |
|----------------|---------|--------|---------|-------------|----------------------------------------|
| Fund           | Account | Center | Project | Adjustment  |                                        |
| 2824           |         |        |         | (200,000)   | Reduce Affordable Housing Fund Balance |
|                |         |        |         |             |                                        |
|                |         |        |         |             |                                        |
|                |         |        |         |             |                                        |
|                |         |        |         |             |                                        |
|                |         |        |         |             |                                        |
| TOTAL          |         |        |         | (200,000)   |                                        |

### Justification for Budget Adjustment:

Adopt an ordinance approving a budget adjustment for \$200,000 to fund Affordable Resale Purchasing Program loans from the Affordable Housing (In-Lieu) Fund. Staff anticipates approximately three (3) resale purchase loans; one for \$50,000 and two for \$75,000 each to be funded to qualified affordable purchasers during FY2020-21. Therefore, the total budget adjustment requested is \$200,000. Between the \$115,000 budgeted in revenues for FY2020-21 and existing fund balance, there is no need to budget additional revenues to cover the cost of the loans.

|                                                                                                                                                                                                                                                                                                                                     |      |                             |      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|-----------------------------|------|
| <div style="display: flex; justify-content: space-between;"> <div style="width: 40%;"> <br/>           REQUESTING DEPARTMENT HEAD / DESIGNEE         </div> <div style="width: 20%;">           8/19/2020<br/>           DATE         </div> <div style="width: 40%; text-align: center;"> <b>REQUIRED APPROVALS:</b> </div> </div> |      |                             |      |
| CHIEF FINANCIAL OFFICER / DESIGNEE                                                                                                                                                                                                                                                                                                  | DATE | BUDGET MANAGER / DESIGNEE   | DATE |
| CITY MANAGER / DESIGNEE                                                                                                                                                                                                                                                                                                             | DATE | BUDGET DEPARTMENT USE ONLY: |      |
| POSTED BY                                                                                                                                                                                                                                                                                                                           |      | DATE                        |      |

Revised: June 24, 2019





## COUNCIL COMMUNICATION

CC #: 0998

File #: 0704-01 & 0201-01

**Title:** Stoneridge/Crocker Ranch and Diamond Creek Areas Park Upgrade Projects – Budget Adjustment

**Contact:** Tara Gee 916-774-5253 tgee@roseville.ca.us

Meeting Date: 9/16/2020

Item #: 7.22.

### RECOMMENDATION TO COUNCIL

Recommend City Council adopt an ordinance to approve a budget adjustment totaling \$283,000 which allocates \$140,000 of the savings recognized in FY2018-19 and FY2019-20 from the Roseville Finance Authority's 2017A bond refunding associated with the Stoneridge and Crocker Ranch community facilities districts for the addition of a shade structure at Cambria Park and additional perimeter landscaping at Harry Crabb Park, as well as \$143,000 from the Diamond Creek Community Facilities District No. 1 Fund for rehabilitation projects related to Bill Hughes Park.

### BACKGROUND

Over a 15 year time span, projects have been identified using savings recognized in FY2018-19 and FY2019-20 from the Roseville Finance Authority's 2017A bond refunding associated with the Stoneridge and Crocker Ranch community facilities districts. Projects included upgrades to streetscapes and parks within both areas. Also identified in the spending plan is a payment plan for repayment of the Auto Replacement Fund which was used as an inter-fund loan to finance the construction of Harry Crabb Park.

This budget adjustment appropriates a total of \$283,000 for park rehabilitation projects as follows:

- 1) \$140,000 from the Roseville Finance Authority's bond refunding savings to fund the following:
  - \$40,000 to add a shade structure over the play structure at Cambria Park (Stoneridge)
  - \$100,000 to enhance the existing perimeter landscaping at Harry Crabb Park (Stoneridge)
- 2) \$143,000 from the Diamond Creek Community Facilities District No. 1 Fund for shade structures at Bill Hughes Park.

### FISCAL IMPACT

The budget adjustment allocates \$140,000 to park upgrade projects from savings recognized in

FY2018-19 and FY2019-20 from the Roseville Finance Authority's 2017A bond refunding associated with the Stoneridge and Crocker Ranch community facilities districts and \$143,000 from the Diamond Creek Community Facilities District No. 1 Fund. These upgrades will have no impact on the General Fund.

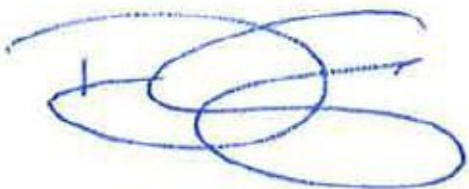
### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. A budget adjustment meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Tara Gee, Park Planning & Development Superintendent

Jill Geller, Parks, Recreation & Libraries Director



---

Dominick Casey, City Manager

### **ATTACHMENTS:**

#### **Description**

Ordinance No. 6267

Budget Adjustment

ORDINANCE NO. 6267

ORDINANCE OF THE COUNCIL OF THE CITY OF ROSEVILLE  
AUTHORIZING CERTAIN AMENDMENTS TO THE FISCAL YEAR 2020-21  
BUDGET AND DECLARING THIS ORDINANCE TO BE IMMEDIATELY  
EFFECTIVE AS AN APPROPRIATION MEASURE

THE CITY OF ROSEVILLE ORDAINS:

SECTION 1. The City of Roseville Annual Budget, Fiscal Year 2020-21, is hereby amended by transferring appropriation to and from the activities indicated below:

Appropriate funds for the addition of a shade structure at Cambria Park, additional perimeter landscaping at Harry Crabb Park, and for rehabilitation projects related to Bill Hughes Park, at the request of the Parks, Recreation & Libraries, as listed on the attached Request for Budget Adjustment in the amount of \$283,000.

SECTION 2. This ordinance is hereby declared to be an appropriation measure, immediately effective pursuant to the provisions of Section 5.03 of the Charter.

SECTION 3. The City Clerk is hereby authorized and directed to post a true copy of the foregoing ordinance in each of three (3) conspicuous locations in the City and she shall immediately after such posting enter in the ordinance book, under the record of the ordinance, a certificate under her hand stating the time and place of such publication by posting.

PASSED AND ADOPTED by the Council of the City of Roseville, this  
\_\_\_\_\_ day of \_\_\_\_\_, 2020, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk



## REQUEST FOR BUDGET ADJUSTMENT

REQUESTER NAME & TITLE: Tara Gee/Park Planning & Dev Superintendent FISCAL YEAR: FY2020-21  
 PREPARER NAME & TITLE: Kathy Cullen/Administrative Analyst II COUNCIL DATE (if applicable): 9/16/2020  
 DEPARTMENT/DIVISION: Parks, Recreation & Libraries/Park Planning ORDINANCE: \_\_\_\_\_

### Expenditures/Expenses/Transfers Out

| ACCOUNT STRING |         |        |         | BUDGET (\$)    | DESCRIPTION                                                                                               |
|----------------|---------|--------|---------|----------------|-----------------------------------------------------------------------------------------------------------|
| Fund           | Account | Center | Project | Adjustment     |                                                                                                           |
| 3016           | 6587    | 84001  | 500158  | 143,000        | Capital Outlay - CIP Projects: Addition of shade structure over playground and picnic area at Hughes Park |
| 3541           | 6587    | 84001  | 500169  | 40,000         | Capital Outlay - CIP Projects: Addition of shade structure over playground at Cambria Park                |
| 3541           | 5411    | 84001  | 400007  | 100,000        | Repairs & Maintenance - General: replace perimeter landscaping around Crabb Park                          |
|                |         |        |         |                |                                                                                                           |
|                |         |        |         |                |                                                                                                           |
|                |         |        |         |                |                                                                                                           |
| <b>TOTAL</b>   |         |        |         | <b>283,000</b> |                                                                                                           |

### Revenues/Transfers In

| ACCOUNT STRING |         |        |         | BUDGET (\$) | DESCRIPTION |
|----------------|---------|--------|---------|-------------|-------------|
| Fund           | Account | Center | Project | Adjustment  |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
| <b>TOTAL</b>   |         |        |         | <b>-</b>    |             |

|                       |                |
|-----------------------|----------------|
| <b>NET ADJUSTMENT</b> | <b>283,000</b> |
|-----------------------|----------------|

### Available Resources

| ACCOUNT STRING |         |        |         | BUDGET (\$) | DESCRIPTION                                                                |
|----------------|---------|--------|---------|-------------|----------------------------------------------------------------------------|
| Fund           | Account | Center | Project | Adjustment  |                                                                            |
| 3016           |         |        |         | (143,000)   | Reduce available resources in Diamond Creek CFD1                           |
| 3541           |         |        |         | (140,000)   | Reduce available resources in Roseville Finance Authority Capital Projects |
|                |         |        |         |             |                                                                            |
|                |         |        |         |             |                                                                            |
|                |         |        |         |             |                                                                            |
|                |         |        |         |             |                                                                            |
| TOTAL          |         |        |         | (283,000)   |                                                                            |

### Justification for Budget Adjustment:

The PRL department is requesting a budget adjustment totaling \$283,000 for park rehabilitation projects as follows:  
 1) \$140,000.00 from the Roseville Finance Authority's bond refunding savings to fund the following:
 

- \$40,000 to add a shade over the play structure at Cambria Park (Stoneridge)
- \$100,000 to enhance the existing perimeter landscaping at Harry Crabb Park (Stoneridge)

 2) \$143,000.00 from the Diamond Creek CFD1 (Fund 3016) for the addition of shade structures at Bill Hughes Park.

|                                           |                 |                           |      |
|-------------------------------------------|-----------------|---------------------------|------|
| REQUIRED APPROVALS:                       |                 |                           |      |
| <br>REQUESTING DEPARTMENT HEAD / DESIGNEE | 8/20/20<br>DATE | BUDGET MANAGER / DESIGNEE | DATE |
| CHIEF FINANCIAL OFFICER / DESIGNEE        | DATE            | CITY MANAGER / DESIGNEE   | DATE |
| BUDGET DEPARTMENT USE ONLY:               |                 |                           |      |
|                                           |                 |                           |      |
| POSTED BY                                 |                 | DATE                      |      |



## COUNCIL COMMUNICATION

CC #: 1006

File #: 0110-01 & 0201-01

**Title:** Placer Valley Event Center Sidewalk Extension - Funding Agreement and Budget Adjustment  
**Contact:** Ryan DeVore 916-774-5349 rdevore@roseville.ca.us

Meeting Date: 9/16/2020

Item #: 7.23.

### RECOMMENDATION TO COUNCIL

Staff recommends the City Council adopt a resolution authorizing the City Manager to execute a Funding Agreement with Placer Valley Sports Complex.

Staff additionally recommend City Council adopt an ordinance approving a budget adjustment in the amount of \$200,000 from the Strategic Improvement Fund.

### BACKGROUND

On February 13, 2020, the Placer Valley Event Center (PVEC), a 160,000 square foot indoor multi-purpose event facility, opened @the Grounds. The \$34 million dollar event center was the result of a public-private partnership among County, City and Placer Valley Tourism, the administrator for the Placer Valley Sports Complex and Tourism Marketing District.

The PVEC is estimated to add \$12 million dollars annually to the economy in South Placer County and the PVEC will additionally bring between 24,000 and 28,000 hotel room night sales annually to the area. The City will benefit from these additional hotel room nights as it collects a transient occupancy tax ("TOT") on each room night.

Additional improvements in the form of an onsite sidewalk @the Grounds is needed as shown in Exhibit "A" of the funding agreement. The sidewalk extension from Junction Boulevard through Event Center Drive will allow for safe bicycle and pedestrian pathways to access @the Grounds without having any unsafe conflicts with vehicles and would also accommodate the closest bus stop location which is located on Junction Boulevard at Barbara Drive. As a continuation of the public-private partnership and because of the positive economic impact the City receives, and further because these improvements will enhance public safety, staff finds that a public purpose is served by partially funding the onsite sidewalk, not-to-exceed \$200,000, from the Strategic Improvement Fund.

Existing conditions do not provide a separate path for bicycles and pedestrians and in just the

short amount of time since the Event Center has opened, PVEC staff have seen a significant increase in both bicycles and pedestrians trying to access the site, which causes conflicts with vehicles. The sidewalk extension will also encourage more local attendance from the adjacent neighborhoods especially for community-focused events such as the Placer County Fair and 4<sup>th</sup> of July Celebration, in addition to the regularly scheduled events.

### FISCAL IMPACT

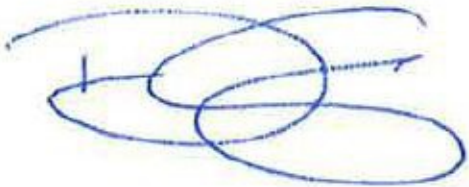
The City's contribution is a not-to-exceed amount of \$200,000 from the Strategic Improvement Fund. An advance contribution of \$100,000 will be paid upon City Council approval and the balance paid upon completion of the work.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Approval of a funding agreement and budget adjustment meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Ryan DeVore, Assistant City Manager

A handwritten signature in blue ink, appearing to read 'Ryan DeVore', with a stylized, overlapping loop structure.

---

Dominick Casey, City Manager

### **ATTACHMENTS:**

#### **Description**

Resolution No. 20-355

Funding Agreement

Ordinance 6266

Budget Adjustment

RESOLUTION NO. 20-355

APPROVING A FUNDING AGREEMENT BETWEEN THE CITY OF ROSEVILLE AND  
PLACER VALLEY SPORTS COMPLEX AND AUTHORIZING THE CITY MANAGER TO  
EXECUTE IT ON BEHALF OF THE CITY OF ROSEVILLE

WHEREAS, a Funding Agreement between the City of Roseville and Placer Valley Sports Complex dba @the Grounds, for an onsite sidewalk @the Grounds, has been reviewed by the Council; and

NOW, THEREFORE, BE IT RESOLVED by the Council of the City of Roseville that said agreement is approved and that the City Manager is authorized to execute it on behalf of the City of Roseville.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 20\_\_, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk

**FUNDING AGREEMENT BETWEEN THE CITY OF ROSEVILLE  
AND PLACER VALLEY SPORTS COMPLEX**

**(Onsite Sidewalk @the Grounds)**

THIS FUNDING AGREEMENT is made and entered into this \_\_\_\_ day of \_\_\_\_\_, 2020, by and between the City of Roseville, a municipal corporation (“CITY”), and the Placer Valley Sports Complex, a California nonprofit public benefit corporation, dba @the Grounds (“PVSC”).

W I T N E S S E T H:

WHEREAS, Placer County (“COUNTY”) owns approximately 61 acres of improved real property located in Roseville, California, which was previously referred to as the Placer County Fairgrounds but is now known as @the Grounds; and

WHEREAS, @the Grounds is located within the physical boundary of CITY; and

WHEREAS, on February 13, 2020, the Placer Valley Event Center (“PVEC”), a 160,000 square foot indoor multi-purpose event facility, opened @the Grounds; and

WHEREAS, the \$34 million dollar event center was the result of a public-private partnership among COUNTY, CITY and Placer Valley Tourism, the administrator for the Placer Valley Sports Complex and Tourism Marketing District; and

WHEREAS, PVSC is a nonprofit public benefit corporation that was created and exists for the specific purpose of managing and operating @the Grounds for public uses; and

WHEREAS, the PVEC is estimated to add \$12 million dollars annually to the economy in South Placer County; and



WHEREAS, the PVEC will additionally bring between 24,000 and 28,000 hotel room night sales annually to the area; and

WHEREAS, CITY will benefit from these additional hotel room nights as it collects a transient occupancy tax (“TOT”) on each room night; and

WHEREAS, additional improvements in the form of an onsite sidewalk @the Grounds is needed as shown in Exhibit “A,” attached hereto and incorporated herein by this reference; and

WHEREAS, the sidewalk extension from Junction Boulevard through Event Center Drive will allow for safe bicycle and pedestrian pathways to access @the Grounds without having any unsafe conflicts with vehicles and would also accommodate the closest bus stop location which is located on Junction Boulevard at Barbara Drive; and

WHEREAS, as a continuation of the public-private partnership and because of the positive economic impact from the PVEC CITY receives, and further because these improvements will enhance public safety, CITY finds that a public purpose is served by partially funding the onsite sidewalk; and

WHEREAS, it is the sole purpose of this MOU to set forth CITY’s commitment to pay a proportionate cost for the construction of an onsite sidewalk @the Grounds.

**NOW, THEREFORE,** the parties agree as follows:

1. Cost-Sharing. CITY shall be responsible for paying up to two hundred thousand dollars (\$200,000) towards construction of the onsite sidewalk. PVSC shall be responsible for paying for all design and engineering work and for paying for any construction costs exceeding two hundred thousand dollars (\$200,000).

2. Contracting. PVSC shall be solely responsible for contracting with the necessary consultants and contractors for the design and construction of the onsite sidewalk and for administering such contracts.

3. Compliance with State Prevailing Wage and Contractor Registration Laws Required. PVSC is required to pay prevailing wages and to otherwise comply with applicable provisions of the California Labor Code, Government Code and Public Contracts Code relating to public works projects of cities.

In addition, no contractor or subcontractor may be listed on a proposal for or work on the onsite sidewalk unless registered with the Department of Industrial Relations pursuant to Labor Code section 1725.5. PVSC shall be responsible for ensuring that these contractor registration requirements are adhered to since construction of this onsite sidewalk is subject to compliance monitoring and enforcement by the Department of Industrial Relations. In addition, PVSC shall notify the Department of Industrial Relations of this construction project within five (5) days of the award of a contract to a contractor for the project.

4. Payments. Within thirty (30) calendar days after execution of this Agreement, CITY shall pay to PVSC an advance contribution towards its share in the amount of one hundred thousand dollars (\$100,000). CITY shall pay the balance of its share, not to exceed two hundred thousand dollars (\$200,000) in total, within thirty (30) calendar days after completion of the onsite sidewalk.

5. Term of Agreement. This Agreement shall be effective as of the date executed by the authorized representatives of the parties and shall remain in effect until amended or superseded by another Agreement or until all services and contracts covered by this Agreement

have been completed and performed, and all payments required under this Agreement have been made.

6. Successors in Interest. This Agreement shall be binding upon the heirs, successors, executors, administrators and assigns of the respective parties hereto.

7. Attorney's Fees; Venue; Governing Law. If either party commences any legal action against the other party arising out of this Agreement or the performance hereof, the prevailing party in such action shall be entitled to recover its reasonable litigation expenses, including but not limited to, court costs, expert witness fees, discovery expenses, and attorney's fees. Any action arising out of this Agreement shall be brought in Placer County, California, regardless of where else venue may lie. This Agreement shall be governed by and construed in accordance with the laws of the State of California.

8. Modification. This Agreement and each provision contained herein may be waived, amended, supplemented or eliminated only by mutual written agreement of the parties.

9. Severability. If any of the provisions contained in this Agreement are for any reason held invalid or unenforceable, such holding shall not affect the remaining provisions or the validity and enforceability of the Agreement as a whole.

10. Notices. Any notices to parties required by this Agreement shall be delivered personally or mailed, U.S. first class postage prepaid, addressed as follows:

CITY OF ROSEVILLE

City of Roseville  
311 Vernon Street  
Roseville, CA 95678  
Attn: City Manager

PVSC

Placer Valley Sports Complex  
2204 Plaza Drive, Suite 110  
Rocklin, CA 95765  
Attn: Chief Executive Officer

Either party may amend its address for notice by giving notice to the other party in writing.

11. Integrated Agreement. This is an integrated agreement and contains all of the terms, considerations, understanding and promises of the parties. It shall be read as a whole.

IN WITNESS WHEREOF, the City of Roseville, a municipal corporation, has authorized the execution of this Agreement in duplicate by its City Manager and attested to by its City Clerk under the authority of Resolution No. \_\_\_\_\_, adopted by the Council of the City of Roseville on the \_\_\_\_ day of \_\_\_\_\_, 2020, and PVSC has caused this Agreement to be executed.

CITY OF ROSEVILLE, a  
municipal corporation

PLACER VALLEY  
SPORTS COMPLEX,  
a California nonprofit corporation,  
dba @the Grounds

BY: \_\_\_\_\_  
DOMINICK CASEY  
City Manager

BY:  \_\_\_\_\_  
DAVID ATTAWAY  
Chief Executive Officer

ATTEST:

and

BY: \_\_\_\_\_  
SONIA OROZCO  
City Clerk

BY:  \_\_\_\_\_  
STEPHEN MAKIS  
Secretary

APPROVED AS TO FORM:

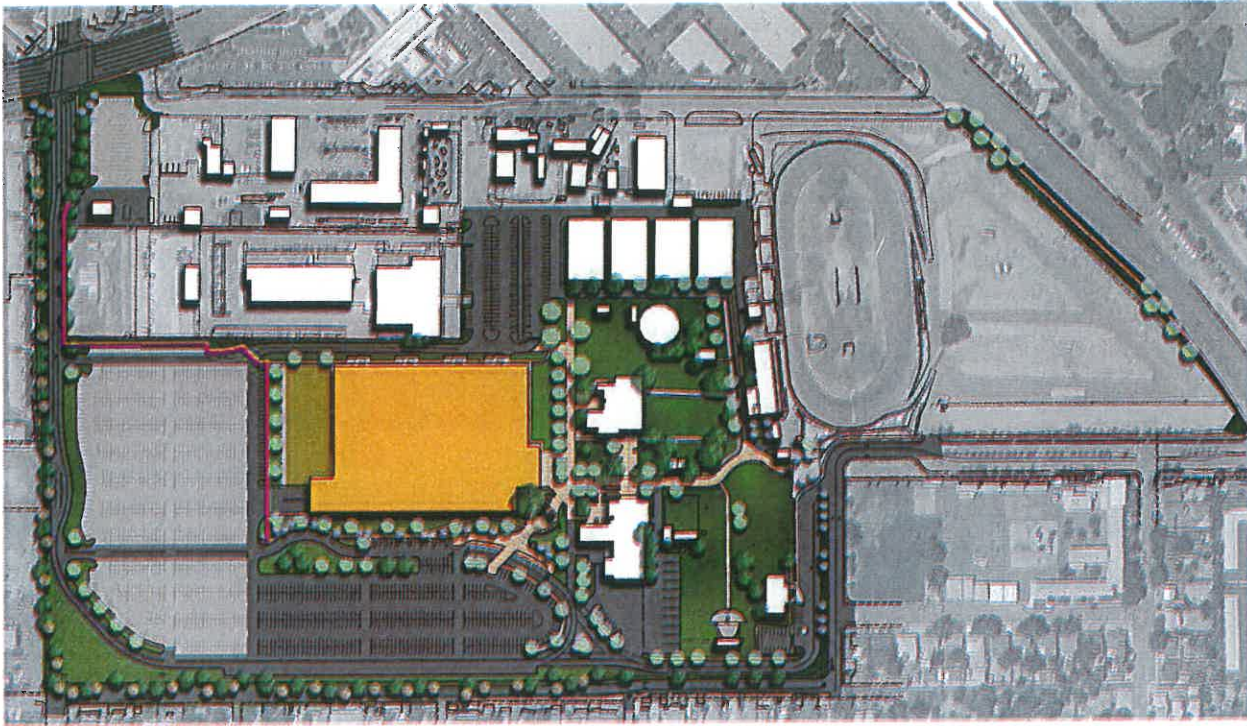
BY: \_\_\_\_\_  
ROBERT R. SCHMITT  
City Attorney

APPROVED AS TO SUBSTANCE:

BY:   
\_\_\_\_\_  
RYAN DEVORE  
Assistant City Manager

### Exhibit A

Onsite sidewalk construction to provide all grading, site concrete, and site concrete reinforcement for added 5' wide x 4" thick concrete walkway as depicted below starting at Event Center Drive following interior of the site to the southwest corner of the Event Center (estimated 5,179 SF of new sidewalk).



ORDINANCE NO. 6266

ORDINANCE OF THE COUNCIL OF THE CITY OF ROSEVILLE  
AUTHORIZING CERTAIN AMENDMENTS TO THE FISCAL YEAR 2020-21  
BUDGET AND DECLARING THIS ORDINANCE TO BE IMMEDIATELY  
EFFECTIVE AS AN APPROPRIATION MEASURE

THE CITY OF ROSEVILLE ORDAINS:

SECTION 1. The City of Roseville Annual Budget, Fiscal Year 2020-21, is hereby amended by transferring appropriation to and from the activities indicated below:

Appropriate funds for the Placer Valley Event Center sidewalk extension project, per request of the City Managers' Department, as listed on the attached Request for Budget Adjustment totaling \$200,000.

SECTION 2. This ordinance is hereby declared to be an appropriation measure, immediately effective pursuant to the provisions of Section 5.03 of the Charter.

SECTION 3. The City Clerk is hereby authorized and directed to post a true copy of the foregoing ordinance in each of three (3) conspicuous locations in the City and she shall immediately after such posting enter in the ordinance book, under the record of the ordinance, a certificate under her hand stating the time and place of such publication by posting.

PASSED AND ADOPTED by the Council of the City of Roseville, this  
\_\_\_\_\_ day of \_\_\_\_\_, 2020, by the following vote on roll call:

AYES COUNCILMEMBERS:

NOES COUNCILMEMBERS:

ABSENT COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk



## REQUEST FOR BUDGET ADJUSTMENT

REQUESTER NAME & TITLE: Kelly Wickline, Executive Assistant FISCAL YEAR: 2021  
 PREPARER NAME & TITLE: Alexandra Marquez, Budget Analyst COUNCIL DATE (if applicable): 9/16/2020  
 DEPARTMENT/DIVISION: City Manager ORDINANCE: \_\_\_\_\_

### EXPENDITURES/EXPENSES/TRANSFERS OUT

| ACCOUNT STRING |         |        |         | BUDGET (\$) | DESCRIPTION                                                                                        |
|----------------|---------|--------|---------|-------------|----------------------------------------------------------------------------------------------------|
| Fund           | Account | Center | Project | Adjustment  |                                                                                                    |
| 1030           | 5388    | 62440  |         | 200,000     | Increase budget for City contribution to the Placer Valley Event Center Sidewalk Extension project |
|                |         |        |         |             |                                                                                                    |
|                |         |        |         |             |                                                                                                    |
|                |         |        |         |             |                                                                                                    |
|                |         |        |         |             |                                                                                                    |
| TOTAL          |         |        |         | 200,000     |                                                                                                    |

### REVENUES/TRANSFERS IN

| ACCOUNT STRING |         |        |         | BUDGET (\$) | DESCRIPTION |
|----------------|---------|--------|---------|-------------|-------------|
| Fund           | Account | Center | Project | Adjustment  |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
|                |         |        |         |             |             |
| TOTAL          |         |        |         | -           |             |

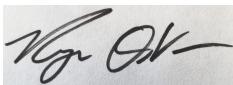
|                |         |
|----------------|---------|
| NET ADJUSTMENT | 200,000 |
|----------------|---------|

### FUND BALANCE

| ACCOUNT STRING |         |        |         | BUDGET (\$) | DESCRIPTION                               |
|----------------|---------|--------|---------|-------------|-------------------------------------------|
| Fund           | Account | Center | Project | Adjustment  |                                           |
| 1030           |         |        |         | (200,000)   | Reduce Strategic Improvement fund balance |
|                |         |        |         |             |                                           |
|                |         |        |         |             |                                           |
|                |         |        |         |             |                                           |
|                |         |        |         |             |                                           |
|                |         |        |         |             |                                           |
| TOTAL          |         |        |         | (200,000)   |                                           |

### Justification for Budget Adjustment:

The City has entered into a funding agreement with the Placer Valley Sports Complex to extend the sidewalk from Junction Boulevard through Event Center Drive for safe bicycle and pedestrian pathways to access @the Grounds. This budget adjustment provides \$200,000 in funding from the Strategic Improvement Fund towards the City's shared cost for constructing the onsite sidewalk. There is adequate funding in the Strategic Improvement fund to cover this cost with no impact on the General Fund.

|                                                                                     |      |                           |      |
|-------------------------------------------------------------------------------------|------|---------------------------|------|
|  |      | REQUIRED APPROVALS:       |      |
| REQUESTING DEPARTMENT HEAD / DESIGNEE                                               | DATE | BUDGET MANAGER / DESIGNEE | DATE |
| CHIEF FINANCIAL OFFICER / DESIGNEE                                                  | DATE | CITY MANAGER / DESIGNEE   | DATE |
| BUDGET DEPARTMENT USE ONLY:                                                         |      |                           |      |
| POSTED BY                                                                           | DATE |                           |      |

Revised: June 24, 2019





## COUNCIL COMMUNICATION

CC #: 1007  
File #: 0323-04

**Title:** Roseville Municipal Code Amendment - Title 7 Regarding Animals  
**Contact:** Brian Lewis 916-746-1051 blewis@roseville.ca.us

Meeting Date: 9/16/2020  
Item #: 7.24.

### RECOMMENDATION TO COUNCIL

ORDINANCE NO. 6268 OF THE COUNCIL OF THE CITY OF ROSEVILLE REPEALING AND REPLACING TITLE 7 OF THE ROSEVILLE MUNICIPAL CODE REGARDING ANIMALS, for second reading and adoption.

### BACKGROUND

Not applicable.

### FISCAL IMPACT

Not applicable.

### ENVIRONMENTAL REVIEW

Not applicable.

Respectfully Submitted,

Troy Bergstrom, Police Captain

James Maccoun, Police Chief

A handwritten signature in blue ink, consisting of several overlapping loops and a long horizontal stroke.

Dominick Casey, City Manager

**ATTACHMENTS:**

Description

Ordinance No. 6268

## ORDINANCE NO. 6268

### ORDINANCE OF THE COUNCIL OF THE CITY OF ROSEVILLE REPEALING AND REPLACING TITLE 7 OF THE ROSEVILLE MUNICIPAL CODE REGARDING ANIMALS

THE CITY OF ROSEVILLE ORDAINS:

SECTION 1. Title 7 of the Roseville Municipal Code is hereby repealed and replaced to read as follows:

#### **Chapter 7.04 GENERAL PROVISIONS**

##### **7.04.010 Title.**

This title shall be known as the “animal control law” and may be cited as such.

##### **7.04.020 Definitions generally.**

Unless the text otherwise requires, the following terms and words shall have the meanings designated in the following sections of this chapter.

##### **7.04.030 Animal defined.**

“Animal” means any dog, cat, livestock, wild animal or fowl subject to regulation pursuant to this title. For purposes of this chapter, “animal” and/or “dog” shall not mean any trained police dog, while on duty.

##### **7.04.040 Animal control center defined.**

“Animal control center” means facilities available to the city and designated by the police chief for the impoundment and care of animals.

##### **7.04.050 Animal control officer defined.**

“Animal control officer” means that person and his duly authorized assistants and deputies who are authorized and directed to enforce the provisions of this title and carry out the intent hereof.

##### **7.04.060 At large defined.**

A. “At large” means the following:

1. Off the premises of the owner or the person having care, custody, control or possession of the dog unless such dog is restrained by a leash or adequate enclosure. The leash shall not exceed six feet in length and shall be of sufficient strength to restrain the dog and must be held continuously by a responsible person capable of controlling the dog.

2. On the premises of the owner or the person having care, custody, control or possession of the dog unless such dog is restrained by means adequate and sufficient to prevent the dog from leaving the premises or under the control and in the immediate presence of the owner or person having care, custody, control or possession of the dog.

B. A dog shall not be considered “at large” if it is:

1. A guide dog, signal dog, or service dog as defined in Section 54.1 of the California Civil Code, as may be amended, while performing the duties it is trained to perform;

2. Assisting or in training to assist a peace officer who is engaged in law enforcement duties;
3. Enrolled and actively participating in a commercial dog training or obedience class, exhibition or competition;
4. Within the confines of a city-designated dog park and licensed pursuant to this chapter;
5. Securely confined in a vehicle.

**7.04.070 Domestic fowl defined.**

“Domestic fowl” means any common farm fowl including, but not limited to, turkeys, geese, ducks, chickens and pigeons.

**7.04.080 Health officer defined.**

“Health officer” means the health officer of the county or any duly authorized representatives.

**7.04.090 Impoundment defined.**

“Impound” or “impoundment” means the taking up and confinement of an animal, alive or deceased, in the animal control center by the animal control officer or by the county at the request of the animal control officer.

**7.04.100 Keep defined.**

“Keep” means keep, harbor, maintain or permit to keep, harbor or maintain.

**7.04.110 Kennel defined.**

“Kennel” means any enclosure, premises, building, structure, lot or area, in or on which four or more dogs of at least four months of age are kept, harbored, or maintained for commercial or noncommercial purposes.

**7.04.120 Livestock defined.**

“Livestock” means any common farm animal including, but not limited to, cows, horses, sheep, goats, and pigs, but excluding fowl.

**7.04.130 Owner defined.**

“Owner” means a person, firm, partnership, corporation, association, trust or organization of any kind, having an interest in, harboring or having control, custody or possession of an animal.

**7.04.140 Person defined.**

“Person” means one or more individual human beings or any fictional entity or entities.

**7.04.145 Potentially vicious defined.**

“Potentially vicious animal” means any of the following:

- A. Any dog which, when unprovoked, on two separate occasions reported to a Roseville animal control officer and/or Roseville police department, within the prior 36-month

period, engages in any behavior that requires a defensive action by any person to prevent bodily injury when the person and the dog are not on the property of the owner or keeper of the dog.

B. Any dog which, when unprovoked, bites a person or otherwise engages in aggressive behavior, causing a less severe injury than as defined in Section 7.04.152.

C. Any dog which, when unprovoked and while not on the property of the owner or keeper of the dog, has killed, seriously bitten or inflicted injury to a domestic animal to the extent that the domestic animal required documented veterinary care.

**7.04.150 Premises defined.**

“Premises” means any parcel(s) of property owned, leased, occupied, or under the control of a person.

**7.04.152 Severe injury defined.**

“Severe injury” means any physical injury to a human being that results in a fracture, muscle tears or disfiguring lacerations or requires sutures or corrective or cosmetic surgery.

**7.04.154 Unprovoked defined.**

“Unprovoked” means without being intentionally incited to aggressive action.

**7.04.160 Vaccination defined.**

“Vaccination” means the inoculation with an antirabies vaccine approved by and administered in the manner prescribed by the State Department of Public Health.

**7.04.170 Veterinarian defined.**

“Veterinarian” means a person licensed by the State of California to practice veterinary medicine, including but not limited to veterinary technicians.

**7.04.180 Vicious animal defined.**

“Vicious animal” means any of the following:

- A. Any dog which, when unprovoked, inflicts severe injury on or kills a human being.
- B. Any dog that is associated with conduct which results in the dog’s owner or keeper being convicted under California Penal Code Section 597.5, as it may be amended.
- C. Any dog which has been declared dangerous or vicious by another jurisdiction.
- D. Any dog previously determined to be, and currently listed as potentially vicious which, after its owner or keeper has been notified of this determination, continues any behavior described in Section 7.04.145 or is maintained in violation of any conditions of release.

**7.04.190 Wild animal defined.**

“Wild animal” means any animal other than those specified in Chapters 7.16, 7.20, 7.28 and 7.36.

**Chapter 7.08 ANIMAL CONTROL OFFICER**

**7.08.010 Powers and duties.**

It shall be the duty and responsibility of the animal control officer to enforce the provisions of this chapter and carry out the intent hereof.

**7.08.020 Animal control methods.**

In the performance of his duties, the animal control officer shall have the authority to use all methods of animal control normally employed by animal control agencies within this state, specifically including the use of the tranquilizer gun. (Ord. 1293 § 1, 1975; prior code § 3.21.)

**7.08.030 Interference with animal control officer.**

It is unlawful for any person to prevent, oppose, resist, or otherwise interfere with the animal control officer in the performance of his duties.

**7.08.040 Authority.**

The animal control officer shall have all the authority and power conferred by this chapter and, in addition, have any power or authority granted or given by the laws of the State of California to any animal control officer of a general law city or general law county. Nothing in this chapter shall obligate the animal control officer to exercise such authority or power.

**7.08.050 Violations.**

Except as otherwise provided, a violation of any provision of this title may be punishable as an infraction or administrative citation, at the discretion of the City Attorney..

**Chapter 7.12 DOGS—RUNNING AT LARGE****7.12.010 Leash law.**

No person shall permit or allow any dog to run at large. This section may be cited as the “leash law.”

**7.12.020 Exceptions.**

A. Dogs are permitted to run at large on public and private golf courses for the sole purpose of controlling the geese population at said golf courses. Provided, however, that the dogs are specially trained for that purpose and provided that the dogs do not harm, catch, or kill the geese.

B. Trained police dogs are permitted to run at large while on duty.

**7.12.030 Property damage.**

No person shall allow any animal to cause any damage to any public property.

**7.12.040 Female dogs in season.**

The owner of any female which is in season shall confine such dog during such season and shall not, in any instance, allow such dog to run at large.

**7.12.050 Aggressive behavior.**

No person shall permit or allow any dog, when unprovoked, to engage in any behavior that requires a defensive action by any person to prevent bodily injury when the person and the dog are not on the property of the owner or keeper of the dog.

**Chapter 7.14 REMOVAL OF DOG DEFECATION**

#### **7.14.010 Removal of dog defecation.**

A. It is unlawful for the owner or person having the custody of any dog to fail to immediately remove and dispose of in a sanitary manner, by placing in a closed or sealed container and depositing in a trash receptacle, any feces deposited by such dog upon public property or upon private property not exclusively owned or controlled by the owner or person having the custody of such dog.

B. Any person who has the charge or control of any dog in a location other than on private property exclusively owned or controlled by such person, or on the property of the owner of the dog, shall have in his or her possession a suitable wrapper, bag or container for the purpose of complying with the requirements of this section. The failure of any person to carry such a wrapper, bag or container when in charge or control of any dog in a location other than on property exclusively owned or controlled by such person, or on the property of the owner of the dog, shall constitute a violation of this section.

C. Subsections A and B of this section shall not apply to the proper use of guide dogs, service dogs, or signal dogs as defined in Section 54.1 of the California Civil Code, as may be amended..

D. It is unlawful for the owner or person having the custody of any dog to allow its feces to accumulate or remain on the ground or other surface on his or her private property to the extent that the accumulation creates a nuisance. A nuisance, for purposes of this subsection, includes, but is not limited to, feces accumulation that interferes with the use or enjoyment of any neighboring property as a result of odors or the attraction or breeding of vermin or vectors.

### **Chapter 7.16 LICENSING**

#### **7.16.010 Licensing.**

A dog or cat over the age of four months must be licensed according to the provisions of this chapter.

#### **7.16.020 Application.**

Within 30 days after a person acquires ownership of a dog and/or cat, he or she shall make application for the issuance of a license. Such application shall contain the following information:

- A. The name, address and telephone number of the owner;
- B. Breed, sex, color, age, and name of dog and/or cat;
- C. Whether the dog and/or cat is spayed or neutered;
- D. Vaccine expiration date and name of veterinarian who administered vaccine;
- E. The name, address and telephone number of a person who may be contacted concerning the dog and/or cat in an emergency.

#### **7.16.030 Vaccination.**

A. Application for a dog and/or cat license shall be accompanied by a certificate that the dog and/or cat has received a medically current vaccination with antirabies vaccine approved by the Health Department of the State of California. Such certificate shall be signed by a licensed veterinarian or by the person administering a vaccination clinic for any city or county, or his authorized assistant or deputy.

B. For purposes of this section, the term “medically current vaccination” shall mean a vaccination which does not expire before the end of the period for which the license is issued.

C. The animal control officer may waive the requirement for vaccination if:

1. A veterinarian signs a statement to the effect that a vaccination would be dangerous to the health of the dog and/or cat;

2. The health officer concurs in such determination.

D. The statement of a veterinarian pursuant to subsection A shall be filed in lieu of a certificate of vaccination and shall be valid only during the term of the license.

E. Every veterinarian, after vaccinating a dog and/or cat for rabies, shall issue a certificate and furnish one copy of the certificate to the owner of the dog and/or cat and one copy to the animal control officer. The certificate shall be in the form prescribed by the animal control officer.

#### **7.16.040 License and tag.**

The following items shall be issued to a person who successfully completes the application in accordance with Section 7.16.020:

A. A license allowing such person to keep a dog and/or cat within the city. The license shall contain the information supplied by the applicant in the application;

B. A license tag, serially numbered. Such tag shall be affixed by the owner to a collar, which collar is to be worn at all times by the dog and/or cat. (Ord. 1293 § 1, 1975; prior code § 3.43.)

#### **7.16.050 Fee.**

A fee for the license, or the renewal thereof, shall be paid as established by resolution adopted by the city council, as amended from time to time. No license shall be issued until the required fee is paid.

#### **7.16.060 Altered animals.**

A. An “altered animal” is defined as one who has been certified by a veterinarian to be sterilized by surgical spay or neuter.

B. For certified altered dogs and/or cats, the owner shall pay one-half the standard license fee and any applicable penalty fees. Proof of sterilization must accompany the initial dog and/or cat license application or the first dog and/or cat license renewal notice following alteration.

C. The following documents are acceptable as proof of alteration: a certificate of sterilization; an invoice from the office or clinic of a veterinarian for a sterilization procedure; a dog and/or cat license from another licensing agency showing altered status; or the adoption certificate from an animal shelter or humane society showing altered status.

#### **7.16.070 Exemption from fees.**

No fee shall be levied for any dog license issued for guide dogs, service dogs, or signal dogs as defined in Section 54.1 of the California Civil Code, as may be amended, or for a dog used by any law enforcement personnel, or for any dog owned by any government entity or political subdivision.

#### **7.16.080 Term.**



The dog and/or cat licenses required by this chapter shall be issued upon the payment of the fees herein fixed for a period of 12, 24 or 36 months commencing upon the date of application and upon the showing of a valid certificate of rabies vaccination. Such dog and/or cat licenses shall expire on the anniversary date of the rabies certificate, but in no case shall a dog and/or cat license be valid past the expiration date of the rabies certificate.

No dog and/or cat license shall be issued for any dog and/or cat for which the rabies vaccination is valid for less than the 12-month period from the date of licensing. Should the rabies vaccination not be valid for 12 months from the date of first application for licensing, the owner may elect either: (1) to be issued a license at full price which would be valid for less than 12 months; or (2) to revaccinate the dog and/or cat and be issued a license at full price which would be valid for no less than 12 months.

#### **7.16.085 Licenses from other jurisdictions.**

A. When an owner brings into the city a dog and/or cat which has been licensed in another jurisdiction, the dog and/or cat shall not be subject to the licensing provisions of this chapter as long as the out-of-jurisdiction license would be current and valid at its place of issuance and the issuance of said license would have satisfied the provisions of this chapter.

B. Notwithstanding the foregoing, any owner who takes up residency in the City Roseville must either transfer the outside jurisdiction's license to a City of Roseville license or obtain a new City of Roseville license within ten (10) days of taking up residence in the City of Roseville.

C. Upon surrender of a valid license from the other jurisdiction, the owner shall be issued a City of Roseville license, at no charge, for the remaining term of the other jurisdiction's license.

#### **7.16.090 Renewal.**

At least 30 days prior to the expiration date of a license, the animal control officer shall notify each person who holds a current dog and/or cat license that said license will expire and inform such owner of the need to renew the license. However, failure of notification shall not excuse an owner for failure to renew the license. A license shall be renewed upon verification by the holder of the license that the information contained thereon is correct and upon presentation of a valid certificate showing current vaccination.

#### **7.16.100 Failure to renew—Delinquent penalty.**

A person who fails to renew a dog and/or cat license within 15 days of its expiration shall pay a penalty fee as established by resolution adopted by the city council, as amended from time to time.

#### **7.16.110 Lost license or tag.**

If during the period for which a license or dog and/or cat tag is issued, the holder of such license or tag reports to the animal control officer that the same has been lost or stolen, he or she shall be issued a duplicate upon payment of the required fee as established by resolution adopted by the city council, as amended from time to time.

#### **7.16.120 Change of address—Report required.**

Any person holding a current dog and/or cat license shall, within 10 days after a change of address, report the same to the animal control officer.

#### **7.16.130 Transfer prohibited.**

No license issued pursuant to this chapter shall be transferred from one dog and/or cat to another, and it is unlawful for any person to attach a dog and/or cat tag issued for one dog and/or cat to another dog and/or cat.

### **Chapter 7.20 KENNELS**

#### **7.20.010 Kennels—License required.**

No more than three dogs over the age of four months shall be kept at or upon any premises or dwelling unit without first securing from the animal control officer a license to operate a kennel regardless of the number of persons residing in such dwelling unit.

#### **7.20.020 License issuance.**

The animal control officer shall issue a license to operate a kennel only under the following conditions:

- A. When the premises on which the kennel will be located complies with the provisions of the Zoning Ordinance of the city;
- B. When the premises on which the kennel will be located is of sufficient size to accommodate, in the opinion of the animal control officer, the number of dogs which the owner of such kennel anticipates will be on the premises, without causing any disturbance or annoyance to persons in the surrounding area;
- C. No kennel may exist upon any property zoned for residential use.

#### **7.20.030 Fee.**

The fee for the issuance of a kennel license shall be established by resolution adopted by the city council, as amended from time to time. Such fee shall be in addition to all fees required for the licensing of each individual dog kept at the kennel. Nothing herein shall be read to permit any dog kept at any kennel to remain unlicensed.

#### **7.20.040 Revocation.**

A. A kennel license may be revoked by the animal control officer when he determines any of the following:

- 1. That the dogs in the kennel are causing continual annoyance and disturbance to persons in the surrounding area;
- 2. That the dogs within the kennel are not being given proper care;
- 3. That circumstances have changed since the issuance of the kennel license, and in view of such circumstances, the premises are no longer suitable for the operation of a kennel.

B. Any person whose license to operate a kennel is revoked by the animal control officer may appeal such determination to the city council within 10 days after written notice of such revocation is given by the animal control officer. The appeal must be filed with the city clerk in writing.

#### **7.20.050 Kennel license—Additional conditions.**

A. The animal control officer may, prior to issuing a kennel license, attach such reasonable conditions as he deems necessary to insure that the operation of the kennel will not be a detriment to the public health, safety and welfare.

B. The animal control officer may, in lieu of revocation of a kennel license, place such conditions on the license as may be necessary to permit the license holder to continue to have a kennel while protecting the public health, safety and welfare.

### **Chapter 7.25 ANIMAL NOISE**

#### **7.25.010 Animal noise.**

A. No person shall own, possess, harbor, control or keep on any premises, any dog, fowl or other animal, that howls, barks, bays, cries, squawks or makes any other noise so continuously or incessantly for a period of 20 minutes or intermittently for an hour or more as to unreasonably disturb the peace or quiet of any person.

B. In determining whether any sound or noise is “unreasonable” under subsection A above, the following shall be considered:

1. The volume of the sound;
2. The proximity of the sound to residential sleeping facilities;
3. The time of the day or night the sound occurs;
4. The duration of the sound; and
5. Whether the sound is intermittent or constant.

C. Any person who shall keep or permit to remain on any premises any animal as defined in subsection A of this section is guilty of a violation of this chapter, provided that during the time that the animal is making such a noise, no person or other animal is trespassing or threatening to trespass or no person is intentionally provoking or intentionally teasing the animal.

D. After determination that a violation of this provision has occurred and prior to issuance of a citation pursuant to Chapter 2.50 of this code, an enforcement officer shall issue at least one warning to the owner or person having care, custody, control or possession of the animal creating the nuisance.

E. This chapter shall not apply to public animal control agencies or shelters, society for the prevention of cruelty to animals shelters, or humane society shelters.

### **Chapter 7.28 LIVESTOCK**

#### **7.28.010 Hogs prohibited—Exception.**

No person shall keep any hog, pig, swine or boar within the city unless located entirely within an agricultural zone and pursuant to a valid use permit issued under the Zoning Code of the city, as amended from time to time..

#### **7.28.020 Registration—Five or less animals.**

Any person keeping or maintaining five or less livestock of a particular kind shall report the following information to the animal control officer within five days after bringing such animal(s) within the city:

- A. The type of each animal;

- B. A general description of each animal;
- C. The location where the animal(s) will normally be pastured or kept;
- D. The name, address and telephone number of the person owning the animal(s) and the person keeping or maintaining the animal(s), if different from the owner;
- E. The name, address and telephone number of a person to be contacted concerning the animal(s) in case of emergency.

**7.28.030 Registration—More than five animals.**

Any person keeping or maintaining more than five livestock of a particular kind shall report the information to the animal control officer specified in Section 7.28.020, except that such information need not include a general description of each animal, but shall specify the approximate number to be kept in a specific location.

**7.28.040 Restrictions.**

No person shall keep any livestock unless:

- A. It is upon premises zoned for agricultural purposes under the Zoning Ordinance;
- B. Such livestock is kept within a substantial fence of firm construction which consists of at least three barbed wires, evenly spaced, the top of which shall be at least four feet from the ground, and which shall be securely fastened to posts of metal or wood, the space between which is not greater than 12 feet;
- C. Any shelter provided for such livestock is at least 150 feet from any adjoining building or structure;
- D. At least 6,000 square feet of area is provided for each animal.

**7.28.050 Keeping horses, mules or goats.**

Notwithstanding the provisions of Section 7.28.040, a person may keep horses, mules, donkeys or goats on property which is not zoned for agricultural purposes provided that:

- A. Each animal is kept on a parcel created by a subdivision map or parcel map recorded on or after April 1, 1974;
- B. Each animal be kept within a fenced enclosure which is at least 75 feet from any adjoining dwelling unit;
- C. Sections B, C and D of Section 7.28.040, and Section 7.28.020 are complied with.

**Chapter 7.32 WILD ANIMALS**

**7.32.010 Prohibited.**

It is unlawful for any person to keep any wild animal.

**7.32.020 Exceptions.**

This chapter shall not apply to any of the following:

- A. Persons who use wild animals for diagnostic or research purposes, when the use has been approved by the state pursuant to applicable law;
- B. Persons who use wild animals for teaching purposes in recognized educational institutions;
- C. Veterinarians who keep wild animals for boarding or treatment;

- D. Persons operating game farms or game breeding establishments licensed by the state;
- E. Persons operating nonprofit zoological gardens open to the public;
- F. Persons operating commercial establishments which sell animals and maintain wild animals solely at their places of business;
- G. Persons who use wild animals for circus or entertainment purposes.

## **Chapter 7.36 DOMESTIC FOWL—RABBITS—BEES**

### **7.36.010 Domestic fowl—Restrictions.**

Except upon premises zoned for agricultural purposes pursuant to the Zoning Ordinance, no person shall keep any goose or turkey, or more than 10, whether singly or in combination, of the following: ducks, chickens, or pigeons.

### **7.36.020 Domestic fowl—Enclosure.**

Any domestic fowl permitted to be kept by Section 7.36.010 shall be kept in a sanitary enclosure, which enclosure shall not be located within 20 feet of any property line, when such enclosure is located entirely outdoors.

### **7.36.030 Rabbits—Restrictions.**

Except upon premises zoned for agricultural purposes pursuant to the Zoning Ordinance, no person shall keep more than 10 rabbits.

### **7.36.040 Rabbits—Enclosure.**

Rabbits kept pursuant to Section 7.36.030 shall be enclosed within sanitary facilities located not less than 20 feet from any property line, when such enclosure is located entirely outdoors.

### **7.36.050 Animals commonly considered pets—Permitted.**

Animals such as guinea pigs, white rats, mice, parakeets, parrots and other animals generally considered by the public to be tame and commonly considered as pets may be kept.

### **7.36.060 Animals commonly considered pets—Restrictions.**

Restrictions applicable to rabbits as set forth in Sections 7.36.030 and 7.36.040 of this chapter, shall apply to those animals covered by Sections 7.36.050 and 7.36.060.

### **7.36.070 Bees—Hive limitations.**

Except upon property zoned for agricultural purposes pursuant to the Zoning Ordinance, no person shall keep more than two hives of bees.

### **7.36.080 Bees—Distance from building.**

Bees, whether kept pursuant to Section 7.36.070 or upon agriculturally zoned premises, shall be kept at least 500 feet from any building or structure in which persons or animals normally live or are kept.

### **7.36.090 Exemptions.**

This chapter shall not apply to those people specified in Section 7.32.020 of Chapter 7.32.

**7.36.100 Special permits.**

Special permits may be granted for the maintenance of animals and poultry not in strict conformity with the provisions of this chapter, if the chief of police or designee makes a finding that because of soil, drainage, prevailing winds, absence of insect life, unusually effective sanitation measures, population density in the area, innocuousness of the animal or poultry involved, or like conditions, the public health and welfare will not be endangered thereby and such animals or poultry shall be kept in a manner consistent with the conditions, if any, imposed in such special permit and within the scope thereof.

**7.36.110 Annual fee.**

An annual fee for a special animal permit, as established by resolution adopted by the city council, as amended from time to time, shall be paid to the police department.

**Chapter 7.40 IMPOUNDMENT**

**7.40.010 General provisions.**

The animal control officer is authorized to impound the following animals:

- A. Any animal running at large;
- B. Any animal kept in violation of this title;
- C. Any known or suspected rabid animal;
- D. Any animal which has bitten any person;
- E. Any potentially vicious animal as set forth in Chapter 7.46;
- F. Any vicious animal as set forth in Chapter 7.48.

**7.40.020 Place.**

The animal control officer shall, when possible, confine any animal impounded in the animal control center.

**7.40.030 Notice to owner.**

The animal control officer shall notify the owner, if known, of the impoundment of any animal pursuant to this chapter and Chapter 7.44. Notice of such impoundment may be given orally or by mail.

**7.40.040 Period of impoundment.**

The period of impoundment shall be that period imposed by the police chief.

**7.40.050 Redemption.**

The owner of any animal impounded may, at any time before the disposition thereof, redeem the same from the animal control center upon the payment of all fees and charges required by the animal control center; provided, that the owner provides proof that any license required by Chapter 7.16 of this code has been obtained.

**7.40.060 Redeeming unlicensed dog.**

A. In the event the owner of an unlicensed dog redeems that animal, he shall agree in writing, prior to the release of the animal by the animal control center, to obtain the proper vaccination for the animal, within 10 days of such release, and submit the same to the animal control officer.

B. The department of finance shall, upon the return of the vaccination certificate, issue the license after the application is properly completed in accordance with Section 7.16.020 of this code.

C. In the event the owner fails to return with the vaccination certificate to obtain the license, the animal control officer shall reimpose the animal. (Ord. 1325 § 6, 1976; Ord. 1293 § 1, 1975; prior code § 3.105.)

#### **7.40.070 Disposing of unredeemed animals.**

In the event that the period of impoundment has run without redemption, the animal control center may sell, destroy or otherwise dispose of such animal.

### **Chapter 7.44 QUARANTINE**

#### **7.44.010 Duty to report bites.**

A. It is the duty of any person having knowledge that any animal has bitten a human being to report the fact to the animal control officer. The animal control officer shall immediately report such bite to the department of agriculture, division of animal control, County of Placer.

B. Nothing in this chapter shall apply to trained police dogs, while on duty.

#### **7.44.015 Information to bite victim.**

If an animal bites a person or another animal, the owner or person in control of the biting animal must provide his or her personal information to the victim or, if the victim is another animal, the victim's owner. If the victim is a minor, the owner or person in control of the biting animal must provide his or her personal information to the parent or guardian of the minor. This personal information must include the owner's name, the biting animal's name, and the owner and animal's home address.

#### **7.44.020 Quarantine.**

A. The animal control officer shall ensure that all animals falling into the following categories shall be isolated or quarantined at the animal control center or in the care of a veterinarian under the conditions prescribed by the health officer and pertinent state laws and regulations:

1. Known rabid animals;
2. Suspected rabid animals;
3. Animals that have bitten or otherwise exposed a human to rabies;
4. Animals, of a species subject to rabies, which have been bitten by a known rabid or suspected rabid animal or have been in intimate contact with a rabid or suspected rabid animal.

B. Pursuant to said laws and regulations, the animal control officer may quarantine any animal that has bitten a human or an animal by confinement in the owner's custody or in the care of a veterinarian if such animal is currently licensed under this title. The animal shall be quarantined in strict confinement under conditions determined by the animal control officer to be safe in view of the animal's physical abilities and in isolation from other animals for a period

established by the animal control officer as necessary to determine whether such animal has rabies. Such confinement shall be subject to any other requirements that the animal control officer may impose to protect the public health and safety.

It is unlawful for the owner or any other person to violate the requirements of confinement established by the animal control officer as set forth in this section.

C. In order for the animal to qualify for confinement, the owner shall certify, under penalty of perjury, his or her agreement to confine the animal pursuant to this section. In order to release the animal from quarantine, the owner shall certify, under penalty of perjury, that the conditions of confinement have been met and that the animal is healthy.

#### **7.44.030 Period of quarantine.**

The period of quarantine shall be that time necessary to determine whether or not the animal in question has rabies.

#### **7.44.040 Destruction of rabid animal.**

In the event the animal control officer determines that the animal which has been quarantined has rabies, he shall cause such animal to be destroyed. The animal owner shall be responsible for paying for all fees related to destruction of the animal and the testing for rabies.

#### **7.44.050 Return of impounded quarantined animal.**

In the event a quarantined animal has been impounded and is determined not to have rabies, the animal control center may allow the owner to redeem said animal upon the payment of any fees required pursuant to Section 3.90 of the Placer County Code.

### **Chapter 7.46 POTENTIALLY VICIOUS DOGS**

#### **7.46.010 Impoundment.**

The animal control officer may cause any potentially vicious dog to be impounded and shall notify the owner, if known, that the dog has been impounded under the provisions of this chapter.

#### **7.46.020 Circumstances under which dog may not be declared potentially vicious.**

A dog may not be declared potentially vicious if:

- A. The injury or damage was sustained by a person who, at the time of the injury or damage was sustained, was:
1. Committing a willful trespass or other tort upon the private property of the owner or person having the right to control the animal;
  2. Teasing, tormenting, abusing or assaulting the dog;
  3. Committing or attempting to commit a crime.
- B. The injury or damage was sustained by a domestic dog that, at the time the injury or damage was sustained, was teasing, tormenting, abusing or assaulting the dog, or trespassing upon the private property of the owner or keeper of the dog.
- C. The dog was protecting or defending a person within the immediate vicinity of the dog from an unjustified attack or assault.
- D. Nothing in this chapter shall apply to trained police dogs, while on duty.



#### **7.46.030 Disposition of potentially vicious dog.**

The animal control officer may do any of the following with regard to a potentially vicious dog:

- A. Impound such dog in the animal control center for purposes of observation for a period not to exceed 30 days;
- B. Release such dog to the control of its owner upon any conditions which may reasonably be required to insure the public safety;
- C. Issue an administrative citation to the dog's owner pursuant to Chapter 2.50 of the Roseville Municipal Code.

#### **7.46.040 Release of impounded dog and abandonment.**

A. No impounded dog which has been declared potentially vicious shall be released to the custody of its owner unless all fees and penalties assessed have been paid. Additionally, no dog declared potentially vicious shall be released to the custody of its owner unless such person demonstrates compliance with the conditions of release imposed by the animal control officer pursuant to Section 7.46.030.

B. A rebuttable presumption shall arise that a dog has been abandoned if any owner of an impounded dog declared potentially vicious has not met the conditions of release of the dog within 10 days after notice mailed by first-class U.S. mail or delivered in person, that the dog is available for release. The police chief, after the notice and hearing provisions of Chapter 7.48, may order the abandoned dog destroyed.

#### **7.46.050 Failure to comply with conditions of release.**

It is unlawful to fail to comply with any conditions of release imposed by the animal control officer. A failure to comply with any conditions of release may result in impoundment of the dog and further disposition pursuant to Section 7.46.030 or may result in the dog being declared vicious pursuant to Chapter 7.48.

#### **7.46.060 Classification—Notice—Appeal.**

A. In the event the animal control officer classifies a dog as potentially vicious, the animal control officer shall notify the owner of such dog by first-class U.S. mail or in person and further inform such owner of his or her right to appeal as provided by this section.

B. Any owner of a potentially vicious dog failing to appeal after notice as herein provided shall be deemed to have waived any right in or claim upon such dog or to claim any damages or other relief by reasons of any action by the animal control officer pursuant to this chapter.

#### **7.46.070 Hearing and appeal regarding classification.**

A. Upon written request by the owner of the dog received by the police chief within 10 days after the mailing of the notice of potentially vicious dog classification, a hearing shall be held by the police chief or his or her designee on the question of the classification. The owner of the dog and all victims and complainants shall be given notice of the hearing by first-class U.S. mail or in person at least five calendar days prior to the date of the hearing. The hearing shall be open to the public.

B. The owner of the dog may appear in person at the hearing or present a sworn written statement contesting the animal control officer's classification.

C. Following the hearing, the police chief or his or her designee shall make written findings of fact showing whether the dog is a threat to the public safety and whether the potentially vicious dog classification is proper. Such written findings of fact shall be the basis for the decision of the police chief or his or her designee.

D. The decision of the police chief or his or her designee shall be final.

E. If any dog previously declared to be potentially vicious has not exhibited any of the behaviors specified in Section 7.04.145 within 36 months following the date that the dog was declared potentially vicious, the dog is deemed to no longer be a potentially vicious dog; provided, however, that the same dog may again be declared potentially vicious or vicious if it again exhibits any of the specified behaviors defined in Section 7.04.145 or 7.04.180.

#### **7.46.080 Harboring potentially vicious dog.**

No person shall harbor or hide, or cause to be harbored or hidden, any potentially vicious dog, and shall surrender any such dog to the animal control officer upon demand.

#### **7.46.090 Relocation of potentially vicious dog.**

The owner or keeper of any dog declared potentially vicious or potentially dangerous in another jurisdiction shall notify the animal control officer within 10 days of bringing the dog into the City of Roseville. If a dog is declared potentially vicious or potentially dangerous in another jurisdiction, the dog shall be deemed potentially vicious pursuant to this chapter. Accordingly, the animal control officer may impose upon the owner or keeper of such dog any conditions which may reasonably be required to insure the public safety.

### **Chapter 7.48 VICIOUS DOGS**

#### **7.48.010 Impoundment.**

The animal control officer shall cause any vicious dog to be impounded and shall notify the owner, if known, that the dog has been impounded under the provisions of this chapter.

#### **7.48.015 Circumstances under which dog may not be declared vicious.**

An dog may not be declared vicious if:

A. The injury or damage was sustained by a person who, at the time of the injury or damage was sustained, was:

1. Committing a willful trespass or other tort upon the private property of the owner or person having the right to control the dog;

2. Teasing, tormenting, abusing or assaulting the dog;

3. Committing or attempting to commit a crime.

B. The injury or damage was sustained by a domestic dog that, at the time the injury or damage was sustained, was teasing, tormenting, abusing, or assaulting the dog, or trespassing upon the private property of the owner or keeper of the dog.

C. The dog was protecting or defending a person within the immediate vicinity of the dog from an unjustified attack or assault.

D. Nothing in this chapter shall apply to trained police dogs, while on duty.

#### **7.48.020 Disposition of vicious dog.**

The animal control officer may do any of the following with regard to a vicious dog:

- A. Impound such dog in the animal control center for purposes of observation for a period not to exceed 30 days;
- B. Release such dog to the control of its owner upon any conditions which may reasonably be required to insure the public safety;
- C. Cause such dog to be destroyed if, in his or her opinion, the release of such dog would create a threat to the public safety.

**7.48.022 Release of impounded dogs and abandonment.**

A. No impounded dog which has been declared vicious shall be released to the custody of its owner unless all fees and penalties assessed have been paid. Additionally, no dog declared vicious shall be released to the custody of its owner unless such person demonstrates compliance with the conditions of release imposed by the animal control officer pursuant to Section 7.48.020.

B. A rebuttable presumption shall arise that a dog has been abandoned if any owner of an impounded dog declared vicious has not met the conditions of release of the dog within 10 days after notice mailed by first-class U.S. mail or delivered in person, that the dog is available for release. The police chief or his or her designee, after the notice and hearing provisions of this chapter, may order the abandoned dog destroyed.

**7.48.024 Failure to comply with conditions of release.**

It is unlawful to fail to comply with any conditions of release imposed by the animal control officer. A failure to comply with any conditions of release may result in impoundment of the dog and further disposition pursuant to Section 7.48.020.

**7.48.026 Classification—Notice—Appeal.**

A. In the event the animal control officer classifies a dog as vicious, the animal control officer shall notify the owner of such dog by first-class U.S. mail or in person and further inform such owner of his or her right to appeal as provided by this section.

B. Any owner of a vicious dog failing to appeal after notice as herein provided shall be deemed to have waived any right in or claim upon such dog or to claim any damages or other relief by reasons of any action by the animal control officer pursuant to this chapter.

**7.48.028 Hearing and appeal regarding classification.**

A. Upon written request by the owner of the dog received by the police chief within 10 days after the mailing of the notice of vicious dog classification, a hearing shall be held by the police chief or his or her designee on the question of the classification. The owner of the dog and all victims and complainants shall be given notice of the hearing by first-class U.S. mail or in person at least five calendar days prior to the date of the hearing. The hearing shall be open to the public.

B. The owner of the dog may appear in person at the hearing or present a sworn written statement contesting the animal control officer's classification.

C. Following the hearing, the police chief or his or her designee shall make written findings of fact showing whether the dog is a threat to the public safety and whether the vicious dog classification is proper. Such written findings of fact shall be the basis for the decision of the police chief or his or her designee.

D. The decision of the police chief or his or her designee shall be final.

**7.48.030 Destruction—Notice—Appeal.**

A. In the event the animal control officer determines that a vicious dog is to be destroyed pursuant to the provisions of Section 7.48.020(C), he or she shall notify the owner of such dog by first-class U.S. mail or in person at least 10 days in advance of the intended destruction, and further inform such owner of his or her right to appeal as provided by this section. The notice of intention shall be in substantially the following form:

Notice of Intention to Destroy Dog  
(Name and Address of Owner of the Animal)

The Animal Control Officer has determined that your dog, a \_\_\_\_\_, is a vicious dog constituting a threat to the public safety. For that reason the Animal Control Officer has determined that the dog shall be destroyed on \_\_\_\_\_.

As owner of the dog, you are hereby notified that you may, within ten (10) days after the mailing of this notice of intention, request a public hearing before the Police Chief.

You may appear in person at the hearing or you may present a sworn written statement.  
Notice mailed \_\_\_\_\_

\_\_\_\_\_  
Police Chief  
City of Roseville

B. The animal control officer shall not destroy the dog until the owner has exhausted his or her right to appeal pursuant to this chapter.

C. Any owner of a vicious dog failing to appeal after notice as herein provided shall be deemed to have waived any right in or claim upon such dog or to claim any damages or other relief by reasons of any action by the animal control officer pursuant to this chapter.

**7.48.035 Hearing and appeal regarding destruction.**

A. Upon written request by the owner of the dog received by the police chief within 10 days after the mailing of a notice of intention to destroy the dog, a hearing shall be held by the police chief or his or her designee on the question of the destruction. The owner of the dog and all victims and complainants shall be given notice of the hearing by first-class U.S. mail or in person at least five calendar days prior to the date of the hearing. The hearing shall be open to the public.

B. The owner of the dog may appear in person at the hearing or present a sworn written statement contesting the animal control officer's determination.

C. Following the hearing, the police chief or his or her designee shall make written findings of fact showing whether the dog is a threat to the public safety. Such written findings of fact shall be the basis for the decision of the police chief or his or her designee. A finding that the dog should be destroyed shall specify a date for destruction that is later than the expiration of the appeal period provided in subsection D of this section.

D. Appeal from any decision of the police chief or his or her designee may be made, in writing, to the city council within 10 calendar days from the police chief's or his or her designee's action. Within the same 10-day period, the appellant shall pay an appeal fee as

established by resolution adopted by the city council, as amended from time to time, no part of which shall be refundable.

E. Any order of destruction made by the police chief or his or her designee shall be stayed pending the final decision of the city council.

#### **7.48.040 Decision of the city council.**

A. After hearing testimony from all interested parties as it may deem proper, the city council may:

1. Uphold the decision of the police chief or his or her designee and order the dog destroyed;
2. Order the return of the dog to its owner and impose such conditions upon such return as may be reasonably necessary to insure the public safety; or
3. Take such other action as it may reasonably find necessary to protect the public safety, including a continuation of the impoundment of such dog for a period not to exceed 30 days from the date of the hearing.

B. The decision of the city council shall be final.

#### **7.48.050 Animal control officer—Further action.**

After the decision of the city council has been rendered as provided in Section 7.48.040, the animal control officer shall take such action as is necessary to carry out the decision.

#### **7.48.060 Harboring vicious dog.**

No person shall harbor or hide, or cause to be harbored or hidden, any vicious dog, and shall surrender any such dog to the animal control officer upon demand.

#### **7.48.070 Relocation of vicious dog.**

The owner or keeper of any dog declared vicious or dangerous in another jurisdiction, shall notify the animal control officer within 10 days of bringing the dog into the City of Roseville. If a dog is declared vicious or dangerous in another jurisdiction, the dog shall be deemed vicious pursuant to this chapter. Accordingly, the animal control officer may impose upon the owner or keeper of such dog any conditions which may reasonably be required to insure the public safety.

### **Chapter 7.56 FEES**

#### **7.56.010 Dog licenses and tags.**

The fees for a dog license, for a duplicate license or tag, and the amount of any applicable senior discounts to license fees, shall be as established by resolution adopted by the city council, as amended from time to time.

#### **7.56.020 Kennel license.**

The fee for a kennel license shall be as established by resolution adopted by the city council, as amended from time to time.

#### **7.56.030 Disposal—Voluntary.**

Any owner of any animal, as specified in Chapter 7.16, 7.20, 7.28, 7.32, or 7.36, who voluntarily turns the same over to the animal control officer for disposal and such animal is accepted by animal control, shall pay a fee as established by resolution adopted by the city council, as amended from time to time.

## **Chapter 7.60 DISPOSAL OF DEAD ANIMALS—ANIMAL CONTROL OFFICER DUTIES**

### **7.60.010 Voluntary disposal.**

Any person who brings any animal, alive or dead, to the animal control center or to the animal control officer for disposal shall waive any right to redeem such animal, and the animal control officer and the animal control center shall not be required to retain such animal for purposes of redemption, but may immediately dispose of such animal.

### **7.60.020 Dead animals—Generally.**

A. No person shall keep the carcass of any dead animal, except while butchering or processing the same, for a period of more than 48 hours, unless the same is frozen or refrigerated.

B. No person shall bury the remains of any dead animal within the city limits.

### **7.60.030 Dead animals—Disposal.**

The animal control officer may accept the carcass of any dead animal for disposal. The fee therefor shall be the same as set forth in Section 7.56.040.

### **7.60.040 Records.**

The animal control officer shall keep such records as are reasonably necessary for the animal control center and the requirements of this title.

### **7.60.050 Rules and regulations.**

The animal control officer may promulgate such rules and regulations as are reasonably necessary to carry out the intent and purposes of this title and to provide for the general health, safety and welfare of animals and the general public. Additionally, animal control may cause rules and conduct regarding city dog parks to be posted at all city dog parks. Failure to follow such posted rules would be a violation of this chapter.

## **Chapter 7.62 GENERAL ANIMAL WELFARE**

### **7.62.010 Animal Welfare.**

It shall be a violation of this code for any person to overdrive, overload, drive when overloaded, overwork, torture, torment, deprive of necessary sustenance, drink, or shelter, cruelly beat, mutilate, or cruelly kill any animal, or cause or procure any animal to be so overdriven, overloaded, driven when overloaded, overworked, tortured, tormented, deprived of necessary sustenance, drink, shelter, or to be cruelly beaten, mutilated, or cruelly killed. Enforcement of this section may be in addition to any criminal penalties under California Penal Code Section 597 et seq., as may be amended from time to time.

**7.62.020 Animals in Motor Vehicles.**

Notwithstanding section 7.62.010 of this code, a person shall not leave or confine an animal in any unattended motor vehicle under conditions that endanger the health or well-being of an animal due to heat, cold, lack of adequate ventilation, or lack of food or water, or other circumstances that could reasonably be expected to cause suffering, disability, or death to the animal. Enforcement of this section may be in addition to any criminal penalties under California Penal Code Section 597 et seq., as may be amended from time to time.

SECTION 2. This ordinance shall be effective at the expiration of thirty (30) days from the date of adoption.

SECTION 3. The City Clerk is hereby directed to cause this ordinance to be published in full at least once within fourteen (14) days after it is adopted in a newspaper of general circulation in the City, or shall within fourteen (14) days after its adoption cause this ordinance to be posted in full in at least three (3) public places in the City and enter in the Ordinance Book a certificate stating the time and place of said publication by posting.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by the following vote on roll call:

AYES            COUNCILMEMBERS:

NOES            COUNCILMEMBERS:

ABSENT        COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk



## COUNCIL COMMUNICATION

**CC #: 0996**

**File #: 0400-04-12-01 & 0400-07**

**Title:** Sierra Vista - KT Properties Phase 2 Large Lot Subdivision Final Map

**Contact:** Kerry Andrews 916-774-5346 kandrews@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 7.25.**

### RECOMMENDATION TO COUNCIL

It is recommended that the City Council take the following actions:

Approve the final map on file with the City Clerk and accept on behalf of the public the easements offered thereon, but reject at this time, on behalf of the public, all irrevocable offers of dedication, and approve the abandonment of the irrevocable offers of dedication listed thereon.

### BACKGROUND

The Development Services - Engineering section has reviewed the subject final map and found that it is in compliance with the Subdivision Map Act and the City's Subdivision Ordinance and all conditions of the tentative map have been met.

This map will be creating 6 large lots for future development, 3 public park lots, 2 public open space lots, 1 public sewer lift station lot and 1 school site lot.

### FISCAL IMPACT

There is no fiscal impact to the City's General Fund associated with this approval.

### ENVIRONMENTAL REVIEW

Approval of the Sierra Vista - KT Properties Phase 2 Large Lot Subdivision final map is an action that is subject to California Environmental Quality Act (CEQA). Project level CEQA compliance for the Sierra Vista - KT Properties Phase 2 Large Lot Subdivision final map was accomplished with preparation of the Sierra Vista Specific Plan EIR (Adopted: May 5, 2010) (SCH#2008032017) and the Mitigated Negative Declaration (MND) and associated Mitigation Monitoring Program approved by the City of Roseville on June 6, 2012. Because the Sierra Vista



- KT Properties Phase 2 Large Lot Subdivision final map is consistent with the project evaluated in the Sierra Vista Specific Plan Environmental Impact Report (EIR), no new effects would be expected to occur and all applicable mitigation measures from the Sierra Vista Specific Plan EIR will be implemented. As such, no additional CEQA action is required at this time.

Respectfully Submitted,

Kerry Andrews, Assistant Engineer

Mike Isom, Development Services Director



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Dominick Casey, City Manager

**ATTACHMENTS:**

Description

Final Map

OWNER'S STATEMENT

THE UNDERSIGNED HEREBY CERTIFY THAT THEY ARE THE ONLY PERSONS HAVING ANY RECORD TITLE INTEREST IN THE REAL PROPERTY INCLUDED WITHIN THE SUBDIVISION SHOWN UPON THIS FINAL MAP OF "SIERRA VISTA - KT PROPERTIES PHASE 2 LARGE LOT SUBDIVISION" AND THEY HEREBY CONSENT TO THE PREPARATION AND RECORDATION OF THIS FINAL MAP AND HEREBY OFFER FOR DEDICATION AND DO HEREBY DEDICATE FOR PARTICULAR PURPOSES THE FOLLOWING:

THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED AS EASEMENT FOR PUBLIC PURPOSES:

- (A) PUBLIC EASEMENTS FOR THE INSTALLATION AND MAINTENANCE OF, BUT NOT LIMITED TO ELECTROLIERS, WATER AND GAS PIPES, SEWER AND DRAINAGE PIPES, AND FOR UNDERGROUND WIRE AND CONDUITS, ABOVE GROUND APPURTENANCES FOR ELECTRIC, TELEPHONE AND TELEVISION SERVICES AND TRAFFIC CONTROL APPURTENANCES TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER, UNDER AND ACROSS LOT A AND THOSE STRIPS OF LAND LYING CONTIGUOUS TO THE RIGHT OF WAY, AS SHOWN HEREON AND DESIGNATED "P.U.E." (PUBLIC UTILITY EASEMENT).
- (B) PUBLIC EASEMENT FOR THE INSTALLATION AND MAINTENANCE OF A BUS SHELTER TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER AND ACROSS THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "B.S.E." (BUS SHELTER EASEMENT)
- (C) PUBLIC EASEMENT FOR PEDESTRIAN / BICYCLE ACCESS AND THE INSTALLATION, REPAIR, REMOVAL OR REPLACEMENT OF LANDSCAPING TOGETHER WITH ANY AND ALL APPURTENANCES THERETO, ON OVER, UNDER AND ACROSS THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "P.E." (PASEO EASEMENT).
- (D) PUBLIC SEWER EASEMENT FOR THE INSTALLATION, MAINTENANCE AND REPAIR OF SEWER FACILITIES ON, OVER, UNDER AND ACROSS THE AREA SHOWN HEREON AND DESIGNATED "S.E." (SEWER EASEMENT).

THE REAL PROPERTY DESCRIBED BELOW IS IRREVOCABLY DEDICATED IN FEE FOR PUBLIC PURPOSES:

- (A) AS PUBLIC RIGHT OF WAY (INCLUDING ALL IMPROVEMENTS THEREON) THE STREETS SHOWN HEREON AS LOT A, SANTUCCI BOULEVARD, VISTA GRANDE BOULEVARD, SIERRA VILLAGE DRIVE, BASELINE ROAD AND ALSO SHOWN HEREON AND DESIGNATED AS I.O.D./R.O.W AND THOSE SEPARATE AREAS SHOWN HEREON AND DESIGNATED I.O.D./R.O.W..
- (B) 2 & 9 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR OPEN SPACE PURPOSES.
- (C) LOT 3 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR A SEWER LIFT STATION.
- (D) LOT 1, 7 & 13 SHOWN HEREON TO THE CITY OF ROSEVILLE FOR PARK PURPOSES.
- (E) LOT 12 SHOWN HEREON IS HEREBY RESERVED TO BE DEDICATED IN THE FUTURE AS A SCHOOL SITE.

SIERRA VISTA COMMUNITIES, LLC  
A CALIFORNIA LIMITED LIABILITY COMPANY

BY: AKT INVESTMENTS, INC., A CALIFORNIA CORPORATION

BY: \_\_\_\_\_

NAME: CHRYSANTHY DEMOS

TITLE: PRESIDENT & CEO

BY: \_\_\_\_\_

NAME:

TITLE:

BY: LENNAR HOMES CALIFORNIA INC., A CALIFORNIA CORPORATION

BY: \_\_\_\_\_

NAME: LARRY GUALCO

TITLE: VICE PRESIDENT

BY: \_\_\_\_\_

NAME:

TITLE:

SUBDIVISION MAP ACT SECTION 66477.5 CERTIFICATE

PURSUANT TO SECTION 66477.5 OF THE SUBDIVISION MAP ACT THE CITY OF ROSEVILLE SHALL RECONVEY LOT 3 AS SHOWN HEREON TO THE SUBDIVIDER NAMED BELOW IF THE CITY OF ROSEVILLE MAKES A DETERMINATION THAT THE SAME PUBLIC PURPOSE FOR WHICH THE PROPERTY WAS DEDICATED DOES NOT EXIST, OR THE PROPERTY OR ANY PORTION THEREOF IS NOT NEEDED FOR PUBLIC UTILITIES EXCEPT FOR ANY PORTION OF THE PROPERTY THAT IS REQUIRED FOR THE SAME PUBLIC PURPOSE OR PUBLIC UTILITIES.

SUBDIVIDER: SIERRA VISTA COMMUNITIES, LLC

ADDRESS: 1025 CREEK RIDGE DRIVE  
ROSEVILLE CA, 95678

NOTARY'S ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY OR VALIDITY OF THAT DOCUMENT.

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

SS

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2020, BEFORE ME, \_\_\_\_\_  
A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED, \_\_\_\_\_, WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

MY PRINCIPAL PLACE OF BUSINESS IS THE  
COUNTY OF: \_\_\_\_\_

MY COMMISSION EXPIRES: \_\_\_\_\_

MY COMMISSION NO.: \_\_\_\_\_

NOTARY'S ACKNOWLEDGMENT

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY OR VALIDITY OF THAT DOCUMENT.

STATE OF \_\_\_\_\_

COUNTY OF \_\_\_\_\_

SS

ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2020, BEFORE ME, \_\_\_\_\_  
A NOTARY PUBLIC IN AND FOR SAID COUNTY AND STATE, PERSONALLY APPEARED, \_\_\_\_\_, WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL: \_\_\_\_\_

PRINTED NAME: \_\_\_\_\_

MY PRINCIPAL PLACE OF BUSINESS IS THE  
COUNTY OF: \_\_\_\_\_

MY COMMISSION EXPIRES: \_\_\_\_\_

MY COMMISSION NO.: \_\_\_\_\_

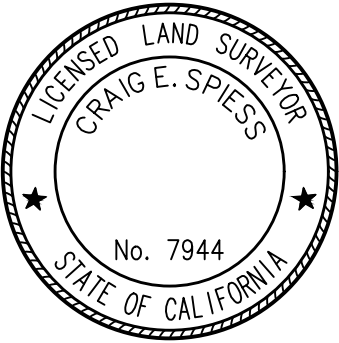
SURVEYOR'S STATEMENT

THIS FINAL MAP OF "SIERRA VISTA - KT PROPERTIES PHASE 2 LARGE LOT SUBDIVISION" WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCES AT THE REQUEST OF SIERRA VISTA COMMUNITIES, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY, IN OCTOBER 2019. I HEREBY STATE THAT THIS FINAL MAP SUBSTANTIALLY CONFORMS TO THE APPROVED OR CONDITIONALLY APPROVED TENTATIVE MAP. ALL MONUMENTS SHOWN HEREON ARE OF THE CHARACTER AND WILL OCCUPY THE POSITIONS INDICATED, AND WILL BE SET BY DECEMBER 31, 2022 AND THAT THE MONUMENTS ARE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED.

R.E.Y. ENGINEERS, INC.

CRAIG E. SPIESS, PLS 7944  
EXPIRATION DATE: DECEMBER 31, 2021

DATE: \_\_\_\_\_



CITY ENGINEER'S STATEMENT

I HEREBY STATE THAT I HAVE EXAMINED THIS FINAL MAP OF "SIERRA VISTA - KT PROPERTIES PHASE 2 LARGE LOT SUBDIVISION" AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP ON FILE AND ANY APPROVED ALTERATIONS THEREOF; THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.

DATE: \_\_\_\_\_

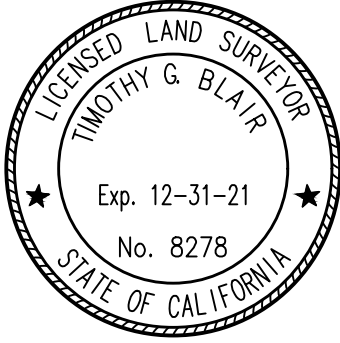
MARC STOUT, R.C.E. 69879  
CITY ENGINEER, CITY OF ROSEVILLE  
LICENSE EXPIRES: SEPTEMBER 30, 2020

I HEREBY STATE THAT I AM SATISFIED WITH THIS FINAL MAP OF "SIERRA VISTA - KT PROPERTIES PHASE 2 LARGE LOT SUBDIVISION" IS TECHNICALLY CORRECT.

FOR MARC STOUT, CITY ENGINEER, CITY OF ROSEVILLE

DATE: \_\_\_\_\_

TIMOTHY G. BLAIR, PLS 8278  
EXPIRES DECEMBER 31, 2021



CITY CLERK'S STATEMENT

I HEREBY CERTIFY THAT THE CITY COUNCIL OF THE CITY OF ROSEVILLE, HAS APPROVED THIS FINAL MAP OF "SIERRA VISTA - KT PROPERTIES PHASE 2 LARGE LOT SUBDIVISION", AND HAS ACCEPTED ON BEHALF OF THE PUBLIC, THE EASEMENTS OFFERED HEREON FOR DEDICATION. BUT HAS REJECTED AT THIS TIME ON BEHALF OF THE PUBLIC, BUT RESERVES THE RIGHT TO ACCEPT AT A LATER DATE ON BEHALF OF THE PUBLIC ALL IRREVOCABLE OFFERS OF DEDICATION IN ACCORDANCE WITH THE TERMS OF THOSE OFFERS AND DOES ALSO HEREBY APPROVE THE ABANDONMENT OF THE IRREVOCABLE OFFERS OF DEDICATIONS LISTED HEREON WITHIN NOTE 4 ON SHEET 2.

CITY CLERK, CITY OF ROSEVILLE

DATE: \_\_\_\_\_

BY: \_\_\_\_\_

ASSISTANT CITY CLERK

RECORDER'S STATEMENT

FILED THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 2020, AT \_\_\_\_\_ M. IN BOOK \_\_\_\_\_ OF MAPS, AT PAGE \_\_\_\_\_, IN THE OFFICE OF THE PLACER COUNTY RECORDER, AT THE REQUEST OF R.E.Y. ENGINEERS, INC.

RECORDER OF PLACER COUNTY  
STATE OF CALIFORNIA

DOCUMENT NO.: \_\_\_\_\_

BY: \_\_\_\_\_

DEPUTY

FEE: \$ \_\_\_\_\_

FINAL MAP OF  
SIERRA VISTA - KT PROPERTIES  
PHASE 2 LARGE LOT SUBDIVISION  
SUBDIVISION No. PL15-0192

BEING ALL OF THE DESIGNATED REMAINDER AS SHOWN AND SO DESIGNATED ON THAT CERTAIN FINAL MAP ENTITLED "SIERRA VISTA - KT PROPERTIES LARGE LOT SUBDIVISION SUBDIVISION NUMBER PL 15-0192", FILED FOR RECORD ON NOVEMBER 20, 2018 IN BOOK EE OF MAPS, AT PAGE 33, PLACER COUNTY RECORDS AND ALL OF PARCEL ONE AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON SEPTEMBER 4, 2018 IN DOCUMENT NUMBER 2018-0063959, OFFICIAL RECORDS OF PLACER COUNTY, PORTION OF SECTIONS 34 & 35, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

CITY OF ROSEVILLE • PLACER COUNTY • CALIFORNIA

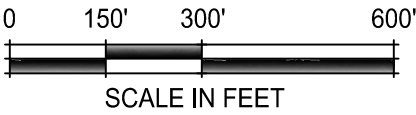
R. E. Y. ENGINEERS, Inc.  
Civil Engineers / Land Surveyors  
905 Sutter St. Ste 200 Folsom CA, 95630  
(916) 366-3040 Fax (916) 366-3303

SEPTEMBER 2020

SHEET 1 OF 9 7310.024

NOTES:

1. THE TOTAL AREA OF THIS SUBDIVISION IS 224.08 ACRES +/-, GROSS, CONSISTING OF 6 LARGE LOTS FOR FUTURE DEVELOPMENT, 2 PUBLIC OPEN SPACE LOTS, 1 PUBLIC SEWER LIFT STATION, 3 PUBLIC PARK LOTS AND 1 SCHOOL SITE LOT. ALL CURVES ARE DIMENSIONED WITH RADIUS, DELTA, ARC LENGTH, CHORD BEARING AND CHORD LENGTH. CHORD LENGTHS MAY CONTAIN SOME ROUNDING ERROR. DISTANCES SHOWN HEREON ARE IN FEET AND DECIMALS THEREOF AND ARE "GROUND" DISTANCES.
2. THE EASEMENT FOR TEMPORARY INGRESS/EGRESS EASEMENT GRANTED TO FRANK T. CHAN TRUST OF THE FRANK T. CHAN FAMILY TRUST U/A DATED DECEMBER 8, 2003 ET AL., IN DEED RECORDED AUGUST 13, 2015, AS INSTRUMENT NO. 2015-0070559, OFFICIAL RECORD OF PLACER COUNTY IS FULLY CONTAINED IN THE RIGHT OF WAY SHOWN HEREON PURSUANT TO SECTION 66499.20.2 OF THE GOVERNMENT CODE, THE LANDS SHOWN HEREON ARE HEREBY MERGED AND RESUBDIVIDED AND THE FOLLOWING IRREVOCABLE OFFER OF DEDICATION FOR RIGHT OF WAY, OPEN SPACE, SEWER PUMP STATION, EASEMENT, PUBLIC UTILITY EASEMENT, CITY OF ROSEVILLE EASEMENT THAT AFFECT THIS MAP ARE HEREBY ABANDONED.
3. A. RIGHT OF WAY, AREA R-1, R-6, R-7, R-8 & R-9 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064318, OFFICIAL RECORDS OF PLACER COUNTY.  
B. OPEN SPACE, AREA O-1 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064318, OFFICIAL RECORDS OF PLACER COUNTY.  
C. EASEMENT, AREA E-3 & E-4 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064325, OFFICIAL RECORDS OF PLACER COUNTY.  
D. PUBLIC UTILITY EASEMENT, AREA R-1, R-7, R-8 & R-9 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064325, OFFICIAL RECORDS OF PLACER COUNTY.  
E. CITY OF ROSEVILLE EASEMENT, AREA R-6 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064326, OFFICIAL RECORDS OF PLACER COUNTY.  
F. RIGHT OF WAY, AREA R-6 & R-8 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064319, OFFICIAL RECORDS OF PLACER COUNTY.  
G. OPEN SPACE, AREA O-1 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064319, OFFICIAL RECORDS OF PLACER COUNTY.  
H. SEWER PUMP STATION, AREA POP-1 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064319, OFFICIAL RECORDS OF PLACER COUNTY.  
I. EASEMENT, AREA E-1 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064327, OFFICIAL RECORDS OF PLACER COUNTY.  
J. PUBLIC UTILITY EASEMENT, AREA R-8 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064327, OFFICIAL RECORDS OF PLACER COUNTY.  
K. CITY OF ROSEVILLE EASEMENT, AREA R-6 AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED JULY 24, 2015 IN DOCUMENT NO. 2015-0064328, OFFICIAL RECORDS OF PLACER COUNTY.
- 4.



FINAL MAP OF  
SIERRA VISTA - KT PROPERTIES  
PHASE 2 LARGE LOT SUBDIVISION  
SUBDIVISION No. PL15-0192

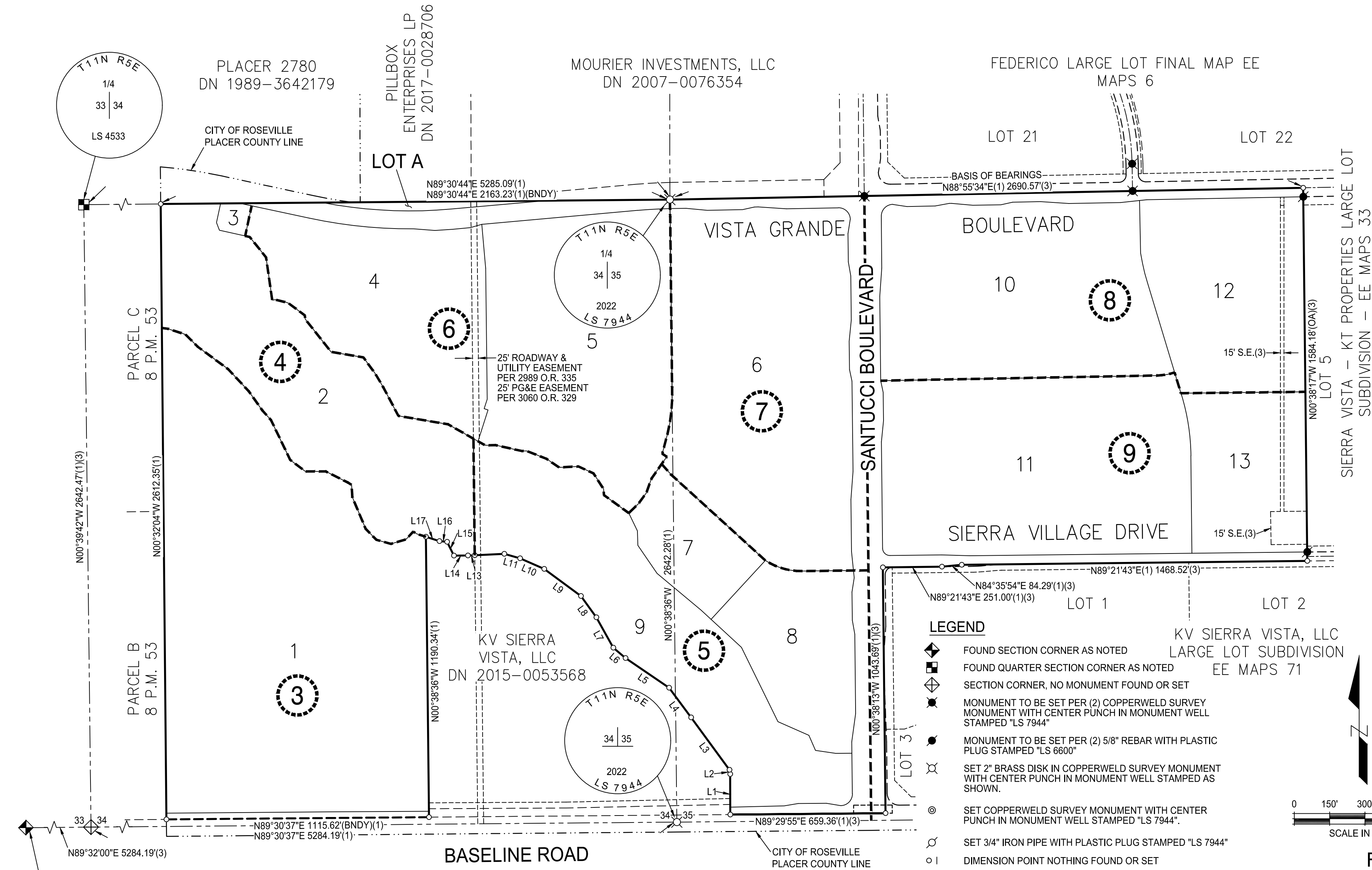
BEING ALL OF THE DESIGNATED REMAINDER AS SHOWN AND SO DESIGNATED ON THAT CERTAIN FINAL MAP ENTITLED "SIERRA VISTA - KT PROPERTIES LARGE LOT SUBDIVISION SUBDIVISION NUMBER PL 15-0192", FILED FOR RECORD ON NOVEMBER 20, 2018 IN BOOK EE OF MAPS, AT PAGE 33, PLACER COUNTY RECORDS AND ALL OF PARCEL ONE AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON SEPTEMBER 4, 2018 IN DOCUMENT NUMBER 2018-0063959, OFFICIAL RECORDS OF PLACER COUNTY, PORTION OF SECTIONS 34 & 35, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

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R. E. Y. ENGINEERS, Inc.  
Civil Engineers / Land Surveyors  
905 Sutter St. Ste 200 Folsom CA, 95630  
(916) 366-3040 Fax (916) 366-3303

SEPTEMBER 2020

SHEET 2 OF 9 7310.024



LEGEND

- ◆ FOUND SECTION CORNER AS NOTED
- FOUND QUARTER SECTION CORNER AS NOTED
- ◇ SECTION CORNER, NO MONUMENT FOUND OR SET
- MONUMENT TO BE SET PER (2) COPPERWELD SURVEY MONUMENT WITH CENTER PUNCH IN MONUMENT WELL STAMPED "LS 7944"
- MONUMENT TO BE SET PER (2) 5/8" REBAR WITH PLASTIC PLUG STAMPED "LS 6600"
- ⊗ SET 2" BRASS DISK IN COPPERWELD SURVEY MONUMENT WITH CENTER PUNCH IN MONUMENT WELL STAMPED AS SHOWN.
- ⊗ SET COPPERWELD SURVEY MONUMENT WITH CENTER PUNCH IN MONUMENT WELL STAMPED "LS 7944".
- ⊗ SET 3/4" IRON PIPE WITH PLASTIC PLUG STAMPED "LS 7944"
- DIMENSION POINT NOTHING FOUND OR SET

- AC. ACRE
- BNDY. BOUNDARY
- CB. CHORD BEARING
- CD. CHORD DISTANCE
- CL. CENTERLINE
- DN. DOCUMENT NUMBER
- I.O.D. IRREVOCABLE OFFER OF DEDICATION
- I.P. IRON PIPE
- L.L.T.M. LARGE LOT TENTATIVE MAP
- M.A.E. MAINTENANCE ACCESS EASEMENT
- (OA) OVERALL
- P.E. PASEO EASEMENT
- P.U.E. PUBLIC UTILITY EASEMENT
- (R) RADIAL
- R.O.W. RIGHT OF WAY
- S.F. SQUARE FEET
- S.L.T.M. SMALL LOT TENTATIVE MAP
- ( ) DENOTES RECORD INFORMATION
- ① SHEET NUMBER

| LARGE LOT # | L.L.T.M. PLAN # | S.L.T.M. PLAN # |
|-------------|-----------------|-----------------|
| 1           | KT-50           | KT-50           |
| 2           | KT-80A          | KT-80A          |
| 3           | KT-60           | KT-60           |
| 4           | KT-1A           | KT-1A           |
| 5           | KT-1B           | KT-1B           |
| 6           | KT-20           | KT-20           |
| 7           | KT-51           | KT-51           |
| 8           | KT-30           | KT-30           |
| 9           | KT-80B          | KT-80B          |
| 10          | KT-21A          | KT-21A          |
| 11          | KT-21B          | KT-21B          |
| 12          | KT-61           | KT-61           |
| 13          | KT-52           | KT-52           |

LINE TABLE

| #         | BEARING     | LENGTH  |
|-----------|-------------|---------|
| L1(1)(3)  | N00°11'16"W | 171.92' |
| L2(1)(3)  | N09°07'22"W | 18.39'  |
| L3(1)(3)  | N36°14'35"W | 275.76' |
| L4(1)(3)  | N36°36'24"W | 157.05' |
| L5(1)(3)  | N55°47'35"W | 223.87' |
| L6(1)(3)  | N49°30'58"W | 67.92'  |
| L7(1)(3)  | N29°12'09"W | 147.49' |
| L8(1)(3)  | N35°59'17"W | 111.83' |
| L9(1)(3)  | N53°39'22"W | 193.94' |
| L10(1)(3) | N66°12'56"W | 111.62' |
| L11(1)(3) | N73°56'55"W | 69.64'  |
| L12(1)    | N87°15'49"E | 125.83' |
| L13(1)    | N87°15'49"E | 29.14'  |
| L14(1)    | N89°39'56"E | 59.57'  |
| L15(1)    | N26°11'00"W | 65.03'  |
| L16(1)    | N84°17'15"W | 32.90'  |
| L17(1)    | N72°13'16"W | 60.42'  |

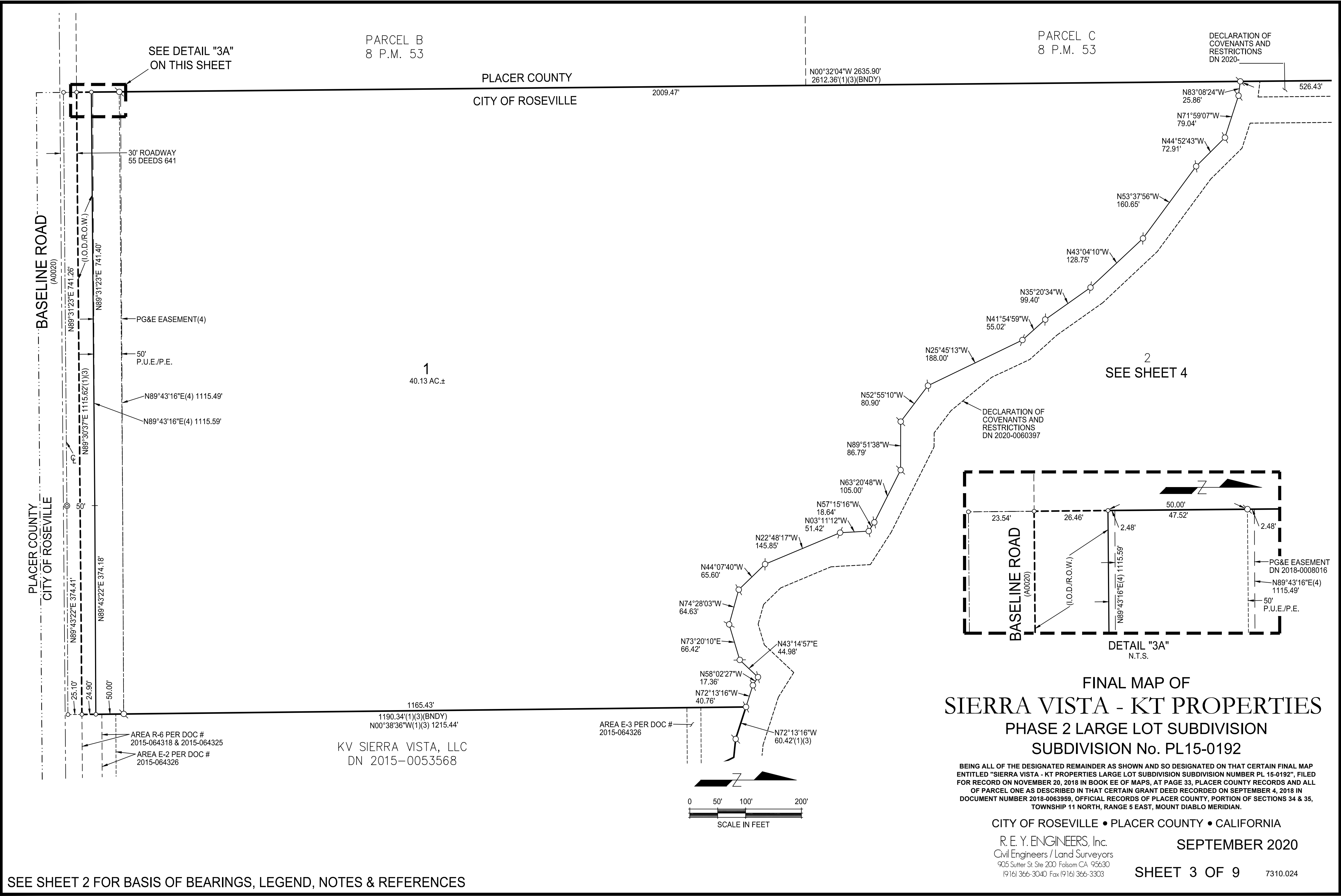
BASIS OF BEARINGS:

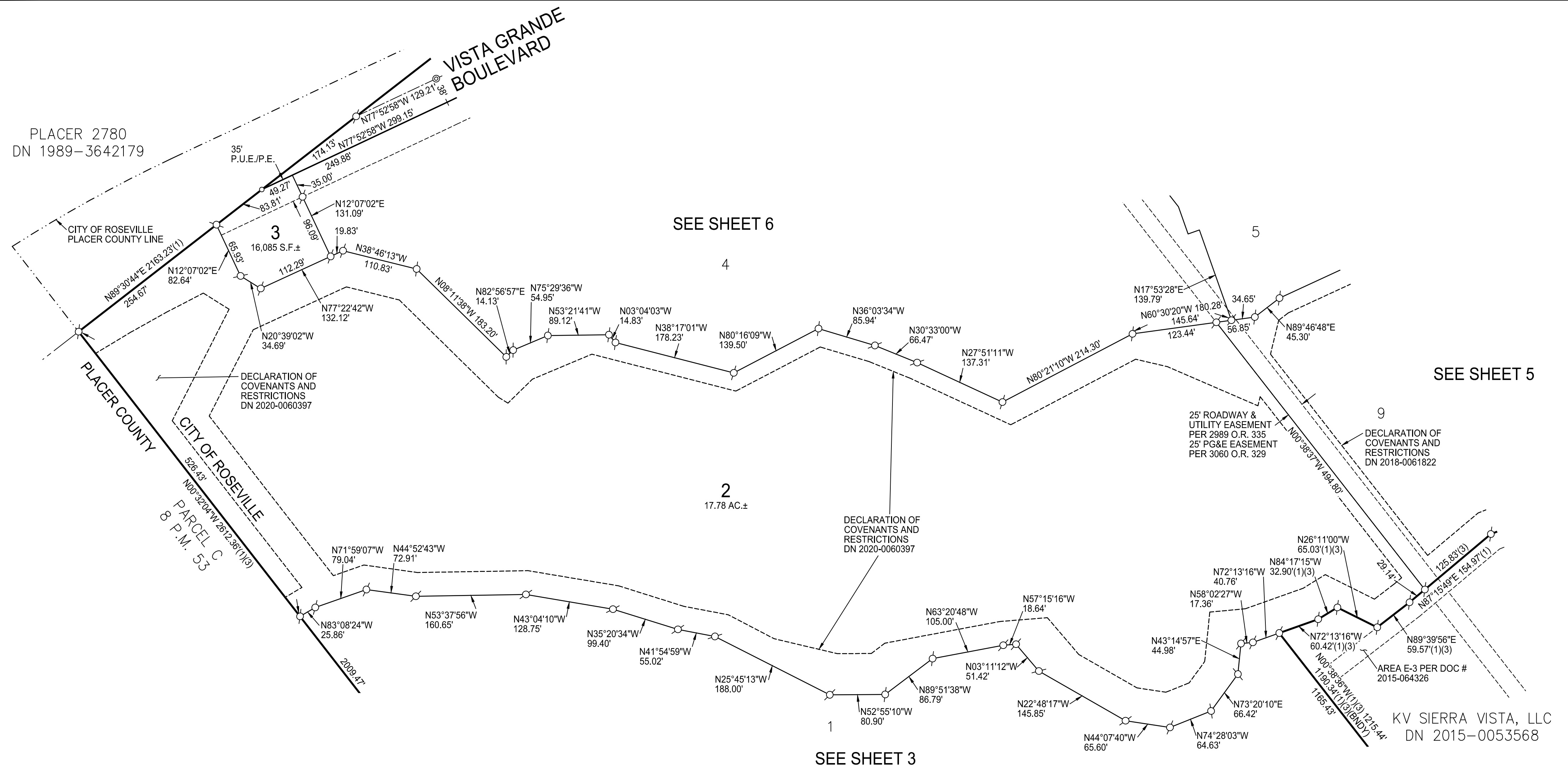
THE BEARING N 88°55'34" W, AS SHOWN ALONG THE NORTH BOUNDARY AS SHOWN ON THAT CERTAIN FINAL MAP ENTITLED "SIERRA VISTA - KT PROPERTIES LARGE LOT SUBDIVISION SUBDIVISION NUMBER PL 15-0192" FILED FOR RECORD ON NOVEMBER, 2018 IN BOOK EE OF MAPS, AT PAGE 33, PLACER COUNTY RECORDS. DISTANCES SHOWN HEREON ARE GROUND DISTANCES.

REFERENCES:

- (1) 22 RS 135
- (2) EE MAPS 6
- (3) EE MAPS 33
- (4) DN 2018-0008016







FINAL MAP OF  
SIERRA VISTA - KT PROPERTIES  
PHASE 2 LARGE LOT SUBDIVISION  
SUBDIVISION No. PL15-0192

BEING ALL OF THE DESIGNATED REMAINDER AS SHOWN AND SO DESIGNATED ON THAT CERTAIN FINAL MAP ENTITLED "SIERRA VISTA - KT PROPERTIES LARGE LOT SUBDIVISION SUBDIVISION NUMBER PL 15-0192", FILED FOR RECORD ON NOVEMBER 20, 2018 IN BOOK E OF MAPS, AT PAGE 33, PLACER COUNTY RECORDS AND ALL OF PARCEL ONE AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON SEPTEMBER 4, 2018 IN DOCUMENT NUMBER 2018-0063959, OFFICIAL RECORDS OF PLACER COUNTY, PORTION OF SECTIONS 34 & 35, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

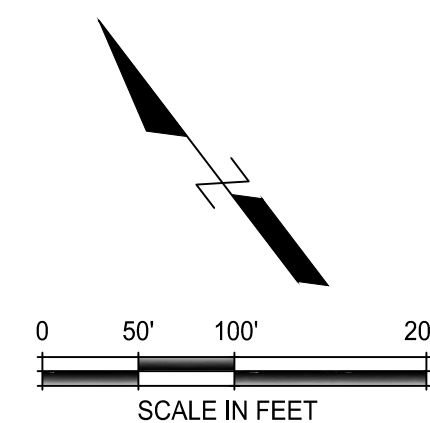
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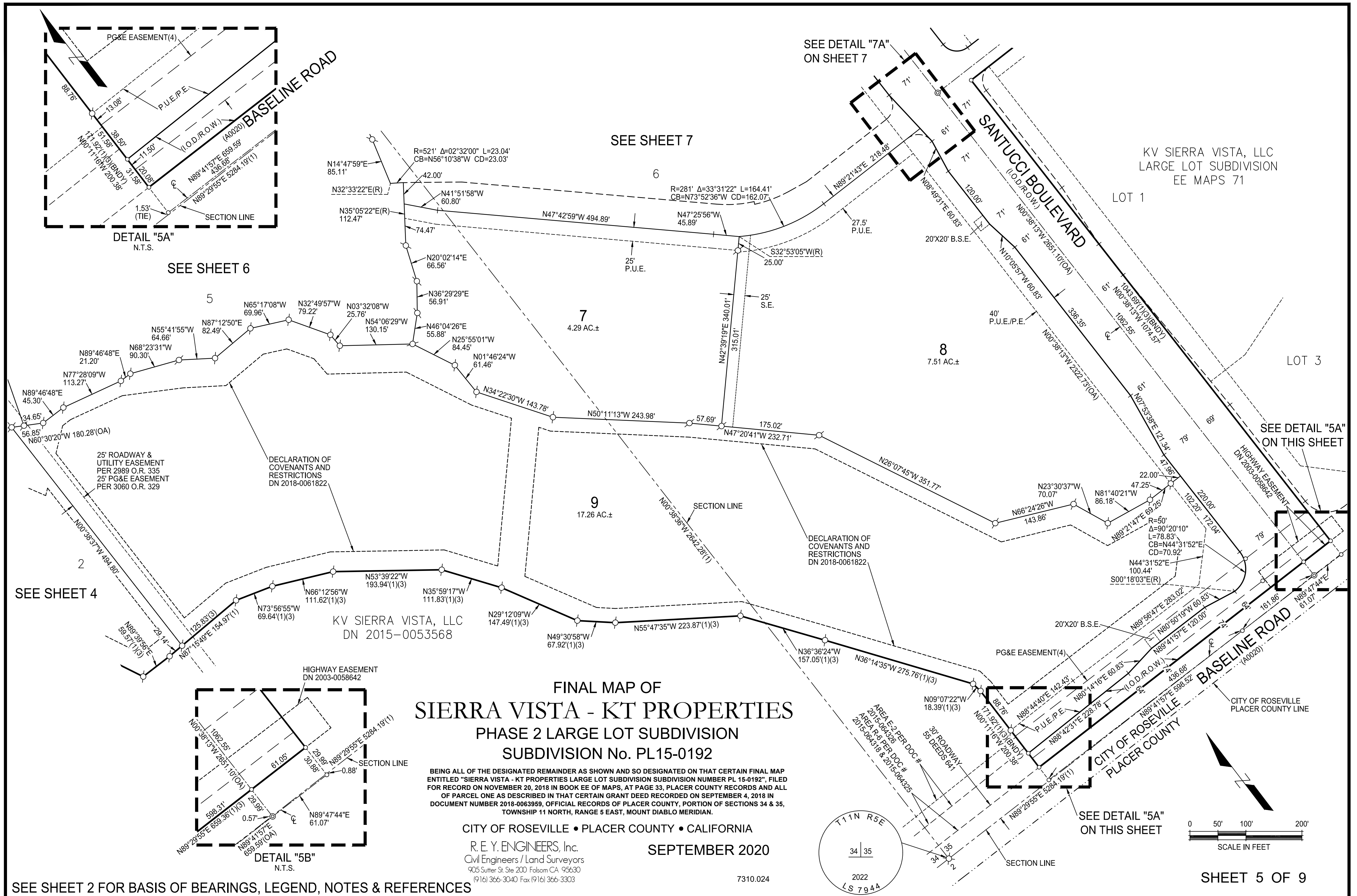
SEPTEMBER 2020

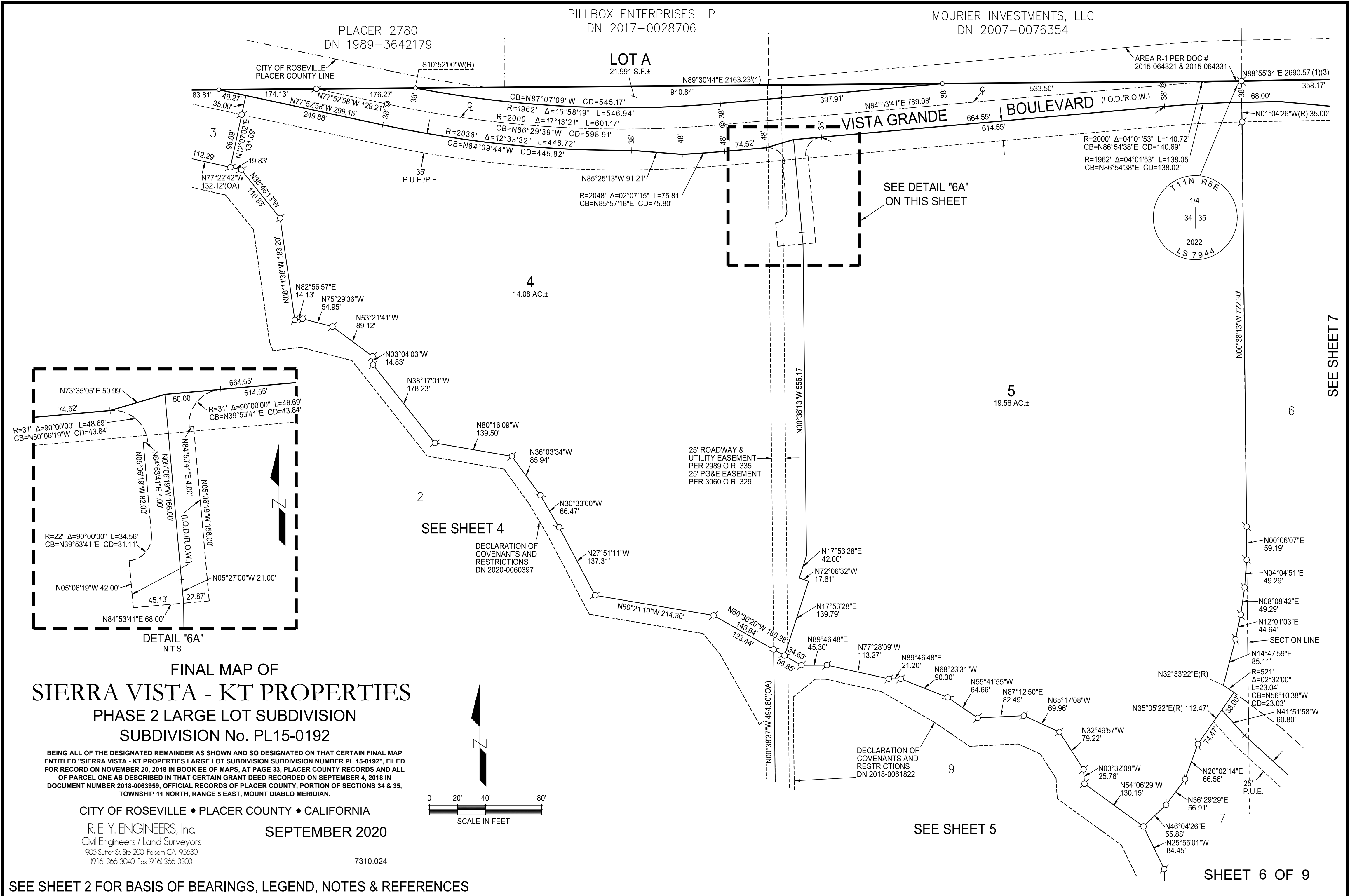
SHEET 4 OF 9 7310.024

SEE SHEET 2 FOR BASIS OF BEARINGS, LEGEND, NOTES & REFERENCES

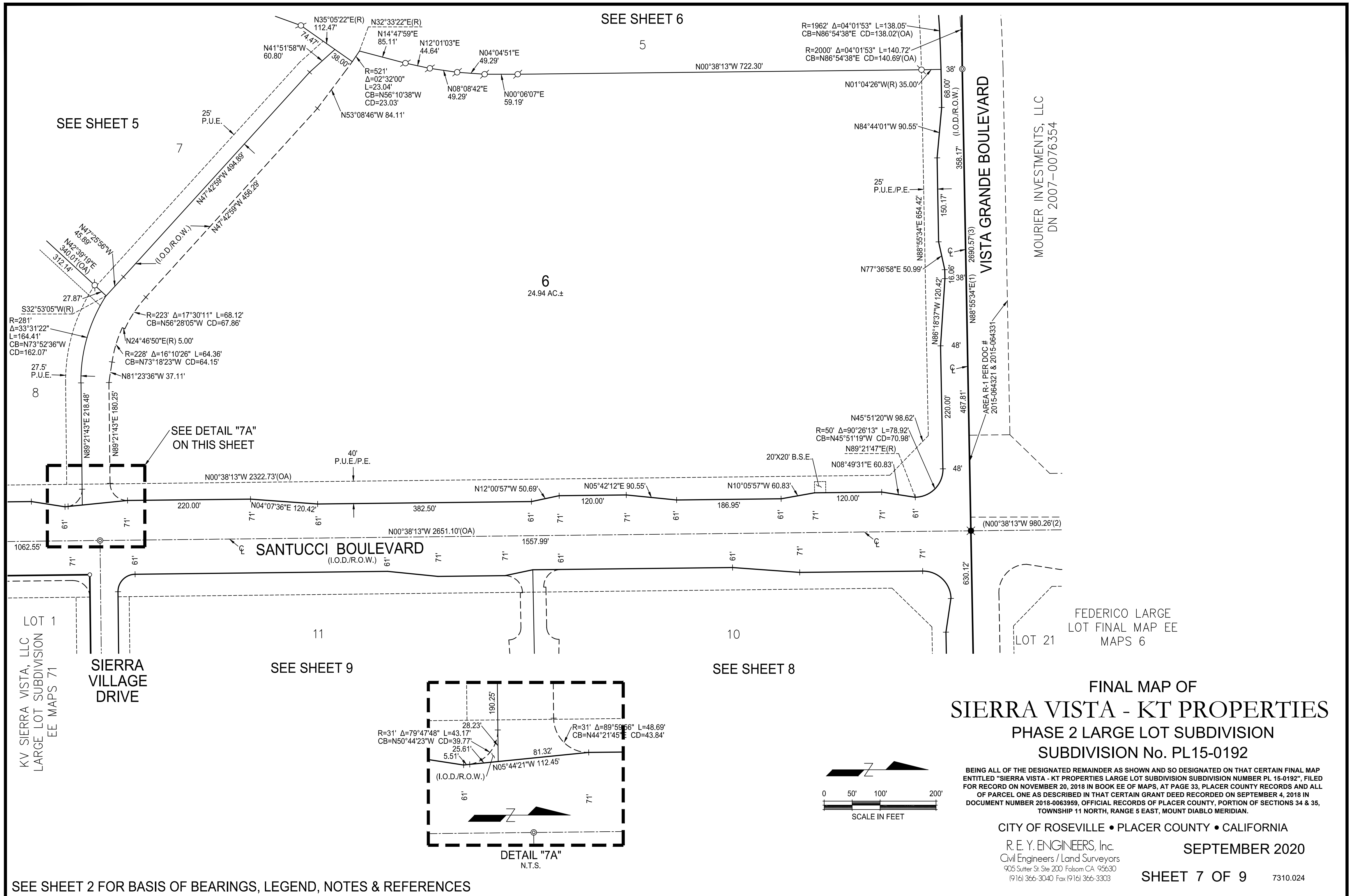




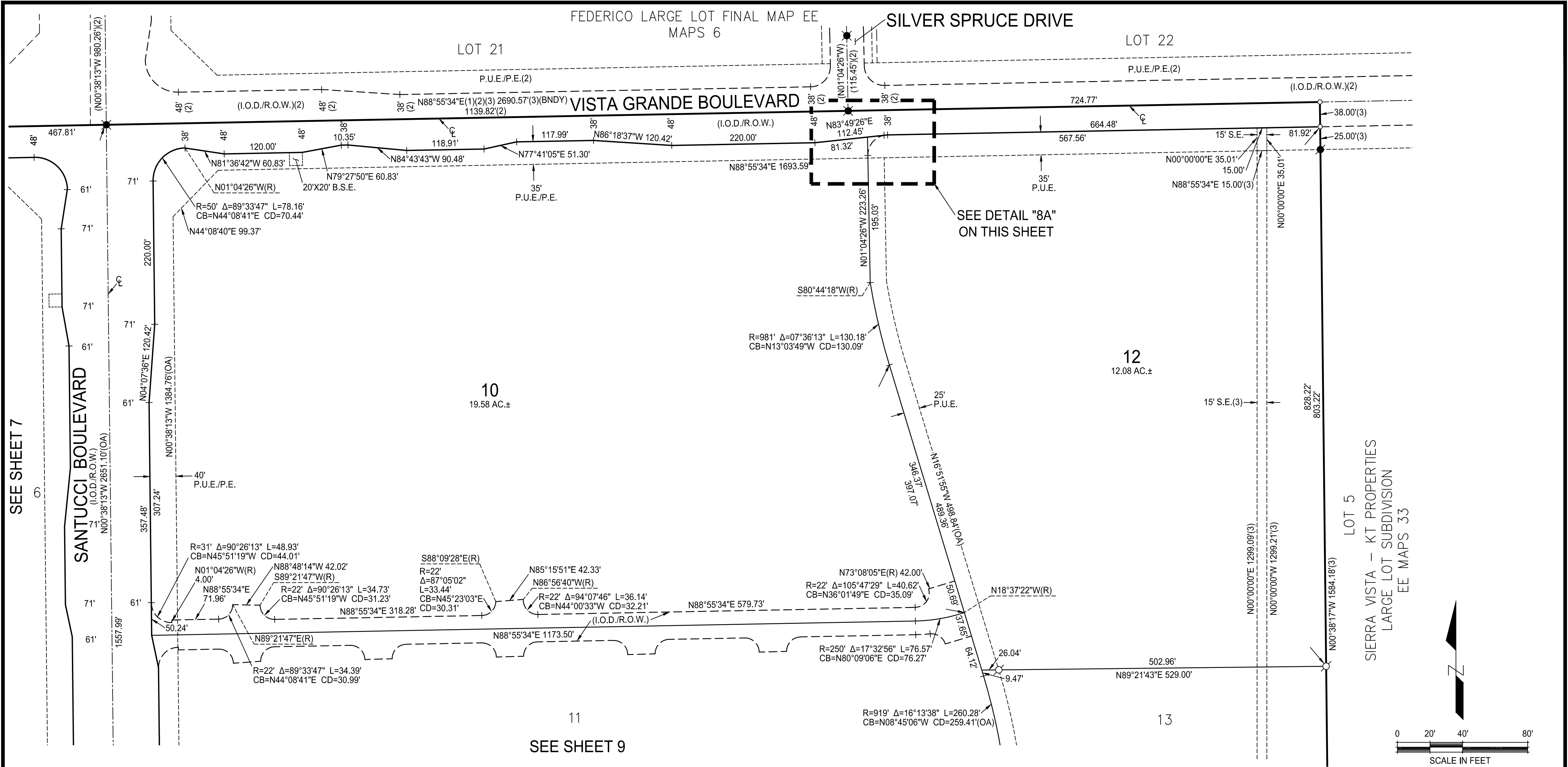






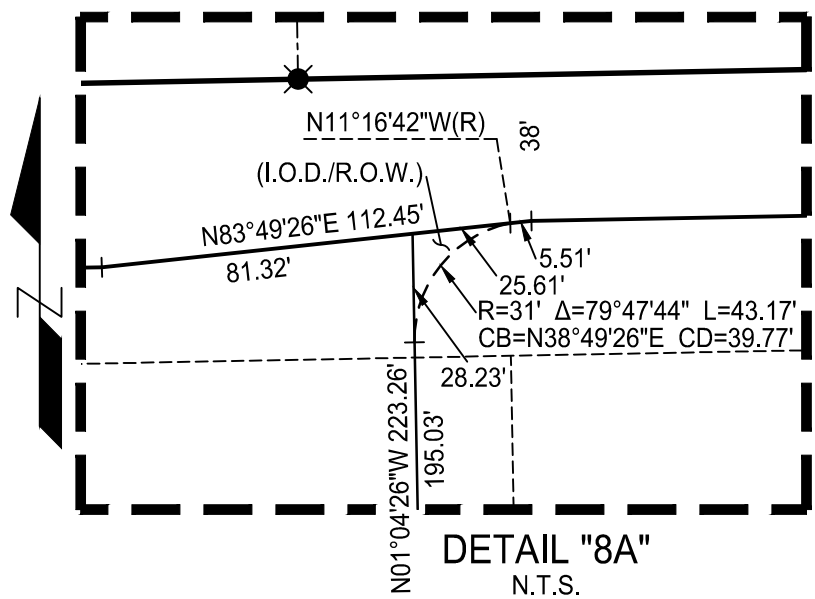






SEE SHEET 7

SEE SHEET 9



FINAL MAP OF  
SIERRA VISTA - KT PROPERTIES  
PHASE 2 LARGE LOT SUBDIVISION  
SUBDIVISION No. PL15-0192

BEING ALL OF THE DESIGNATED REMAINDER AS SHOWN AND SO DESIGNATED ON THAT CERTAIN FINAL MAP ENTITLED "SIERRA VISTA - KT PROPERTIES LARGE LOT SUBDIVISION SUBDIVISION NUMBER PL 15-0192", FILED FOR RECORD ON NOVEMBER 20, 2018 IN BOOK EE OF MAPS, AT PAGE 33, PLACER COUNTY RECORDS AND ALL OF PARCEL ONE AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON SEPTEMBER 4, 2018 IN DOCUMENT NUMBER 2018-0063959, OFFICIAL RECORDS OF PLACER COUNTY, PORTION OF SECTIONS 34 & 35, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

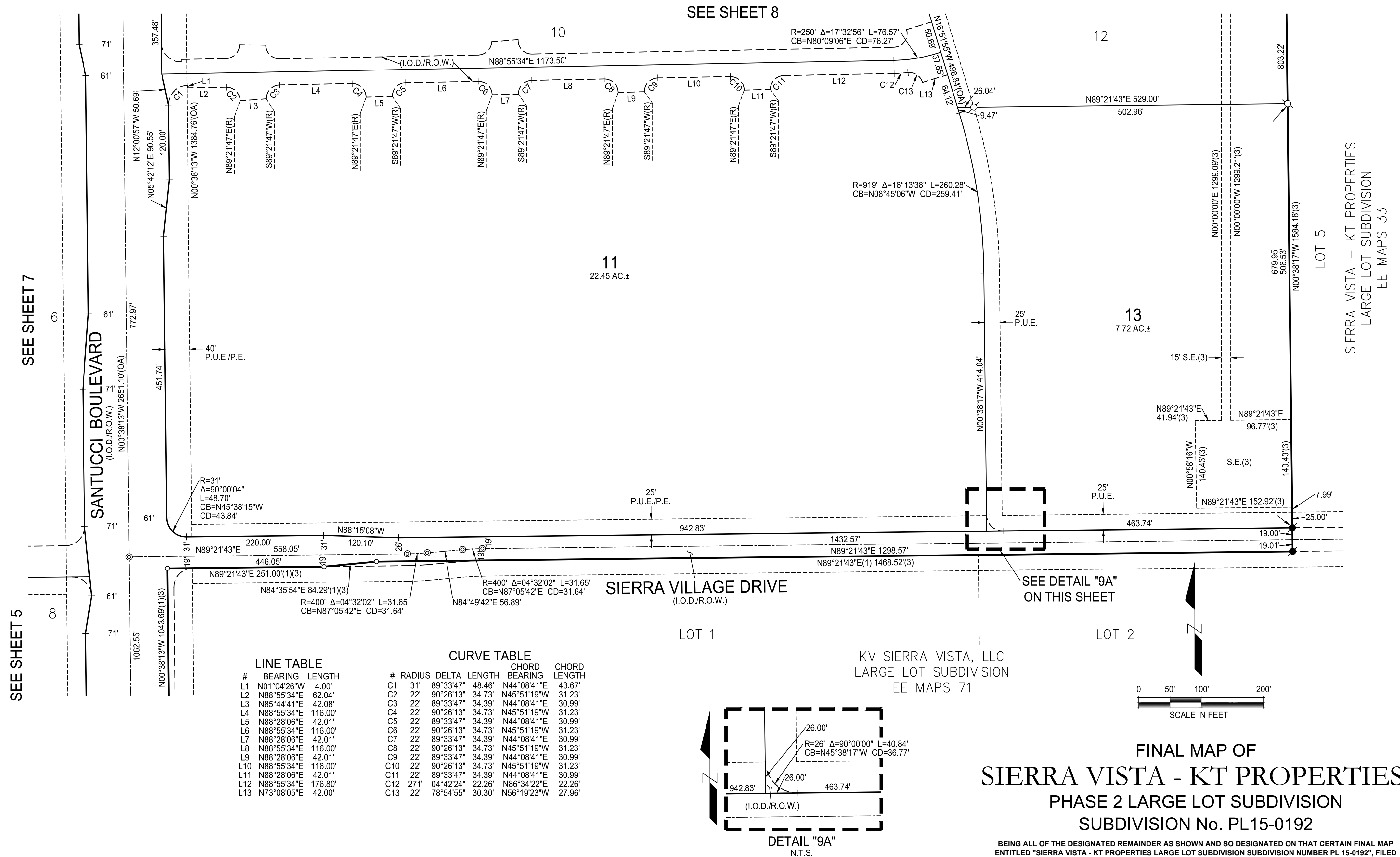
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SEPTEMBER 2020

SHEET 8 OF 9 7310.024

SEE SHEET 2 FOR BASIS OF BEARINGS, LEGEND, NOTES & REFERENCES



FINAL MAP OF  
SIERRA VISTA - KT PROPERTIES  
PHASE 2 LARGE LOT SUBDIVISION  
SUBDIVISION No. PL15-0192

BEING ALL OF THE DESIGNATED REMAINDER AS SHOWN AND SO DESIGNATED ON THAT CERTAIN FINAL MAP ENTITLED "SIERRA VISTA - KT PROPERTIES LARGE LOT SUBDIVISION SUBDIVISION NUMBER PL 15-0192", FILED FOR RECORD ON NOVEMBER 20, 2018 IN BOOK E OF MAPS, AT PAGE 33, PLACER COUNTY RECORDS AND ALL OF PARCEL ONE AS DESCRIBED IN THAT CERTAIN GRANT DEED RECORDED ON SEPTEMBER 4, 2018 IN DOCUMENT NUMBER 2018-0063959, OFFICIAL RECORDS OF PLACER COUNTY, PORTION OF SECTIONS 34 & 35, TOWNSHIP 11 NORTH, RANGE 5 EAST, MOUNT DIABLO MERIDIAN.

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SEPTEMBER 2020

SHEET 9 OF 9 7310.024

SEE SHEET 2 FOR BASIS OF BEARINGS, LEGEND, NOTES & REFERENCES



## COUNCIL COMMUNICATION

**CC #: 0997**

**File #: 0400-04-12-01 & 0400-07**

**Title:** Sierra Vista Village FD-24 and JM-20 Large Lot Subdivision Final Map

**Contact:** Kerry Andrews 916-774-5346 kandrews@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 7.26.**

### RECOMMENDATION TO COUNCIL

It is recommended that the City Council take the following actions:

Approve the final map on file with the City Clerk and accept, on behalf of the public, the easements offered thereon for dedication.

### BACKGROUND

The Development Services - Engineering section has reviewed the subject final map and found that it is in compliance with the Subdivision Map Act and the City's Subdivision Ordinance and all conditions of the tentative map have been met.

This map will be creating 4 large lots for future development.

### FISCAL IMPACT

There is no fiscal impact to the City's General Fund associated with this approval.

### ENVIRONMENTAL REVIEW

Approval of the Sierra Vista Villages FD-24 and JM-20 Large Lot Subdivision final map is an action that is subject to California Environmental Quality Act (CEQA). Project level CEQA compliance for the Sierra Vista Villages FD-24 and JM-20 Large Lot Subdivision final map was accomplished with preparation of the Sierra Vista Specific Plan EIR (Adopted: May 5, 2010) (SCH#2008032017) and the Mitigated Negative Declaration (MND) and associated Mitigation Monitoring Program approved by the City of Roseville on June 6, 2012. Because the Sierra Vista Villages FD-24 and JM-20 Large Lot Subdivision final map is consistent with the project evaluated in the Sierra Vista Specific Plan Environmental Impact Report (EIR), no new effects

would be expected to occur and all applicable mitigation measures from the Sierra Vista Specific Plan EIR will be implemented. As such, no additional CEQA action is required at this time.

Respectfully Submitted,

Kerry Andrews, Assistant Engineer

Mike Isom, Development Services Director

A handwritten signature in blue ink, consisting of several overlapping loops and a horizontal line, positioned above a horizontal line.

---

Dominick Casey, City Manager

**ATTACHMENTS:**

Description

Final Map



OWNER'S STATEMENT:

THE UNDERSIGNED HEREBY STATE THAT THEY ARE THE ONLY PERSONS HAVING ANY RECORD TITLE INTERESTS IN THE REAL PROPERTY INCLUDED WITHIN THIS PLAT OF "LARGE LOT SUBDIVISION MAP OF SIERRA VISTA VILLAGES FD-24 AND JM-20". SHOWN UPON THIS MAP AND THEY HEREBY CONSENT TO THE PREPARATION AND RECORDING OF THIS MAP AND OFFER FOR DEDICATION AND DO HEREBY DEDICATE FOR SPECIFIC PURPOSES THE FOLLOWING:

\*THE REAL PROPERTY DESCRIBED BELOW IS DEDICATED AS AN EASEMENT FOR PUBLIC PURPOSES:

- (A) PUBLIC EASEMENTS FOR INSTALLATION AND MAINTENANCE OF BUT NOT LIMITED TO WATER, GAS AND SEWER PIPES, AND FOR UNDERGROUND WIRES AND CONDUITS FOR ELECTRIC, TELEVISION AND TELEPHONE SERVICES AND TRAFFIC CONTROL APPURTENANCES TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER, UNDER AND ACROSS THOSE STRIPS OF LAND LYING SHOWN HEREON AND DESIGNATED "P.U.E." (PUBLIC UTILITY EASEMENT).
- (B) PUBLIC EASEMENTS FOR THE INGRESS AND EGRESS OF EMERGENCY VEHICLES AND UTILITY MAINTENANCE VEHICLES, TOGETHER WITH ANY AND ALL APPURTENANCES PERTAINING THERETO ON, OVER AND ACROSS THOSE STRIPS OF LAND SHOWN HEREON AND DESIGNATED "M.A.E." (MAINTENANCE ACCESS EASEMENT)

MOURIER INVESTMENTS, LLC, A CALIFORNIA LIMITED LIABILITY COMPANY

BY: \_\_\_\_\_  
PRINT NAME:  
TITLE:

BY: \_\_\_\_\_  
PRINT NAME:  
TITLE:

NOTARY ACKNOWLEDGEMENT:

A NOTARY PUBLIC OR OTHER OFFICER COMPLETING THIS CERTIFICATE VERIFIES ONLY THE IDENTITY OF THE INDIVIDUAL WHO SIGNED THE DOCUMENT TO WHICH THIS CERTIFICATE IS ATTACHED, AND NOT THE TRUTHFULNESS, ACCURACY, OR VALIDITY OF THAT DOCUMENT.

STATE OF CALIFORNIA

COUNTY OF PLACER

ON \_\_\_\_\_, 2020, BEFORE ME, \_\_\_\_\_ A NOTARY PUBLIC  
(PRINT NAME AND TITLE OF OFFICER)

PERSONALLY APPEARED \_\_\_\_\_  
WHO PROVED TO ME ON THE BASIS OF SATISFACTORY EVIDENCE TO BE THE PERSON(S) WHOSE NAME(S) IS/ARE SUBSCRIBED TO THE WITHIN INSTRUMENT AND ACKNOWLEDGED TO ME THAT HE/SHE/THEY EXECUTED THE SAME IN HIS/HER/THEIR AUTHORIZED CAPACITY(IES), AND THAT BY HIS/HER/THEIR SIGNATURE(S) ON THE INSTRUMENT THE PERSON(S), OR THE ENTITY UPON BEHALF OF WHICH THE PERSON(S) ACTED, EXECUTED THE INSTRUMENT.

I CERTIFY UNDER PENALTY OF PERJURY UNDER THE LAWS OF THE STATE OF CALIFORNIA THAT THE FOREGOING PARAGRAPH IS TRUE AND CORRECT.

WITNESS MY HAND AND OFFICIAL SEAL.

MY COMMISSION EXPIRES \_\_\_\_\_.  
MY PRINCIPAL PLACE OF BUSINESS IS IN \_\_\_\_\_ COUNTY.

NOTARY PUBLIC

PRINT NAME

A Final Map of  
SIERRA VISTA VILLAGES FD-24 AND JM-20

Large Lot Subdivision No.: PL17-0204

ALL OF LOT 38 AS SHOWN ON "FINAL MAP OF SIERRA VISTA - FEDERICO  
LARGE LOT SUBDIVISION" FILED IN BOOK EE OF MAPS, AT PAGE 6 AND ALL  
OF RESULTANT LOT 11A AS SHOWN ON 2020-0020085, O.R.P.C.

LOCATED IN SECTION 36, T. 11 N., R. 5 E., M.D.M.

CITY OF ROSEVILLE, COUNTY OF PLACER, STATE OF CALIFORNIA

JULY, 2020

BAKER-WILLIAMS ENGINEERING GROUP

Sheet 1 of 2

CITY ENGINEER'S STATEMENT:

I HEREBY STATE THAT I HAVE EXAMINED THIS PLAT OF "LARGE LOT SUBDIVISION MAP OF SIERRA VISTA VILLAGES FD-24 AND JM-20" AND FIND IT TO BE SUBSTANTIALLY THE SAME AS THE TENTATIVE MAP ON FILE AND ANY APPROVED ALTERATIONS THEREOF, THAT ALL PROVISIONS OF THE SUBDIVISION MAP ACT AND ALL APPLICABLE CITY ORDINANCES HAVE BEEN COMPLIED WITH.

DATED \_\_\_\_\_

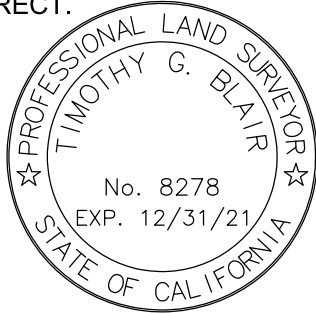
\_\_\_\_\_  
MARC STOUT R.C.E. 69879  
ACTING CITY ENGINEER, CITY OF ROSEVILLE  
EXPIRATION DATE 09/30/2020

I HEREBY STATE THAT I AM SATISFIED THAT THIS PLAT OF "LARGE LOT SUBDIVISION MAP OF SIERRA VISTA VILLAGES FD-24 AND JM-20" IS TECHNICALLY CORRECT.

For Marc Stout, Acting City Engineer, City of Roseville

DATED \_\_\_\_\_

\_\_\_\_\_  
TIMOTHY G. BLAIR  
P.L.S. 8278 EXPIRATION DATE 12/31/2021



CITY CLERK'S STATEMENT:

I HEREBY STATE THAT THE CITY COUNCIL OF THE CITY OF ROSEVILLE HAS APPROVED THIS PLAT OF "LARGE LOT SUBDIVISION MAP OF SIERRA VISTA VILLAGES FD-24 AND JM-20" AND HAS ACCEPTED ON BEHALF OF THE PUBLIC, THE EASEMENTS HEREON OFFERED FOR DEDICATION.

DATED \_\_\_\_\_

\_\_\_\_\_  
CITY CLERK, CITY OF ROSEVILLE

BY: \_\_\_\_\_  
ASSISTANT CITY CLERK

SURVEYOR'S STATEMENT:

THIS MAP WAS PREPARED BY ME OR UNDER MY DIRECTION AND IS BASED UPON A FIELD SURVEY IN CONFORMANCE WITH THE REQUIREMENTS OF THE SUBDIVISION MAP ACT AND LOCAL ORDINANCE AT THE REQUEST OF JOHN MOURIER CONSTRUCTION, INC. AND MOURIER INVESTMENTS , LLC, IN FEBRUARY, 2020. I HEREBY STATE THAT ALL THE MONUMENTS ARE OF THE CHARACTER AND OCCUPY THE POSITIONS INDICATED OR THAT THEY WILL BE SET IN THOSE POSITIONS ON OR BEFORE DECEMBER 31, 2021, THAT THE MONUMENTS WILL BE SUFFICIENT TO ENABLE THE SURVEY TO BE RETRACED AND THAT THIS FINAL MAP SUBSTANTIALLY CONFORMS TO THE CONDITIONALLY APPROVED TENTATIVE MAP.

DATE \_\_\_\_\_

\_\_\_\_\_  
JOHN KARL JEFFRIES L.S. 7820  
EXPIRES 12/31/2021



RECORDER'S STATEMENT:

ACCEPTED FOR RECORD AND FILED IN THE OFFICE OF THE RECORDER OF PLACER COUNTY, STATE OF CALIFORNIA, AT THE REQUEST OF OLD REPUBLIC TITLE COMPANY, AT \_\_\_\_\_ MINUTES AFTER \_\_\_\_\_ O'CLOCK \_\_M. ON THE \_\_\_\_\_ DAY OF \_\_\_\_\_, 2020 AND RECORDED IN BOOK \_\_\_\_\_ OF MAPS, AT PAGE \_\_\_\_\_.

DOCUMENT NO. \_\_\_\_\_

\_\_\_\_\_  
COUNTY RECORDER OF PLACER COUNTY

FEE \_\_\_\_\_

BY: \_\_\_\_\_  
DEPUTY

LEGEND:

- P.U.E. PUBLIC UTILITY EASEMENT
- P.E. PEDESTRIAN EASEMENT
- (R) RADIAL BEARING
- M.A.E. MAINTENANCE ACCESS EASEMENT
- o DIMENSION POINT
- ⌘ SET 3/4" IRON PIPE W/ BRASS DISC STAMPED "LS 7820"
- ⊙ FOUND 2" BRASS DISC STAMPED "LS 7820" IN STANDARD CITY OF ROSEVILLE MONUMENT WELL
- ⊙ FOUND COPPERWELD SURVEY MONUMENT WITH CENTER PUNCH IN MONUMENT WELL STAMPED "LS 7944" PER (2)
- ⌘ FOUND 3/4" IRON PIPE WITH PLASTIC CAP STAMPED "LS 7944" PER (2)
- ⌘ FOUND 3/4" IRON PIPE WITH BRASS DISK STAMPED "LS 7820" PER (1)
- (1) RECORD PER DD BM 26
- (2) RECORD PER EE BM 6
- (3) RECORD PER EE BM 43
- (4) RECORD PER EE BM 96
- (5) RECORD PER 2020-0020085

NOTES:

1. THE TOTAL AREA OF THIS LARGE LOT SUBDIVISION IS 22.059 ACRES MORE OR LESS AND CONSISTS OF 4 LOTS.
2. A PRELIMINARY SOILS REPORT WAS PREPARED BY YOUNGDAHL CONSULTING GROUP, PROJECT NO. E133171.000 DATED SEPTEMBER 10, 2013. A COPY OF THIS REPORT IS AVAILABLE FOR PUBLIC INSPECTION AT THE CITY OF ROSEVILLE ENGINEERING DEPARTMENT.

BASIS OF BEARINGS:

THE BASIS OF BEARINGS FOR THIS SURVEY IS IDENTICAL TO THE CENTERLINE OF GOSSAMER STREET AS SHOWN ON EE BM 43, BEING N 89°36'24" W AND ESTABLISHED BY MONUMENTS FOUND AS SHOWN HEREON.

A Final Map of

SIERRA VISTA VILLAGES FD-24 AND JM-20

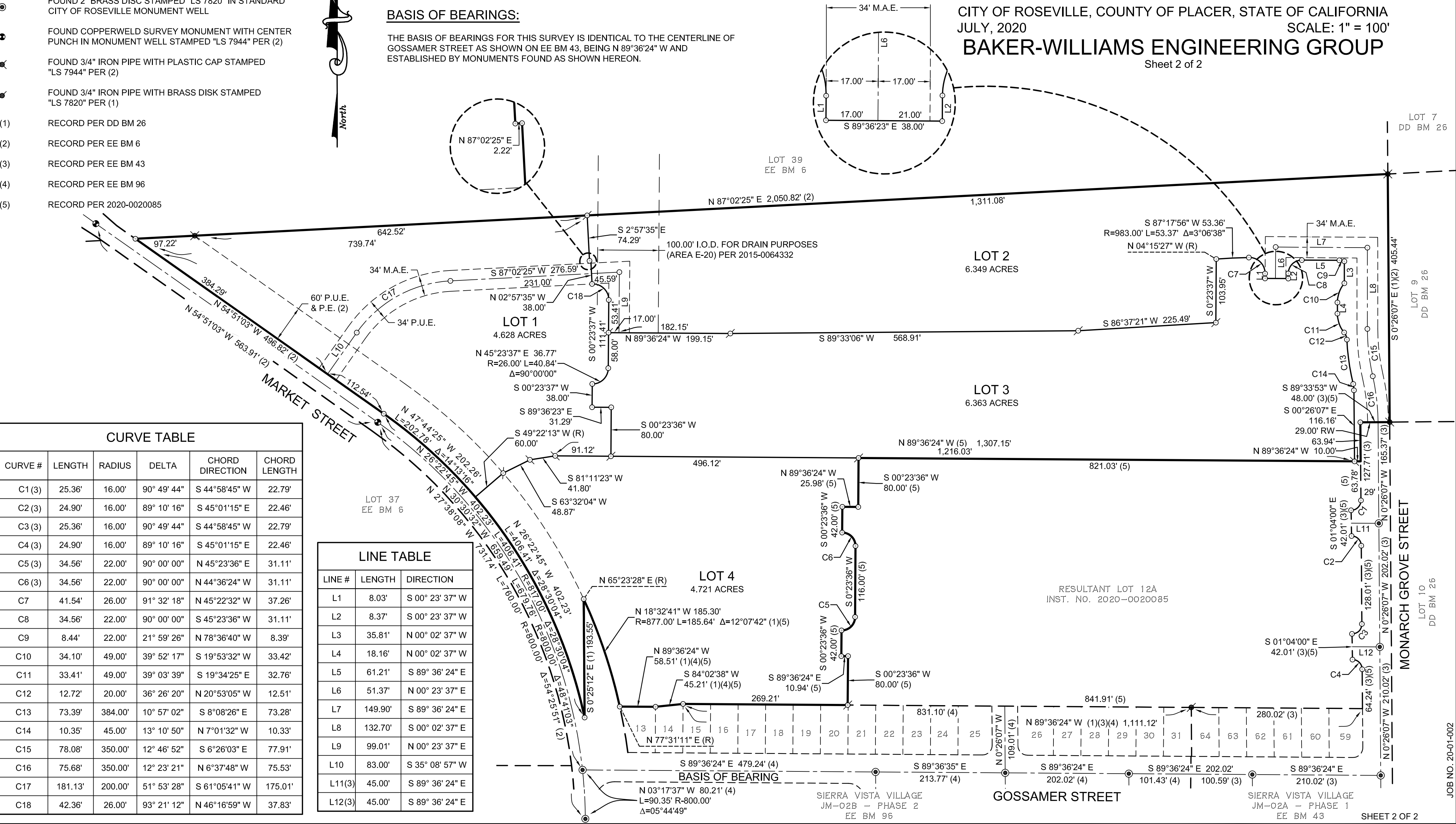
Large Lot Subdivision No.: PL17-0204

ALL OF LOT 38 AS SHOWN ON "FINAL MAP OF SIERRA VISTA - FEDERICO LARGE LOT SUBDIVISION" FILED IN BOOK EE OF MAPS, AT PAGE 6 AND ALL OF RESULTANT LOT 11A AS SHOWN ON 2020-0020085, O.R.P.C. LOCATED IN SECTION 36, T. 11 N., R. 5 E., M.D.M.

CITY OF ROSEVILLE, COUNTY OF PLACER, STATE OF CALIFORNIA  
JULY, 2020  
BAKER-WILLIAMS ENGINEERING GROUP  
Sheet 2 of 2

| CURVE TABLE |         |         |             |                 |              |
|-------------|---------|---------|-------------|-----------------|--------------|
| CURVE #     | LENGTH  | RADIUS  | DELTA       | CHORD DIRECTION | CHORD LENGTH |
| C1 (3)      | 25.36'  | 16.00'  | 90° 49' 44" | S 44°58'45" W   | 22.79'       |
| C2 (3)      | 24.90'  | 16.00'  | 89° 10' 16" | S 45°01'15" E   | 22.46'       |
| C3 (3)      | 25.36'  | 16.00'  | 90° 49' 44" | S 44°58'45" W   | 22.79'       |
| C4 (3)      | 24.90'  | 16.00'  | 89° 10' 16" | S 45°01'15" E   | 22.46'       |
| C5 (3)      | 34.56'  | 22.00'  | 90° 00' 00" | N 45°23'36" E   | 31.11'       |
| C6 (3)      | 34.56'  | 22.00'  | 90° 00' 00" | N 44°36'24" W   | 31.11'       |
| C7          | 41.54'  | 26.00'  | 91° 32' 18" | N 45°22'32" W   | 37.26'       |
| C8          | 34.56'  | 22.00'  | 90° 00' 00" | S 45°23'36" W   | 31.11'       |
| C9          | 8.44'   | 22.00'  | 21° 59' 26" | N 78°36'40" W   | 8.39'        |
| C10         | 34.10'  | 49.00'  | 39° 52' 17" | S 19°53'32" W   | 33.42'       |
| C11         | 33.41'  | 49.00'  | 39° 03' 39" | S 19°03'25" E   | 32.76'       |
| C12         | 12.72'  | 20.00'  | 36° 26' 20" | N 20°53'05" W   | 12.51'       |
| C13         | 73.39'  | 384.00' | 10° 57' 02" | S 8°08'26" E    | 73.28'       |
| C14         | 10.35'  | 45.00'  | 13° 10' 50" | N 7°01'32" W    | 10.33'       |
| C15         | 78.08'  | 350.00' | 12° 46' 52" | S 6°26'03" E    | 77.91'       |
| C16         | 75.68'  | 350.00' | 12° 23' 21" | N 6°37'48" W    | 75.53'       |
| C17         | 181.13' | 200.00' | 51° 53' 28" | S 61°05'41" W   | 175.01'      |
| C18         | 42.36'  | 26.00'  | 93° 21' 12" | N 46°16'59" W   | 37.83'       |

| LINE TABLE |         |                 |
|------------|---------|-----------------|
| LINE #     | LENGTH  | DIRECTION       |
| L1         | 8.03'   | S 00° 23' 37" W |
| L2         | 8.37'   | S 00° 23' 37" W |
| L3         | 35.81'  | N 00° 02' 37" W |
| L4         | 18.16'  | N 00° 02' 37" W |
| L5         | 61.21'  | S 89° 36' 24" E |
| L6         | 51.37'  | N 00° 23' 37" E |
| L7         | 149.90' | S 89° 36' 24" E |
| L8         | 132.70' | S 00° 02' 37" E |
| L9         | 99.01'  | N 00° 23' 37" E |
| L10        | 83.00'  | S 35° 08' 57" W |
| L11(3)     | 45.00'  | S 89° 36' 24" E |
| L12(3)     | 45.00'  | S 89° 36' 24" E |



JOB NO. 20-01-002



## COUNCIL COMMUNICATION

CC #: 1001  
File #: 0102-10

**Title:** Resolution - Chef Q  
**Contact:** Katrina Six 916-774-5267 kmsix@roseville.ca.us

Meeting Date: 9/16/2020  
Item #: 7.27.

### RECOMMENDATION TO COUNCIL

Commend Chef Q for serving his country and serving his community by opening Q1227 Restaurant and serving modern comfort cuisine.

### BACKGROUND

Not applicable.

### FISCAL IMPACT

Not applicable.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Ceremonial documents meet the above criteria and are not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Katrina Six, Deputy City Clerk

Sonia Orozco, City Clerk



A handwritten signature in blue ink, consisting of several overlapping loops and a final horizontal stroke.

---

Dominick Casey, City Manager

**ATTACHMENTS:**

Description

Resolution - Chef Q



# CITY OF ROSEVILLE



OF

## COMMENDATION

**WHEREAS,** Chef Q began his love for cooking in his mama's kitchen when he was just a boy, and has since combined his love of the farm to fork industry with the comfort food of his childhood to bring his southern roots to the plate; and

**WHEREAS,** Chef Q began his culinary career 25 years ago with cooking experience in the Navy, cooking in both private and corporate restaurants, cooking for Former President Bill Clinton, Comedian Steve Harvey, and other TV celebrities, and having the privilege to be a part of the Echo & Rig Steakhouse launching team; and

**WHEREAS,** in October of 2019, Chef Q was given the opportunity to launch his own restaurant and design an eating place that reflected his southern roots while embracing his love of California fresh ingredients; and

**WHEREAS,** Chef Q opened Q1227 Restaurant on December 27, 2019, bringing modern comfort cuisine and a comfortable fine dining establishment to Roseville; and

**NOW, THEREFORE, I, JOHN B. ALLARD II, MAYOR OF THE CITY OF ROSEVILLE, CALIFORNIA,** do hereby commend **CHEF Q** for serving his country and serving his community.

**SIGNED** this 16<sup>th</sup> day of September, 2020.

\_\_\_\_\_  
**JOHN B. ALLARD II, MAYOR**

**ATTEST:**

\_\_\_\_\_  
**SONIA OROZCO, CITY CLERK**  
**CITY OF ROSEVILLE, CALIFORNIA**





## COUNCIL COMMUNICATION

CC #: 1002  
File #: 0102-10

**Title:** Resolution - Guy's For Lunch and Michelle Lehn  
**Contact:** Katrina Six 916-774-5267 kmsix@roseville.ca.us

Meeting Date: 9/16/2020  
Item #: 7.28.

### RECOMMENDATION TO COUNCIL

Commend Michelle Lehn for her contribution to the community for sewing and donating over 2,000 masks.

### BACKGROUND

Not applicable.

### FISCAL IMPACT

Not applicable.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Ceremonial documents meet the above criteria and are not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Katrina Six, Deputy City Clerk

Sonia Orozco, City Clerk



---

Dominick Casey, City Manager

**ATTACHMENTS:**

Description

Michelle Lehn



# CITY OF ROSEVILLE



OF

## COMMENDATION

**WHEREAS,** Roseville resident Michelle Lehn, was inspired to make masks for COVID-19 protection; and

**WHEREAS,** Michelle made masks for friends and coworkers, and then seized an opportunity to help her community with the support of Guy's for Lunch; and

**WHEREAS,** Michelle has made over 2,000 masks for the Guy's for Lunch counter with a sign that says, "Free face masks from a Good Samaritan; and

**NOW, THEREFORE, I, JOHN B. ALLARD II, MAYOR OF THE CITY OF ROSEVILLE, CALIFORNIA,** do hereby commend **GUY'S FOR LUNCH FOR THEIR SUPPORT OF MICHELLE LEHN** and her contribution to the community.

**SIGNED** this 16<sup>th</sup> day of September, 2020.

A handwritten signature in blue ink, appearing to read "John B. Allard II", written over a horizontal line.

**JOHN B. ALLARD II, MAYOR**

**ATTEST:**

A handwritten signature in blue ink, appearing to read "Sonia Orozco", written over a horizontal line.

**SONIA OROZCO, CITY CLERK  
CITY OF ROSEVILLE, CALIFORNIA**





## COUNCIL COMMUNICATION

**CC #: 1006**  
**File #: 0102-06**

**Title:** Proclamation - World Duchenne Awareness Day  
**Contact:** Katrina Six 916-774-5267 kmsix@roseville.ca.us

**Meeting Date: 9/16/2020**  
**Item #: 7.29.**

### RECOMMENDATION TO COUNCIL

Proclaim September 7, 2020 World Duchenne Awareness Day and encourage the residents of Roseville to increase their understanding and awareness of Duchenne Muscular Dystrophy.

### BACKGROUND

Not applicable.

### FISCAL IMPACT

Not applicable.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. Ceremonial documents meet the above criteria and are not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Katrina Six, Deputy City Clerk

Sonia Orozco, City Clerk



---

Dominick Casey, City Manager

**ATTACHMENTS:**

Description

World Duchenne Awareness

# CITY OF ROSEVILLE



## World Duchenne Awareness Day September 7, 2020

**WHEREAS**, Duchenne muscular dystrophy (Duchenne) is the most common fatal genetic disorder diagnosed in childhood, affecting approximately one in every 5,000 live male births each year; and

**WHEREAS**, the Duchenne gene, found on the X-chromosome, primarily affects boys occurring across all races and cultures; and

**WHEREAS**, Duchenne results in progressive loss of strength and is caused by a mutation in the gene that encodes for dystrophin, and with dystrophin being absent, the muscle cells are easily damaged and progressive muscle weakness leads to serious medical problems, particularly issues relating to the heart and lungs; and

**WHEREAS**, Duchenne can be passed from parent to child, but approximately 35% of cases occur because of a random spontaneous mutation which can affect anyone, and although there are medical treatments that may help slow its progression, there is currently no cure for Duchenne; and

**WHEREAS**, Duchenne is a rare disease one of the greatest tools in the fight to end Duchenne is raising awareness; and

**WHEREAS**, on September 7, 2020 the sixth World Duchenne Awareness Day will take place and Duchenne organizations around the world will raise awareness for all people living with Duchenne muscular dystrophy; and

**NOW, THEREFORE, I, JOHN B. ALLARD II, MAYOR OF THE CITY OF ROSEVILLE, CALIFORNIA**, do hereby proclaim **September 7 2020** as **WORLD DUCHENNE AWARENESS DAY** and encourage residents to increase their understanding and awareness of Duchenne Muscular Dystrophy.

**SIGNED** this 16<sup>th</sup> day of September, 2020.

---

**JOHN B. ALLARD II, MAYOR**

**ATTEST:**

---

**SONIA OROZCO, CITY CLERK  
CITY OF ROSEVILLE, CALIFORNIA**



## COUNCIL COMMUNICATION

**CC #: 0995**

**File #: 0900-04-02 & 0400-06-02**

**Title:** Roseville Parkway Extension - Adoption of Initial Study/Mitigated Negative Declaration, Approval of the Mitigation Monitoring and Reporting Program, and Project Approval

**Contact:** Daniel Lierly 916-746-1300 delierly@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 8.1.**

### RECOMMENDATION TO COUNCIL

Staff recommends that City Council:

1. Adopt the attached Resolution Adopting the Initial Study/Mitigated Negative Declaration (IS/MND) and Mitigation Monitoring and Reporting Program (MMRP) for the Roseville Parkway Extension; and
2. Approve the project as described therein.

### BACKGROUND

Roseville Parkway is a multi-lane arterial roadway providing a connection from Northwest Roseville to East Roseville and Granite Bay. The roadway is continuous besides a 0.75 mile segment between Foothills Blvd and Washington Blvd. At their December 19th, 2019 meeting, City Council approved a Professional Design Service agreement with Mark Thomas to complete the design and environmental document for the project. The project scope includes the construction of:

- Four vehicle travel lanes (two in each direction);
- Curb, gutter and sidewalk;
- On-street bike lanes;
- Separated multi-use path;
- Street lights;
- Street landscaping; and
- The construction of an overpass spanning the Union Pacific Railroad tracks and Industrial Avenue.

**Public Outreach:** The IS/MND was made available for a 20-day public review and comment period from July 24 through August 13, 2020. The environmental document availability was advertised:



- Through a letter mailing to surrounding properties;
- Via email to those that signed up for email notices;
- On the City's web site; and
- Via a legal notice published in the July 24, 2020 edition of the Roseville Press Tribune.

These notices advised of the IS/MND availability and public comment period. Hard copies of the environmental document were made available at the Permit Center front counter and electronic copies were available via the City's web site.

A single comment letter dated July 25, 2020, requested a street name spelling correction. No further response is required.

If the project is approved, staff and the consultant anticipate completing the project design in the summer of 2021 and submitting final plans for Council approval shortly thereafter. A request for contract award and the beginning of construction will follow in the fall of 2021.

## FISCAL IMPACT

The Roseville Parkway Extension project is estimated to cost \$24 million and will be funded with Traffic Mitigation Fee funds. No General Fund resources will be used for the project.

## ENVIRONMENTAL REVIEW

**Initial Study/Mitigated Negative Declaration (IS/MND):** In accordance with CEQA, an Initial Study was prepared for the proposed project (Exhibit A). The Initial Study conclusion is that all potential impacts can be mitigated to a less-than-significant level. As such, a Mitigated Negative Declaration is proposed to satisfy CEQA requirements.

**Environmental Impact Summary:** Impacts are primarily short-term construction related. Potentially significant impacts were identified for the following environmental issue areas:

- Air Quality
- Biological Resources
- Cultural and Paleontological Resources

Mitigation is standard and includes the application of several construction best management practices as well as 10 recommended mitigation measures. All potential impacts can be mitigated to less than significance with application of the recommended measures. The IS conclusion is that with implementation of all mitigation measures identified in the IS/MND, all potential impacts would be reduced to less than significant and an MND is proposed to satisfy CEQA requirements.

Consistent with CEQA Guidelines Section 15097, a Mitigation Monitoring and Reporting Plan (MMRP) has been prepared to assist with the tracking and implementation of required mitigation measures (Exhibit B).

The Initial Study conclusion is that with implementation of all mitigation measures identified in the

IS/MND and MMRP, all potential impacts would be reduced to less than significant and an MND is proposed to satisfy CEQA requirements. As such staff recommends adoption of the IS/MND and approval of the MMRP to satisfy the project's CEQA requirements.

Respectfully Submitted,

Daniel Lierly, Assistant Engineer

Jason Shykowski, Public Works Director



---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Resolution 20-372

Exhibit A - Roseville Parkway Extension Initial Study

Exhibit B - Roseville Parkway Extension MMRP

RESOLUTION NO. 20-372

ADOPTING THE INITIAL STUDY/MITIGATED NEGATIVE DECLARATION AND  
APPROVING THE MITIGATION MONITORING AND REPORTING PROGRAM FOR  
THE ROSEVILLE PARKWAY EXTENSION PROJECT

WHEREAS, the Roseville Parkway Extension Project is a multi-lane arterial roadway providing a connection from northwest Roseville to East Roseville and Granite Bay; and

WHEREAS, in accordance with California Environmental Quality Act (CEQA), an Initial Study/Mitigated Negative Declaration (IS/MND) was prepared for the proposed project; and

WHEREAS, the IS/MND was made available for a 20 day public review and comment period from July 24 through August 13, 2020; and

WHEREAS, consistent with CEQA Guidelines Section 15097, a Mitigation Monitoring and Reporting Plan (MMRP) has been prepared to assist with the tracking and implementation of required mitigation measures; and

WHEREAS, the Initial Study conclusion is that with implementation of all mitigation measures identified in the IS/MND and MMRP, all potential impacts would be reduced to less than significant and an IS/MND is proposed to satisfy CEQA requirements; and

WHEREAS, staff recommends adoption of the IS/MND and approval of the MMRP to satisfy the project's CEQA requirements.

NOW, THEREFORE, BE IT RESOLVED by the City Council of the City of Roseville that it finds on the basis of the Initial Study/Mitigated Negative Declaration, and the whole record, including public comments and other documents, that if the Roseville Parkway Extension Project is conditioned with mitigation measures as proposed, there is no substantial evidence that the Project will have a significant effect on the environment; the Mitigated Negative Declaration reflects the independent judgment and analysis of the City of Roseville, and the Mitigated Negative Declaration for the Project is hereby adopted.

BE IT FURTHER RESOLVED that the Mitigation Monitoring and Reporting Program for the Roseville Parkway Extension Project is hereby approved.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_, by the following vote on roll call:

AYES            COUNCILMEMBERS:

NOES           COUNCILMEMBERS:

ABSENT        COUNCILMEMBERS:

---

MAYOR

ATTEST:

---

City Clerk

# Roseville Parkway Extension Project Initial Study/ Mitigated Negative Declaration



311 Vernon Street  
Roseville, California 95678  
[roseville.ca.us](http://roseville.ca.us)









**Development Services Department**  
311 Vernon Street  
Roseville, California 95678-2649  
(916) 774-5285

**NOTICE OF INTENT  
TO ADOPT A MITIGATED NEGATIVE DECLARATION**

TO: Interested Parties  
FROM: City of Roseville  
DATE: July 20, 2020

**REGARDING: Roseville Parkway Extension Project Initial Study/Mitigated Negative Declaration**

---

Public Notice is hereby given that an Initial Study/Mitigated Negative Declaration (environmental report) for the Roseville Parkway Extension Project is available for public review.

**Project Location and Description:** The City of Roseville is proposing to construct the Roseville Parkway Extension Project, which would extend Roseville Parkway by approximately 0.75 mile, from its current terminus at Washington Boulevard westerly to Foothills Boulevard.

The project consists of the following main components.

- Approximately 0.75 mile of new arterial road between Washington Boulevard on the east and Foothills Boulevard on the west.
- A new overpass of the Union Pacific Railroad (UPRR) tracks and Industrial Avenue.
- Intersection improvements at the Roseville Parkway/Washington Boulevard and Roseville Parkway/Foothills Boulevard intersections.
- Minor improvements to the east side of the existing roundabout located west of the Roseville Parkway/Foothills Boulevard intersection.
- Bicycle and pedestrian improvements, including an 8-foot wide sidewalk on the north side of Roseville Parkway and a 10-foot wide multi use path on the south.

**Document Review and Availability:** The public comment period will extend 20 days from July 24 to August 13, 2020. The document can also be reviewed and/or downloaded from the City of Roseville website at the following link: <http://www.roseville.ca.us/ParkwayExtension>.

Copies of the Initial Study/Mitigated Negative Declaration are available for public review, by appointment, at the City of Roseville Permit Center, 311 Vernon Street, Roseville, CA 95678. To schedule an appointment online: [roseville.ca.us/DS-appointment](http://www.roseville.ca.us/DS-appointment) or call (916) 774-5285.

Written comments on the adequacy of the Mitigated Negative Declaration must be received no later than 5:00 pm on August 13, 2020. During the public review period written comments may be provided to:

Terri Shirhall, Environmental Coordinator (tshirhall@roseville.ca.us)  
Development Services Department  
City of Roseville  
311 Vernon Street  
Roseville, CA 95678  
(916) 774-5536





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## Acronyms and Abbreviations

|                   |                                                       |
|-------------------|-------------------------------------------------------|
| ADMP              | asbestos dust mitigation plan                         |
| AB                | Assembly Bill                                         |
| ADT               | average daily traffic                                 |
| BP                | before present                                        |
| BMP               | best management practice                              |
| CAAQS             | California ambient air quality standards              |
| Cal-OSHA          | California Division of Occupational Safety and Health |
| Caltrans          | California Department of Transportation               |
| CARB              | California Air Resources Board                        |
| CBC               | California Building Code                              |
| CESA              | California Endangered Species Act                     |
| CEQA              | California Environmental Quality Act                  |
| CH <sub>4</sub>   | methane                                               |
| CNDDDB            | California Natural Diversity Database                 |
| CNPS              | California Native Plant Society                       |
| CO                | carbon monoxide                                       |
| CO <sub>2</sub>   | carbon dioxide                                        |
| CO <sub>2</sub> e | carbon dioxide equivalent                             |
| CRHR              | California Register of Historical Resources           |
| CNEL              | community noise equivalent level                      |
| cy                | cubic yards                                           |
| dB                | decibel                                               |
| DPM               | diesel particulate matter                             |
| DTSC              | California Department of Toxic Substances Control     |
| ESA               | Endangered Species Act                                |
| EIR               | Environmental Impact Report                           |
| EO                | Executive Order                                       |
| Farmland          | Farmland of Statewide Importance                      |
| FHWA              | Federal Highway Administration                        |
| GHG               | greenhouse gas                                        |
| HAER              | Historic American Engineering Record                  |

|                    |                                                                   |
|--------------------|-------------------------------------------------------------------|
| HCM                | Highway Capacity Manual                                           |
| HFC                | hydrofluorocarbons                                                |
| in/sec             | inches per second                                                 |
| IS/MND             | initial study/mitigated negative declaration                      |
| L <sub>dn</sub>    | day-night sound level                                             |
| L <sub>eq</sub>    | equivalent sound level                                            |
| L <sub>min</sub>   | minimum sound level                                               |
| L <sub>max</sub>   | maximum sound level                                               |
| LOS                | level of service                                                  |
| Madrone            | Madrone Ecological Consulting, LLC                                |
| MBTA               | Migratory Bird Treaty Act                                         |
| MRF                | Materials Recovery Facility                                       |
| MLD                | Most Likely Descendant                                            |
| MSAT               | mobile source air toxic                                           |
| MTP/SCS            | Metropolitan Transportation Plan/Sustainable Communities Strategy |
| N <sub>2</sub> O   | nitrous oxide                                                     |
| NAAQS              | national ambient air quality standards                            |
| NAHC               | Native American Heritage Commission                               |
| NOA                | naturally occurring asbestos                                      |
| NO <sub>2</sub>    | nitrogen dioxide                                                  |
| NO <sub>x</sub>    | nitrogen oxides                                                   |
| NPDES              | National Pollutant Discharge Elimination System                   |
| NSR                | new source review                                                 |
| Pb                 | lead                                                              |
| PCAPCD             | Placer County Air Pollution Control District                      |
| PCTPA              | Placer County Transportation Planning Agency                      |
| PFC                | perfluorocarbon                                                   |
| PPV                | peak particle velocity                                            |
| ROG                | reactive organic gases                                            |
| Roseville Electric | Roseville Electric Utility                                        |
| proposed project   | Roseville Parkway Extension Project                               |
| RWQCB              | Regional Water Quality Control Board                              |
| SACOG              | Sacramento Council of Governments                                 |

|                 |                                                                            |
|-----------------|----------------------------------------------------------------------------|
| SF <sub>6</sub> | sulfur hexafluoride                                                        |
| SFNA            | Sacramento Federal Nonattainment Area                                      |
| SMAQMD          | Sacramento Metropolitan Air Quality Management District's                  |
| Ozone Plan      | Sacramento Regional 8-Hour Attainment and Reasonable Further Progress Plan |
| SAFE            | Safer Affordable Fuel-Efficient                                            |
| SB              | Senate Bill                                                                |
| SO <sub>2</sub> | sulfur dioxide                                                             |
| SSBMI           | Shingle Springs Band of Miwok Indians                                      |
| SVAB            | Sacramento Valley Air Basin                                                |
| SWPPP           | stormwater pollution prevention plan                                       |
| SWRCB           | State Water Resources Control Board                                        |
| TAC             | toxic air contaminants                                                     |
| UAIC            | United Auburn Indian Community of the Auburn Rancheria                     |
| UPRR            | Union Pacific Railroad                                                     |
| USEPA           | U.S. Environmental Protection Agency                                       |
| USGS            | U.S. Geological Survey                                                     |
| VMT             | vehicle miles traveled                                                     |





## **1.1 Introduction**

This document is an Initial Study/Mitigated Negative Declaration (IS/MND) that addresses the potential environmental impacts of the Roseville Parkway Extension Project (proposed project) proposed by the City of Roseville (City). The proposed project involves building an extension of the Roseville Parkway to provide a connection to Foothills Boulevard (Figure 1-1). This would involve construction of an overpass at the Union Pacific Railroad (UPRR) tracks and Industrial Avenue.

The project site is located between Foothills Boulevard on the west and Washington Boulevard on the east in north Roseville (Figure 1-2). The site is within the North Industrial area and is designated Industrial and Light Industrial in the *City of Roseville General Plan 2035*. The site is bordered to the east by the *North Central Roseville Specific Plan* area. The North Industrial area is bordered to the south by the *Northwest Roseville Specific Plan* area, and to the west by the *North Roseville Specific Plan* area. The northern border of the North Industrial area is also the border of the Roseville city limits.

The California Environmental Quality Act (CEQA) and Section 15004 of the State CEQA Guidelines encourage early completion of environmental documentation to enable environmental considerations to influence project design. This IS/MND is a public information document that discloses the proposed project's environmental effects and informs decision makers of the project's compliance with CEQA and the State CEQA Guidelines.

This document describes the proposed project's goals and background, project components, the existing environmental setting (i.e., conditions before implementation of the project), and the potential environmental impacts of the proposed project. Chapter 2, *Project Description*, describes the proposed project and the best management practice (BMP) measures that the City has incorporated into the proposed project to avoid and minimize potential effects. Chapter 3, *Environmental Checklist*, identifies the anticipated environmental impacts by topic and provides mitigation measures that would be implemented to avoid significant impacts.

## **1.2 CEQA Lead Agency**

The City of Roseville—the lead agency for the proposed project under CEQA—determined that preparation of an IS/MND was necessary to evaluate the

environmental issues associated with the proposed project and satisfy the requirements of CEQA and the State CEQA Guidelines. The IS/MND is available for public review at the following location:

City of Roseville Permit Center  
311 Vernon Street  
Roseville, CA 95678

Due to COVID-19 concerns, the Permit Center is currently only open Tuesdays and Thursdays and the hours for in-person document review may be limited. Therefore, the public is encouraged to check the City's website first to ensure in-office accommodations are available: <https://www.roseville.ca.us>.

Alternatively, the IS/MND can also be viewed or downloaded from the City's website via the following link:

<https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8774505>

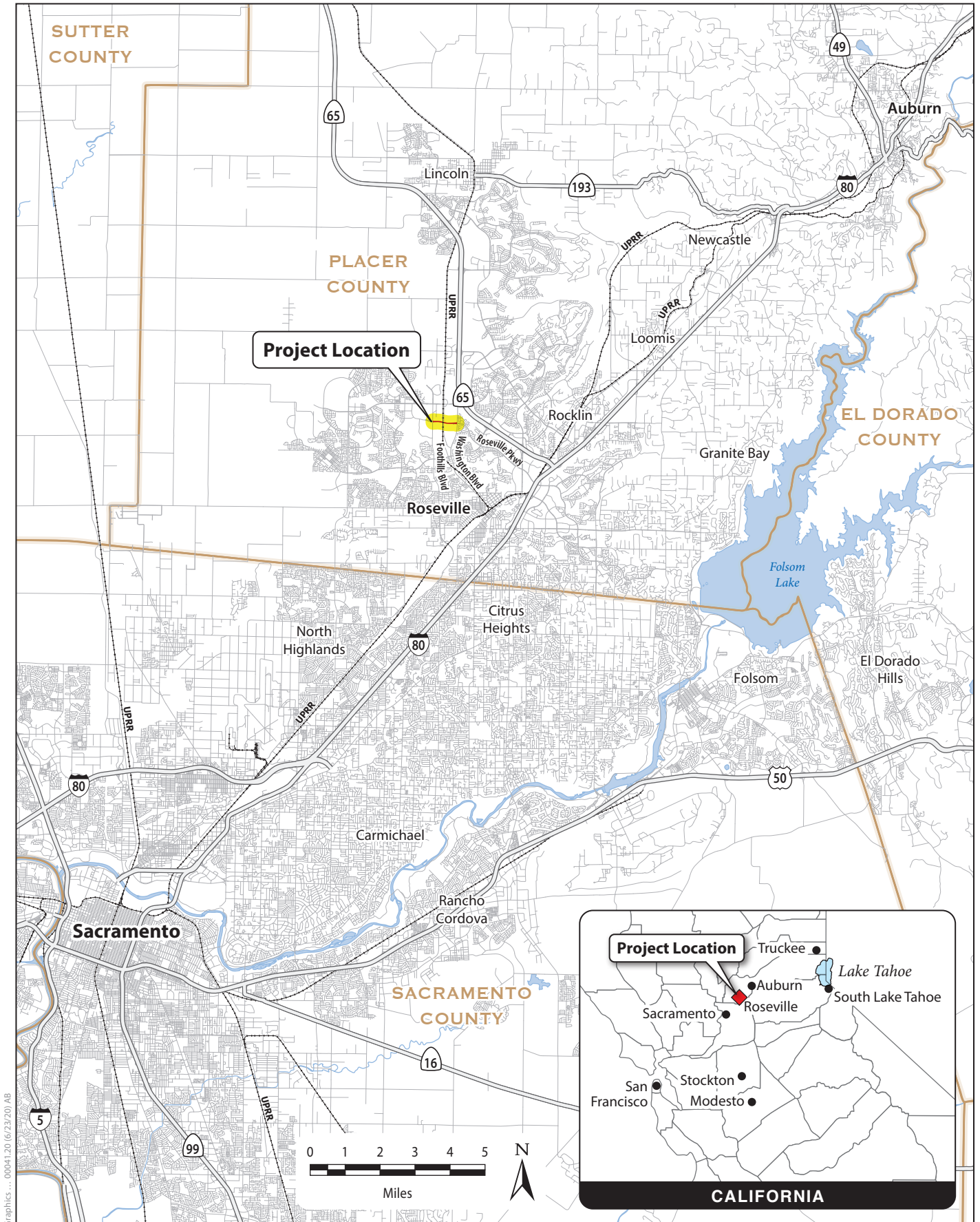
During the review period, written comments may be submitted to:

Ms. Terri Shirhall, Environmental Coordinator  
City of Roseville, Development Services Department  
311 Vernon Street  
Roseville, CA 95678

Or via email to: [tshirhall@roseville.ca.us](mailto:tshirhall@roseville.ca.us)

## 1.3 Summary

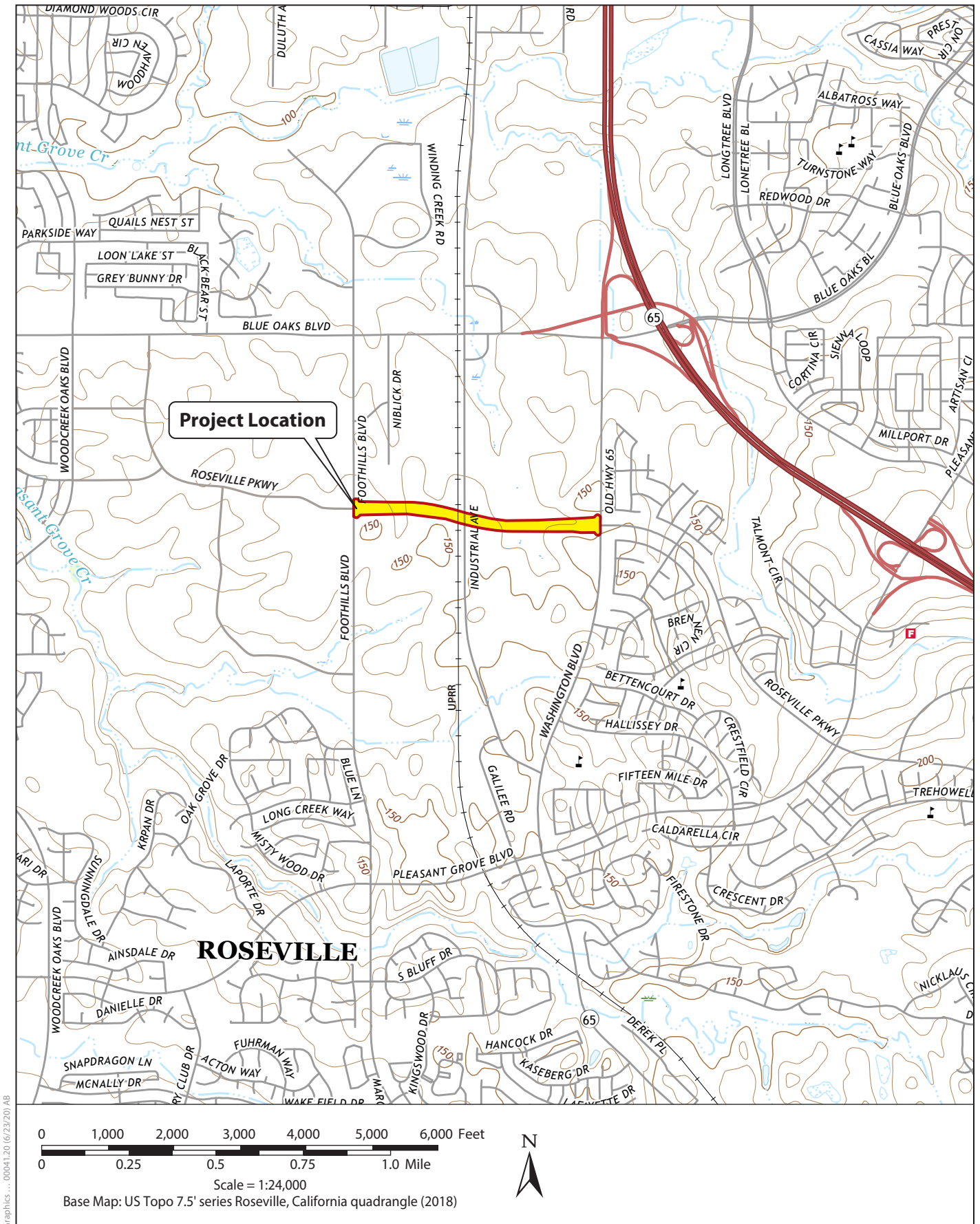
This IS/MND concludes that the proposed project would have potentially significant but mitigable impacts on air quality, biological resources, cultural resources, and paleontological resources, as described in Chapter 3. This IS/MND identifies a variety of mitigation measures that the City would implement to avoid or minimize potentially significant impacts on sensitive environmental resources. Implementation of these measures, in addition to project BMPs, would further reduce the potential impacts to a less-than-significant level.



**Figure 1-1**  
**Regional Location**







**Figure 1-2**  
**Project Location**



## **2.1 Project Background**

The City of Roseville (City) proposes to construct the Roseville Parkway Extension Project (proposed project) in the North Industrial Planning area of the city of Roseville, California (Figure 1-1). The proposed project would extend Roseville Parkway by approximately 0.75 mile from its current terminus at Washington Boulevard west to Foothills Boulevard. The project includes construction of an overpass of the Union Pacific Railroad (UPRR) tracks and Industrial Avenue, which run parallel to one another at the crossing location. The proposed project is identified in the City of Roseville Transportation System Capital Improvement Program and General Plan Transportation Element and associated California Environmental Quality Act (CEQA) documents.

## **2.2 Project Location and Existing Conditions**

The proposed project would be constructed on approximately 12 acres of primarily City-owned property in north Roseville, in western Placer County, California. The project site is located between Foothills Boulevard on the west, and Washington Boulevard on the east. Blue Oaks Boulevard lies approximately 0.5 mile north, and Pleasant Grove Boulevard lies approximately 1 mile south of the project alignment (Figure 1-2). The project area is zoned for general industrial and light industrial uses. The project site falls within the Roseville 7.5-minute U.S. Geological Survey topographic quadrangle map in Section 21 of Township 11 North, Range 6, Mount Diablo Base and Meridian.

The project site is currently dominated by annual grasslands. Industrial development borders the site along most of the south boundary, and along the eastern third of the north boundary. Industrial Avenue and the UPRR tracks transect the project site in a north/south direction.

The Highland Reserve residential development is located near the project's eastern end, along the east side of Washington Boulevard and along both sides of existing Roseville Parkway. Vencil Brown Park and Elementary School are located approximately 0.6 mile east of the project at the southwest corner of Roseville Parkway and Trestle Road. Buljan Middle School is approximately 0.5 mile south of the project, at the southeast corner of the Washington Boulevard/Hallissy Drive intersection.

## 2.3 Project Purpose, Need, and Objectives

The purpose of the proposed project is to improve existing and future traffic conditions consistent with the City's adopted plans; enhance access and safety for motorists, pedestrians, and cyclists; and meet railroad clearance requirements.

## 2.4 Proposed Project Components

The proposed project consists of the following main components.

- Approximately 0.75 mile of new arterial road between Washington Boulevard on the east and Foothills Boulevard on the west.
- A new overpass of the UPRR tracks and Industrial Avenue.
- Intersection improvements at the Roseville Parkway/Washington Boulevard and Roseville Parkway/Foothills Boulevard intersections.
- Minor improvements to the east side of the existing roundabout located west of the Roseville Parkway/Foothills Boulevard intersection. Improvements include modifications to the existing center median, curb and gutter on the east side of the roundabout and associated restriping to conform with these improvements.
- Bicycle and pedestrian improvements, including an 8-foot-wide sidewalk on the north side of Roseville Parkway and a 10-foot-wide multi-use path on the south.

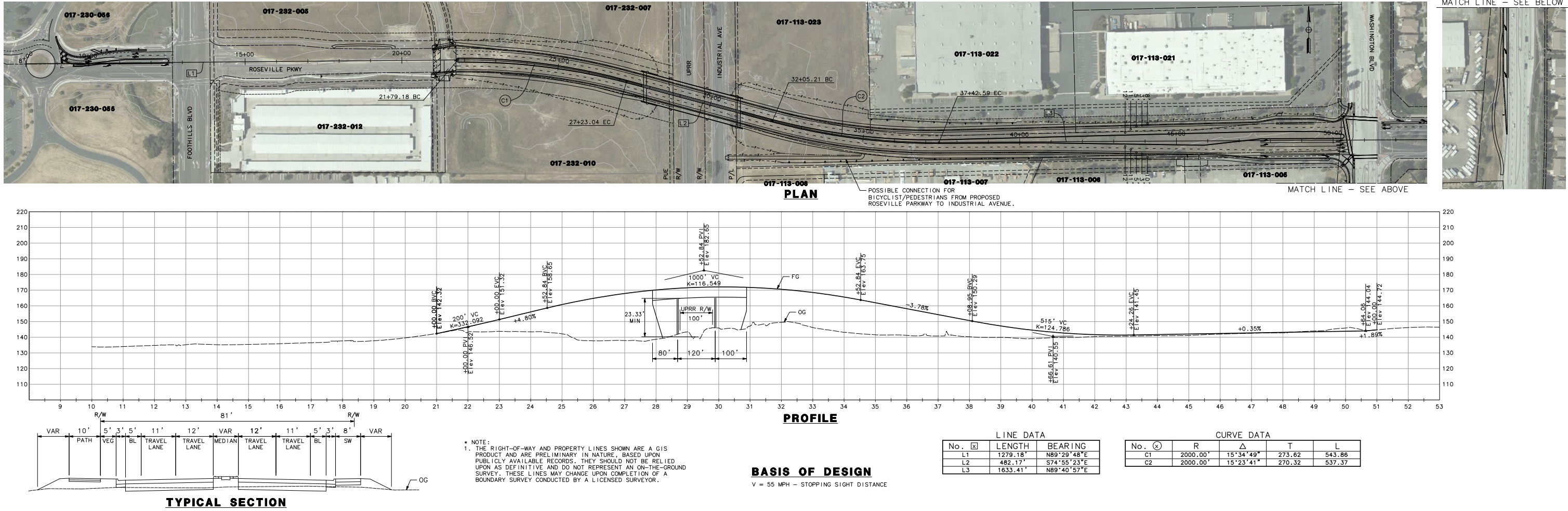
Each project component is described in greater detail below. Figure 2-1 provides an overview of these components.

### 2.4.1 Roseville Parkway Road Improvements and Right-of-Way Acquisitions

The project includes construction of approximately 0.75 mile of new arterial road, with four travel lanes, raised median with related utility relocations and storm drain improvements, between Washington Boulevard on the east and Foothills Boulevard on the west. Concrete curbs would define the new edge of roadway and separate vehicular traffic from pedestrians. The new road cross section would include two travel lanes in each direction (12 and 11 feet wide), followed by 5-foot-wide on-street Class II bike lanes. The travel lanes would be followed by a 3-foot curb and gutter backed by a 10-foot-wide sidewalk/Class I multi-use path on the south side of the new Roseville Parkway.

On the project's west end, the existing south side driveway providing access to the Roseville RV Storage business would remain. Opposite this driveway on the north side, a new driveway would be constructed as part of roadway improvements to connect with the future extension of Niblick Drive. A third driveway would be





Source: Mark Thomas, 2020.

Not to Scale

Figure 2-1  
Road Alignment



constructed near the project's east end on the roadway's south side to retain continued access to the existing Roseville RV Storage business.

Roadway construction would include low-impact development measures and underground storm drain improvements to convey stormwater runoff from the new roadway. The new storm drain system would tie into existing storm drains at the east and west ends of the project.

Most of the right-of-way and slope easement required for project construction is City owned. However, as shown in Figure 2-2, expansion of existing right-of-way and slope easement would be required to implement the project.

On the west end between Niblick Drive and UPRR, small areas of right-of-way acquisitions (between 10 and 30 feet wide) are required on both the north and south sides of the proposed road alignment. On the north and south sides of the western approach ramp, between 25 and 35 feet of additional fill slope easement is required. These acquisitions would not affect existing development.

On the east, between Industrial Avenue and Washington Boulevard, right-of-way acquisition (between 10 and 30 feet) would be required along the entire north side of the proposed alignment. On the north side of the eastern approach ramp, between 25 and 35 feet of additional fill slope easement would also be required. East side right-of-way acquisitions would affect existing parking lot landscape areas, but would not require removal of existing parking spaces.

## **2.4.2 Union Pacific Railroad and Industrial Avenue Overpass**

The UPRR and Industrial Avenue overpass would be comprised of engineered fill approach ramps on the east and west sides and a concrete bridge structure. All improvements would be located outside the existing railroad 100-foot right-of-way and the proposed design accommodates the potential future widening of Industrial Avenue from two to four lanes without need for future overpass modification. The bridge structure would be 300 feet long, supported by concrete abutments and wingwalls, and would provide a minimum of 23.5 feet of clearance between the existing UPRR rails and bridge soffit. The bridge concrete surface could include some type of relief or other aesthetic treatments consistent with a design theme to be developed (for example, to mimic the appearance of an old-style Works Progress Administration bridge or other theme). There is also opportunity for incorporating architectural enhancements, color, and features into the concrete facade to provide additional visual interest and character for the structure. The bridge would include a concrete barrier on the south side between the multi-use path and travel lanes and would maintain the same road cross section striping, lane widths, and pedestrian and bicycle facilities as the adjoining roadway.

## 2.4.3 Traffic Signal and Intersection Improvements

Proposed intersection improvements are shown on Figure 2-1 and described below.

### 2.4.3.1 Roseville Parkway/Foothills Boulevard

Improvements at this intersection would include the following.

**West Leg.** Elimination of the eastbound number 1 left turn lane to accommodate construction of a new raised center median. The resulting improvements would provide one eastbound left turn lane, two eastbound through lanes, one dedicated right turn lane, and an on-street striped Class II bike lane.

**East Leg.** Existing lane striping would remain unchanged; however, a new signal mast arm would be installed on the westbound approach. Existing striping includes two westbound left turn lanes, two through lanes, one dedicated right turn lane, and an on-street striped Class II bike lane.

**North Leg.** A southbound number 1 left turn lane currently exists but is closed and would be opened as part of the project. Therefore, the improvements would result in two southbound left turn lanes, two through lanes, one dedicated right turn lane, and an on-street striped Class II bike lane.

**South Leg.** Existing lane striping would remain unchanged. Existing striping includes two northbound left turn lanes, two through lanes, one dedicated right turn lane, and an on-street striped Class II bike lane.

### 2.4.3.2 Roundabout

West of the above intersection improvements, where Roseville Parkway transitions to the adjacent roundabout, the following improvements would be implemented. The center median would be realigned and reconstructed; the westbound north curb and gutter would be realigned and reconstructed to improve operations; the lanes entering and leaving the roundabout on the east side would be restriped to conform with the above changes.

### 2.4.3.3 Roseville Parkway/Washington Boulevard

Improvements at this intersection would include the following.

**West Leg.** Reconstruction of the north and south curb, gutter, and sidewalk west of Washington Boulevard to accommodate the widened roadway; construction of a new raised center median on the eastbound approach; construction of a new free right turn lane; and installation of new traffic signal/mast arms on the Roseville Parkway eastbound approach. These improvements would result in two eastbound left turn lanes, two through lanes, one free right turn lane, and a striped on-street Class II bike lane.









**East Leg.** Two westbound turn lanes and a free right turn lane are existing and would be retained as part of the project. In addition, two westbound through lanes exist but are currently closed and would be opened as part of the project. Two eastbound lanes and a receiving lane for the existing Washington Boulevard free right turn currently exist and would also be retained. Therefore, planned improvements would result in two southbound left turn lanes, two through lanes, one free right turn lane, and an on-street striped Class II bike lane.

**North Leg.** One southbound left turn lane, one through lane, and one dedicated right turn lane are existing (although the dedicated right turn lane is currently closed). The project would reconstruct the west curb, gutter, and sidewalk, extend and open the dedicated southbound right turn lane, and add a new through lane and left turn lane. Therefore, planned improvements would result in two southbound left turn lanes, two through lanes, one free right turn lane, and an on-street striped Class II bike lane.

**South Leg.** One left turn lane, two through lanes, one free right turn lane, and one on-street Class II bike lane currently exist on the northbound approach. One through lane, one receiving lane for the Roseville Parkway eastbound dedicated right turn, and one multi-use trail on the east side of Washington Boulevard currently exist in the southbound direction. The project would reconstruct the west curb, gutter, and sidewalk to accommodate a new Roseville Parkway eastbound free right turn lane and associated Washington Boulevard southbound merge lane. Therefore, planned improvements on the south leg would result in one northbound left turn lane, two northbound through lanes, one southbound free right turn lane, and on-street striped Class II bike lanes. In the south direction there would be two through lanes and one receiving merge lane to accommodate the Roseville Parkway westbound free right movement.

## 2.4.4 Pedestrian and Bicycle Improvements

Roseville Parkway road and bridge construction would include on-street 5-foot Class II Bike Lanes in each direction, a 10-foot multi-use path on the south side of the roadway, and an 8-foot sidewalk on the north side.

At the Roseville Parkway/Foothills Boulevard intersection the existing crosswalks would remain in their current location.

At the Roseville Parkway/Washington Boulevard intersection, new pedestrian crosswalks would be striped across the intersection's west, north, and south legs and the existing crosswalk on the intersection's east leg would remain. Therefore, planned improvements would result in pedestrian crosswalks on all legs of the intersection.

Finally, as shown on Figure 2-1, a new approximately 450-foot-long 10-foot-wide multi-use path could potentially be constructed to link Industrial Avenue with Roseville Parkway near the east end of the eastern approach ramp.

## 2.4.5 Utility Relocations

Existing overhead electric transmission and telecommunication lines located between Industrial Avenue and the UPRR would require relocation to avoid conflict with the proposed bridge. The high-voltage lines would be elevated using taller steel poles to span the new bridge, while the low-voltage lines would be routed underground along the same alignment in order to reduce the required height of the new steel poles. Existing underground lines within the proposed footprint of the eastern bridge embankment would require relocation. In addition, several telecommunication lines owned by Consolidated Communications, Verizon, and Level 3 also currently exist within the proposed road alignment and may require relocation. Any relocations would remain along the roadway alignment and be reinstalled at a depth of approximately 6 feet.

There are existing gas lines within the proposed road alignment that may require relocation based on current depth and allowable placement of fill. Any relocations would be buried to a depth of approximately 3 feet and would remain along the proposed roadway alignment within identified disturbance areas.

Storm drain, domestic water, reclaimed water, and sanitary sewer pipes also exist within the proposed road alignment. It is anticipated these pipes would remain in place and the manholes or valves adjusted to grade. Storm drain facilities constructed as part of the proposed road extension would tie into and discharge to existing storm drain facilities.

## 2.5 Construction Approach

Construction activities would take place between 7:00 a.m. and 7:00 p.m. Monday through Friday and between 8:00 a.m. and 8:00 p.m. Saturday and Sunday, in compliance with the City noise ordinance. The general construction phases, duration, and associated activities are identified in Table 2-1. It is anticipated that portions of Phases 2 and 3 would overlap and include concurrent construction activity.



**Table 2-1. Construction Phasing**

| <b>Phase</b>                                                        | <b>Activity</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
|---------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Phase 1 – Pre-construction activities, mobilization and site layout | <p>Establish control points, survey and field stake construction limits</p> <p>Install environmental sensitive fencing and employ pre-construction best management practices.</p> <p>Clear and establish staging areas and temporary construction access roads.</p> <p>Mobilize heavy equipment, receive and stockpile construction equipment and supplies. Should material become available, this may involve early placement and stockpiling of soil for approach ramp construction (i.e., prior to initiation of Phase 1 construction).</p> |
| Phase 2 – Grading and fill import                                   | <p>Clear, grub, and remove vegetation from work area.</p> <p>Conduct initial road grading activities, construct below-ground drainage facilities.</p> <p>Construct overpass approach ramps.</p> <p>Establish final road grades and fill slope limits.</p>                                                                                                                                                                                                                                                                                      |
| Phase 3 – Construct road and bridge improvements                    | <p>Construct curb, gutter, sidewalk, and erosion control drainage facilities; lay aggregate base and pave.</p> <p>Form bridge abutment headwalls and bridge deck and pour concrete.</p>                                                                                                                                                                                                                                                                                                                                                        |
| Phase 4 – Construction closure activities                           | <p>Clean up, demobilize, open roadway.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     |

## 2.5.1 Equipment and Material Staging Areas

Equipment and material staging would occur within designated locations within the project site. In addition, the contractor may choose to establish additional staging areas through agreement with private property owners on land adjacent to, or near the project site. Staging areas would accommodate fueling and maintenance areas for equipment, along with designated areas for material storage. Section 2.6, *Best Management Practices*, outlines the best management practices (BMP) that would be implemented to minimize potential construction-related water quality impacts and ensure compliance with requirements of the project's stormwater pollution prevention plan (SWPPP). Prior to initiation of the construction contract, soil from nearby construction projects may become available to the proposed project for use as approach ramp fill. Should this occur, the City may allow placement and stockpiling of acceptable material within the approach ramp footprints.

## 2.5.2 Earthwork and Grading

The project site topography is relatively flat and only minor grading would be required to prepare the site for construction. All grading would be conducted using conventional grading equipment. Initial earthwork would include clearing and grubbing to remove vegetation and prepare the ground for construction. Consistent with the City's grading ordinance, all grading would be limited to designated work areas. Finish grading would be achieved by motor graders (blades) and skip loaders.

The majority of earthwork would involve soil import and compaction to ready the road base and build up the overpass approach ramps. The project requires approximately 165,000 cubic yards of fill import, primarily for the overpass approach ramps. It's expected that excess soil from local development projects would provide a portion of this material. The balance would be obtained from available commercial supplies.

Construction BMPs specified in the SWPPP would be implemented during earthwork to control dust and protect nearby aquatic resources from siltation associated with stormwater runoff.

### **2.5.3 Construction Traffic Control**

The majority of project construction would not affect existing pedestrian and/or bicycle facilities or existing Foothill or Washington Boulevard vehicle travel lanes. However, during construction of intersection improvements, temporary lane shifting or temporary lane closures would be implemented as necessary with the assistance of construction signage and/or flaggers consistent with standard traffic handling practices. This could also include temporary detours for pedestrian and bicyclists routing through intersections during paving and restriping activities; however, controlled vehicle, pedestrian, and bicycle access through affected intersections would be maintained at all times.

### **2.5.4 Project Schedule**

Project construction is scheduled to begin in August 2021 and proceed according to the phases described in Table 2-1. The only exception is the possibility for early placement of construction approach ramp fill material, which could become available and be placed in 2020. Construction is expected to take approximately 10 to 12 months with a scheduled roadway opening date of Spring 2022 pending funding availability.

## **2.6 Best Management Practices**

Water quality measures (stormwater management measures and BMPs) would be implemented as part of the project to minimize potential water quality impacts during construction, operation, and maintenance. Key management measures consist of the following:

- Protect areas that provide important water quality benefits or are particularly susceptible to erosion or sediment loss.
- Minimize the potential for erosion by limiting land disturbances such as clearing, grading, and cut and fill.

- Limit disturbance of natural drainage features and vegetation.
- Prepare and implement an approved SWPPP.
- Ensure proper storage and disposal of toxic material.
- Incorporate pollution prevention into operation and maintenance procedures to reduce pollutant loadings to surface runoff.

## 2.6.1 Construction Best Management Practices

The City and its contractor will implement construction BMPs to avoid and minimize impacts on sensitive environmental resources. Implementation of the Erosion Control Plan, the National Pollutant Discharge Elimination System (NPDES) permit and associated SWPPP, and the BMPs as discussed below will minimize the potential for construction-related surface water pollution and ensure that water quality in off-site waterways and wetlands would not be compromised by erosion and sedimentation during construction.

**Temporary Fencing.** Where appropriate, the City's contractor will install construction barrier fencing (including sediment fencing and straw wattles) to prevent contaminants and debris from entering off-site surface waters. Before construction begins, the City or its contractor will identify the locations for the barrier fencing and mark those locations with stakes or flagging.

**SWPPP.** A SWPPP will be implemented as part of the NPDES Permit and a General Construction Activity Storm Water Permit to minimize the potential for sediments or contaminants to enter off-site waterways.

**Equipment.** The City will comply with applicable stormwater ordinances, stormwater management plans, and BMPs to prevent or minimize the potential release of equipment-related petroleum contaminants into adjacent surface waters and groundwater. Implementation of standard construction procedures and precautions for working with petroleum and construction chemicals will further ensure that the impacts related to chemical handling during project construction will be minor.

**Hazardous Materials.** The City will implement appropriate hazardous material management practices and other good housekeeping measures to reduce the potential for chemical spills or releases of contaminants, including any non-stormwater discharge to adjacent surface waters. Implementation of these measures will minimize the potential for surface and groundwater contamination.

**Erosion Control.** The project design will incorporate permanent erosion control elements to ensure that stormwater runoff does not cause soil erosion. Erosion and sediment control plans will comply with the City's Grading Ordinance, which requires reducing erosion and retaining sediment on-site.

**Toxic Materials Control and Spill Response Plan.** The following measures will be incorporated into the plan and implemented to avoid or minimize the risk of spills or discharges of toxic materials into adjacent surface waters.

- Prepare a hazardous material spill prevention, control, and countermeasure plan before construction and implement during construction.
- Prevent raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life from contaminating the soil or entering off-site surface waters.
- Prevent discharge of drilling mud and fluids into off-site surface waters by using appropriate containment, disposal, and storage methods.
- Prevent discharge of turbid water or sediment-laden runoff to off-site surface waters by using sediment filters, diverting the water to a settling tank, and/or implementing other erosion and water quality control BMPs.
- Clean up all spills immediately according to the spill prevention, control, and countermeasure plan.
- Provide areas located outside of sensitive environmental areas for staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants.
- Prevent hazardous materials from entering waters. The construction contractor will notify the City Fire Department if evidence of soil or groundwater contamination is encountered during construction activities. Construction in that area will be halted until the Fire Department has evaluated the find and remediation is completed, if necessary.

### 2.6.1.1 Traffic Management Plan

The City will require the construction contractor to implement a traffic management plan, including a construction schedule and plan to meet the City's notice procedures, before construction activities are initiated. This plan will identify general methods by which construction activities will be managed to minimize substantial delays to traffic as discussed below.

**Communication.** Develop and implement a public information campaign that describes the nature and duration of construction activities and when construction related temporary "controlled conditions" and/or travel delays are expected. Particular attention will be placed on special events (e.g., school graduations or Placer County Fairgrounds events) that may attract unfamiliar users to the City's roadway system. The City is currently doing public outreach and will continue the outreach program throughout project design and construction.

**Construction.** Describe and analyze the number of employees and their site parking areas, and the number of trucks, their routing and staging, and operating hours.

**Wayfinding.** Position and operate changeable message sign trailers at strategic locations and employ other temporary signage as necessary to advise motorists, pedestrians and bicyclists of pending construction activities and alternate routes.

**Emergency Vehicle Response.** The contractor will coordinate with City Police and Fire Departments to ensure that all potential effects of construction traffic controls are clearly communicated understood by public safety providers.

### 2.6.1.2 Noise Control Measures

The following measures will be incorporated into the construction specifications for the proposed project to reduce and control noise generated by construction-related activities, consistent with City ordinances and standards:

- Noise-generating construction activities from the City's construction contractor will be restricted consistent with the City's Noise ordinance (Monday through Friday from 7:00 a.m. to 7:00 p.m., and Saturday and Sunday from 8:00 a.m. to 8:00 p.m.).
- All construction equipment will have sound-control devices no less effective than those provided on the original equipment. No equipment will have an unmuffled exhaust.
- Appropriate additional noise-reducing measures will be implemented, including the following: stationary construction equipment will be located as far as possible from sensitive uses; sensitive uses will be identified on construction drawings; and excessive equipment idling will be prohibited when the equipment is not in use.

### 2.6.1.3 Hazards and Hazardous Materials Measures

The construction documents will identify materials that are considered hazardous. The project contractor will be required to develop a health and safety plan (prepared by a registered industrial hygienist) that addresses release prevention measures; employee training, notification, and evacuation procedures; and adequate emergency response protocols and cleanup procedures.

The contractor will comply with the California Occupational Safety and Health Administration standards for the storage and handling of fuels, flammable materials, and common construction-related hazardous materials and for fire prevention (California Labor Code, Division 5, Chapter 2.5).

## 2.6.2 City of Roseville Mitigating Ordinances, Guidelines, and Standards

As part of the proposed project, the City will implement the following regulations and ordinances to reduce potential environmental impacts associated with the project.

- Noise Regulation (Roseville Municipal Code Ch.9.24).
- Urban Stormwater Quality Management and Discharge Control Ordinance (Roseville Municipal Code Ch.14.20).
- Stormwater Quality Design Manual (Resolution 07-432).
- City of Roseville Design and Construction Standards (Resolution 07-137).
- Community Design Guidelines (Resolution 95-347).

## 2.7 Required Approvals

Required permits and approvals are shown in Table 2-2. Local approvals required to construct and operate the proposed project include adoption of the Mitigated Negative Declaration and Mitigation Monitoring and Reporting Plan by the City Council and approval of the project plans and specifications and construction contract. In addition, the proposed construction activities would trigger Section 402 of the Clean Water Act, which requires coverage under the National Pollutant Discharge Elimination System Permit from the State Water Resources Control Board. This coverage would require development and implementation of a SWPPP. No other state or federal approvals are required for the proposed project.

**Table 2-2. Permits and Approvals Needed for the Proposed Project**

| Agency                              | Permit/Approval                                                                                                        |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------|
| City of Roseville                   | Adoption of the Mitigated Negative Declaration                                                                         |
| City of Roseville                   | Approval of the Mitigation Monitoring and Reporting Plan                                                               |
| City of Roseville                   | Approval of Plans and Specifications and Construction Contract                                                         |
| City of Roseville                   | Approval of pre-construction approach ramp stockpiling and any related City required permits (such as grading permit). |
| State Water Resources Control Board | Clean Water Act Section 402 coverage under the NPDES Permit (Order No. 00-06-DWQ)                                      |

## Chapter 3

# Environmental Checklist

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|                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|--------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>1. Project Title:</b>                                     | Roseville Parkway Extension Project                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
| <b>2. Lead Agency Name and Address:</b>                      | City of Roseville<br>311 Vernon Street<br>Roseville, CA 95678                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>3. Contact Person and Phone Number:</b>                   | Terri Shirhall<br>Environmental Coordinator<br>Development Services Department<br>(916) 774-5362                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              |
| <b>4. Project Location:</b>                                  | The project would be constructed on approximately 12 acres of primarily City-owned property in north Roseville, in western Placer County, California. The project site is located between Foothills Boulevard on the west, and Washington Boulevard on the east. The project site falls within the Roseville 7.5-minute U.S. Geological Survey topographic quadrangle map in Section 21 of Township 11 North, Range 6 East, Mount Diablo Base and Meridian.                                                                                                                                                                                                                                                                                                                   |
| <b>5. Project Sponsor's Name and Address:</b>                | City of Roseville<br>311 Vernon Street<br>Roseville, CA 95678                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>6. General Plan Designation:</b>                          | Industrial and Light Industrial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| <b>7. Zoning:</b>                                            | General Industrial and Light Industrial                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| <b>8. Description of Project:</b>                            | <p>The project would extend Roseville Parkway by approximately 0.75 mile, from its current terminus at Washington Boulevard westerly to Foothills Boulevard. The project includes construction of an overpass of the Union Pacific Railroad tracks and Industrial Avenue which run parallel to one another at the crossing location. The new road would include two travel lanes in each direction, raised median with related utility relocations and storm drain improvements, followed by 5-foot-wide on-street Class II bike lanes. Three-foot-wide curbs and gutter would be backed by a 10-foot-wide multi-use path on the south side and 8-foot-wide sidewalk on the north side of the new roadway. The total project area would encompass approximately 12 acres.</p> |
| <b>9. Surrounding Land Uses and Setting:</b>                 | <p>The project site is currently dominated by disturbed annual grasslands. Industrial development borders the site along most of the south boundary and along the eastern third of the north boundary. The Highland Reserve residential development is located near the project's eastern end, along the east side of Washington Boulevard and along both sides of existing Roseville Parkway. Industrial development is located near the project's western boundary, on the west side of Foothills Boulevard</p>                                                                                                                                                                                                                                                             |
| <b>10. Other Public Agencies Whose Approval is Required:</b> |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |

State Water Resources Control Board—Clean Water Act Section 402, National Pollutant Discharge Elimination System Permit for disturbance of more than 1 acre of land.

**11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, has consultation begun?**

On September 23, 2019, the City of Roseville sent certified letters to the Tribes listed below requesting consultation and/or information regarding tribal resources in the project area.

- United Auburn Indian Community of the Auburn Rancheria (UAIC)
- Shingle Springs Band of Miwok Indians (SSBMI)

The letters requested a response within 30 days. Both tribes responded requesting consultation and consultation was initiated. As discussed in Initial Study Section 3.2.18 Tribal Cultural Resources, after exchanging additional information, both consultations were closed with agreement.

## 3.1 Environmental Factors Potentially Affected

The environmental factors checked below would potentially be affected by this project (i.e., the project would involve at least one impact that is a “Potentially Significant Impact”), as indicated by the checklist on the following pages.

- |                                                               |                                                    |                                                             |                                                          |
|---------------------------------------------------------------|----------------------------------------------------|-------------------------------------------------------------|----------------------------------------------------------|
| <input type="checkbox"/> Aesthetics                           | <input type="checkbox"/> Agricultural and Forestry | <input checked="" type="checkbox"/> Air Quality             | <input checked="" type="checkbox"/> Biological Resources |
| <input checked="" type="checkbox"/> Cultural Resources        | <input checked="" type="checkbox"/> Geology/Soils  | <input type="checkbox"/> Greenhouse Gas Emissions           | <input type="checkbox"/> Hazards and Hazardous Materials |
| <input type="checkbox"/> Hydrology/Water Quality              | <input type="checkbox"/> Land Use/Planning         | <input type="checkbox"/> Mineral Resources                  | <input type="checkbox"/> Noise                           |
| <input type="checkbox"/> Population/Housing                   | <input type="checkbox"/> Public Services           | <input type="checkbox"/> Recreation                         | <input type="checkbox"/> Transportation/Traffic          |
| <input checked="" type="checkbox"/> Tribal Cultural Resources | <input type="checkbox"/> Utilities/Service Systems | <input type="checkbox"/> Mandatory Findings of Significance |                                                          |



## 3.2 Determination

On the basis of this initial evaluation:

- ☐ I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- ☒ I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions to the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- ☐ I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.
- ☐ I find that the proposed project MAY have an impact on the environment that is "potentially significant" or "potentially significant unless mitigated" but at least one effect (1) has been adequately analyzed in an earlier document pursuant to applicable legal standards and (2) has been addressed by mitigation measures based on the earlier analysis, as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- ☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL IMPACT REPORT or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the project, nothing further is required.

Signature

*Tim Skill*

Date

7/14/2020

## 3.2.1 Aesthetics

| I. Aesthetics                                                                                                                                                                                                                                                                                                                                                               | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                                                                                                                                                                                                          |                                |                                                    |                                     |                                     |
| a. Have a substantial adverse effect on a scenic vista?                                                                                                                                                                                                                                                                                                                     | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings along a scenic highway?                                                                                                                                                                                                                           | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. Create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?                                                                                                                                                                                                                                                    | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

### 3.2.1.1 Setting

The project site lies within an urbanizing area of North Roseville. Roseville and its environs are generally characterized as a transitional zone between the Central Valley's flat terrain and the Sierra Nevada foothills. On clear days, long-range views in the project vicinity include the Sierra Nevada to the east, the Sutter Buttes to the north, and the Coast Ranges to the west. The project site and nearby undeveloped areas consist of flat disturbed annual grasslands.

RV Storage, lumber yard, self-storage and FedEx dominate the views south from the project site. To the west are views of landscaping and surface parking of Cokevo Inc. and First Tech Federal Credit Union. To the north are views of annual grasslands and the Roseville Parkway Industrial Center. To the east are views of the Highland Reserve residential development. Industrial Avenue and Union Pacific Railroad (UPRR) tracks run through the center of the project site in a north/south direction.

The primary viewer groups that would have views of the proposed project are employees at the Roseville Parkway Industrial Center and other similar uses, nearby residents and travelers on adjacent roads. Mature trees and shrubs planted along

property lines and along Washington Boulevard to the east and Foothills Boulevard to the west partially obscure views of the project site from all directions.

### 3.2.1.2 Impact Analysis

***a) Would the project have a substantial adverse effect on a scenic vista?***

There are no designated scenic vistas in the project vicinity. The proposed project would consist of an 0.75-mile extension of Roseville Parkway between Washington Boulevard and Foothills Boulevard with an overpass of the UPRR tracks and Industrial Avenue, which run parallel to one another at the crossing location. The low-lying structures would not be evident beyond the project vicinity and the overpass would be similar to overpasses to the north and south. Therefore, the impact would be less than significant.

***b) Would the project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?***

The project site is not located near or within view of any state or locally designated scenic highway. Further, no scenic resources have been identified in the vicinity of the project site; therefore, there would be no impact.

***c) Would the project, in non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point). If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?***

Removal of existing vegetation, site grading, and roadway and overpass construction would introduce heavy equipment, including backhoes, bulldozers, and excavators, into the viewshed of all viewer groups, creating temporary effects on views of and from the project site during the construction period. These activities would be visible from ground-level and elevated vantages. However, the visual effects of construction activities would be less than significant because of their temporary character and the transience of some viewers passing by the project site.

The proposed project would consist of an 0.75-mile extension of Roseville Parkway between Washington Boulevard and Foothills Boulevard with an overpass of the UPRR tracks and Industrial Avenue. The extension of Roseville Parkway would alter the site's visual character and would be visible to residents to the east, Roseville Parkway Industrial Center and other similar uses employees, and nearby travelers. However, the conversion of the project site from undeveloped grassland to a planned roadway extension would be consistent with existing zoning and visually compatible with adjacent roadways and overpasses and would not permanently

degrade either the visual character of the project site or its surroundings, nor would it be inconsistent with existing City regulations governing scenic quality. The impact would be less than significant, and no mitigation is required.

***d) Would the project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?***

The proposed project would include streetlights similar to existing streetlights in the project vicinity and larger Roseville area. The conversion of the project site from undeveloped grassland to a roadway would be visually compatible with existing roadways and would not create substantial unnecessary light. The impact would be less than significant, and no mitigation is required.

No aspect of the project would create a new source of substantial glare. No impact would occur.

### **3.2.1.3 Mitigation Measures**

The proposed project would not result in any potentially significant impacts on aesthetic resources. Therefore, no mitigation measures are necessary.

## 3.2.2 Agricultural and Forestry Resources

| II. Agricultural and Forestry Resources                                                                                                                                                                                                                                                   | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                                                                                                                        |                                |                                                    |                              |                                     |
| a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?                                            | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| b. Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?                                                                                                                                                                                         | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| c. Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| d. Result in the loss of forest land or conversion of forest land to non-forest use?                                                                                                                                                                                                      | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| e. Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?                                                                                | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

### 3.2.2.1 Setting

The proposed project site is currently fallow and consists of undeveloped and disturbed annual grassland. The project site was historically used for livestock grazing.

According to the California Department of Conservation's California Important Farmland Finder for Placer County, the project site's eastern half is designated as "Urban and Built-Up Land" while the western half is designated as "Grazing Land" (California Department of Conservation 2016). Lands to the west and east of the project site are designated as "Urban and Built-Up Land." Land along the northern and southern project boundaries include both "Urban and Built-Up Land" and "Grazing Land."

The project site is not restricted to agricultural uses under the California Land Conservation Act of 1965 (Williamson Act). East of Industrial Avenue the project site is designated as "Easement or Right of Way" and zoned General Industrial. West of Industrial Avenue the project site is designated Light Industrial and zoned Light Industrial.

### 3.2.2.2 Impact Analysis

***a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?***

The project site is designated as Urban and Built-Up Land and Grazing Land and contains no Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (California Department of Conservation 2016). No impact would occur.

***b) Conflict with existing zoning for agricultural use or conflict with a Williamson Act contract?***

The project site is fallow and designated and zoned for industrial or light industrial use. The project site is not under Williamson Act contract. Therefore, the proposed project would not conflict with existing zoning for agricultural use or conflict with a Williamson Act contract. No impact would occur.

***c) Conflict with existing zoning for, or cause rezoning of forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?***

There is no forest land, timberland, or timberland production on the project site or in the City of Roseville. Therefore, the proposed project would not conflict with existing zoning for, or cause rezoning of, these resources. No impact would occur.

***d) Result in the loss of forest land or conversion of forest land to non-forest use?***

The project site consists of disturbed annual grassland. Thus, the proposed project would not result in the loss or conversion of forest land. No impact would occur.

***e) Involve other changes in the existing environment that, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?***

The project site is not designated or zoned for agricultural or forest use and contains no active agricultural uses or forest land. The adjacent parcels are also not designated or zoned for agricultural or forest use and they contain no active

agricultural uses or forest land. The undeveloped parcels in the project area consist of disturbed annual grasslands. No impact would occur.

### **3.2.2.3 Mitigation Measures**

The proposed project would not result in any potentially significant impacts on agricultural and forestry resources. Therefore, no mitigation measures are necessary.

### **3.2.2.4 References**

California Department of Conservation. 2016. California Important Farmland Finder. Available: <https://maps.conservation.ca.gov/DLRP/CIFF/>. Accessed: April 8, 2020.

### 3.2.3 Air Quality

| III. Air Quality                                                                                                                                                                                             | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|--------------------------|
| When available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project: |                                |                                                    |                                     |                          |
| a. Conflict with or obstruct implementation of the applicable air quality plan?                                                                                                                              | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?                    | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>            | <input type="checkbox"/> |
| c. Exposure of sensitive receptors to substantial pollutant concentrations?                                                                                                                                  | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>            | <input type="checkbox"/> |
| d. Other emissions (such as those leading to odors) adversely affecting a substantial number of people?                                                                                                      | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

#### 3.2.3.1 Setting

The project site is located in the city of Roseville in western Placer County, which is within the Sacramento Valley Air Basin (SVAB). Concentrations of ozone, carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), lead (Pb), and particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) are commonly used as indicators of ambient air quality conditions. These pollutants are known as *criteria pollutants* and are regulated by the U.S. Environmental Protection Agency (USEPA) and California Air Resources Board (CARB) through national ambient air quality standards (NAAQS) and California ambient air quality standards (CAAQS), respectively. The NAAQS and CAAQS define clean air and represent the maximum amount of pollution that can be present in outdoor air without any harmful effects on people and the environment. Other pollutants of concern in the project area are nitrogen oxides (NO<sub>x</sub>) and reactive organic gases (ROG), which are precursors to ozone, and toxic air contaminants (TAC), which can cause cancer and other human health ailments.

Criteria pollutant concentrations in Placer County and the SVAB are measured at several monitoring stations. The nearest station to the proposed project is the Roseville North Sunrise Avenue station, which is approximately 3.7 miles southeast of the project site. Monitoring data show that the station experienced several violations of the ozone CAAQS and NAAQS each year between 2016 and 2018, and violations of the PM<sub>10</sub> and PM<sub>2.5</sub> NAAQS in 2018 (California Air Resources Board



2020a). Data collected from monitoring stations throughout the region, including the Roseville North Sunrise Avenue station, are used to designate Placer County as nonattainment, maintenance, or attainment for the NAAQS and CAAQS. Based on the most recent local monitoring data, the SVAB portion of Placer County is currently classified nonattainment for the federal and state ozone standards, nonattainment for the federal PM<sub>2.5</sub> standard, and nonattainment for the state PM<sub>10</sub> standard (California Air Resources Board 2020b; U.S. Environmental Protection Agency 2020).

The Placer County Air Pollution Control District (PCAPCD) is responsible for ensuring that the NAAQS and CAAQS are met within Placer County. PCAPCD manages air quality through a comprehensive program that includes long-term planning, regulations, incentives for technical innovation, education, and community outreach. For example, the *2017 Sacramento Regional 8-Hour Attainment and Reasonable Further Progress Plan* (2017 Ozone Plan) outlines strategies to achieve the federal ozone standard throughout the entire nonattainment area of the SVAB. PCAPCD has also adopted rules and regulations applicable to individual projects and emissions generating sources within Placer County.

PCAPCD's *CEQA Handbook* (2017) provides guidance for evaluating project-level air quality impacts, including thresholds to assist lead agencies in evaluating the significance of project generated criteria pollutant and precursor emissions. PCAPCD's thresholds are based on the new source review (NSR) rule, which requires stationary sources to offset emissions in excess of the identified thresholds. PCAPCD (2017) concludes that there is no difference between emissions from stationary sources and those generated by land use uses, and as such, the NSR rule and associated thresholds are equally applicable to all sources. Based on analysis of current regional goals to attain the NAAQS and CAAQS, PCAPCD (2017) has demonstrated that the NSR emission offset requirements are appropriate in addressing the potential air quality impacts from new land use projects in Placer County.

Table 3-1 outlines PCAPCD's recommended thresholds. The thresholds consider whether a project's emissions would result in a cumulatively considerable adverse contribution to existing air quality conditions. If a project's emissions would be less than these levels, the project would not be expected to result in a cumulatively considerable contribution to the significant project-level and cumulative impact.

**Table 3-1. Placer County Air Pollution Control District Criteria Pollutant and Precursor Thresholds (pounds per day)**

| Source                    | Ozone Precursor Emissions |                 | PM10 |
|---------------------------|---------------------------|-----------------|------|
|                           | ROG                       | NO <sub>x</sub> |      |
| Construction (short-term) | 82                        | 82              | 82   |
| Operational (long-term)   | 55                        | 55              | 82   |

Source: Placer County Air Pollution Control District 2017

NO<sub>x</sub> = nitrogen oxides

PM10 = particulate matter 10 microns or less in diameter

ROG = reactive organic gases

PCAPCD also considers localized CO emissions to result in significant impacts if concentrations exceed the CAAQS. The air district has adopted the following screening criteria that provide a conservative indication of whether project-generated traffic would cause a potential CO hot spot. If both criteria are met, PCAPCD recommends traffic-generated CO concentrations be modeled and compared with the CAAQS to determine impact significance.

- Vehicle emissions generated by the project exceed 550 pound per day, **and**
- Either of the following scenarios would occur:
  - Peak-hour level of service (LOS) on one or more streets or at one or more intersections (both signalized and non-signalized) in the project vicinity would be degraded from an acceptable LOS (e.g., A, B, C, or D) to an unacceptable LOS (e.g., E or F), or
  - Project would substantially worsen an already existing unacceptable peak-hour LOS on one or more streets or at one or more intersections in the project vicinity. *Substantially worsen* includes situations where delay would increase by 10 seconds or more when project-generated traffic is included.

PCAPCD has also adopted a threshold to evaluate receptor exposure to TAC. The “substantial” TAC threshold defined by the PCAPCD is the probability of contracting cancer for the maximum exposed individual exceeding 10 in a million. This risk threshold is used by PCAPCD to evaluate potential risks for both existing and new sources in Placer County (Placer County Air Pollution Control District 2017).

### 3.2.3.2 Impact Analysis

#### ***a) Conflict with or obstruct implementation of the applicable air quality plan?***

The federal Clean Air Act requires that an air quality attainment plan be prepared for areas with air quality violating the NAAQS. The air quality attainment plan sets forth the strategies and pollution control measures that states will use to attain the NAAQS by the earliest practical date. PCAPCD's air quality attainment plans are based, in part, on regional population and employment (and thus vehicle miles

traveled [VMT]) growth projections from Sacramento Area Council of Governments (SACOG). Thus, a project's conformance with SACOG's Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) that was considered in the preparation of the air quality attainment plans would demonstrate that the project would not conflict with or obstruct implementation of plans.

The proposed project was included in the regional emissions analysis conducted by SACOG for the conforming 2020 MTP/SCS (Sacramento Area Council of Governments 2019). Accordingly, the project's operational emissions (which include the ozone precursors ROG and NO<sub>x</sub>) would not exacerbate nonattainment conditions or conflict with air quality plans adopted to attain and maintain the CAAQS and NAAQS (i.e., the 2017 Ozone Plan). This impact would be less than significant. No mitigation is required.

***b) Cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard?***

## **Construction**

The predominant pollutants associated with construction of the proposed project are fugitive dust (PM<sub>10</sub>) from earthmoving activities and combustion pollutants, particularly ROG and NO<sub>x</sub>, from heavy equipment and trucks. ROG would also be generated from paving activities.

Construction emissions were estimated using the latest Sacramento Metropolitan Air Quality Management District's (SMAQMD) Road Construction Model. While the model was developed for Sacramento conditions in terms of fleet emission factors, silt loading, and other model assumptions, it is considered adequate for estimating linear road construction emissions by the PCAPCD (in its air quality analysis guidance) and is used for that purpose in this project analysis.

Construction is anticipated to occur over five phases, (1) Grubbing/Land Clearing; (2) Grading/Excavation; (3) Drainage/Utilities/Sub-Grade; (4) Paving; and (5) Overpass Construction. Activities would occur over 9.5 months, commencing in fall 2021. Project-specific model inputs were provided by the project engineers, Mark Thomas & Company (Cervantes pers. comm.).

Estimated unmitigated construction emissions are summarized in Table 3-2. Appendix A provides the full list of modeling assumptions.

**Table 3-2 Estimated Unmitigated Criteria Pollutant Emissions from Project Construction (pounds per day)**

| <b>Construction Phase</b> | <b>ROG</b> | <b>NO<sub>x</sub></b> | <b>PM<sub>10</sub><sup>a</sup></b> |
|---------------------------|------------|-----------------------|------------------------------------|
| Grubbing/Land Clearing    | 7          | 82                    | 24                                 |

| Construction Phase           | ROG | NO <sub>x</sub> | PM10 <sup>a</sup> |
|------------------------------|-----|-----------------|-------------------|
| Grading/Excavation           | 7   | 88              | 24                |
| Drainage/Utilities/Sub-Grade | 4   | 46              | 22                |
| Paving                       | 2   | 26              | 1                 |
| Overpass Construction        | 3   | 33              | 1                 |
| Maximum daily <sup>b</sup>   | 15  | 167             | 48                |
| PCAPCD threshold             | 82  | 82              | 82                |
| Exceed threshold?            | No  | Yes             | No                |

NO<sub>x</sub> = nitrogen oxides

PCAPCD = Placer County Air Pollution Control District

PM10 = particulate matter 10 microns or less in diameter.

ROG = reactive organic gases

<sup>a</sup> Accounts for fugitive dust control, as modeled by the Road Construction Emissions Model, achieved by use of on-site water trucks.

<sup>b</sup> Represents the highest emissions during concurrent construction activity.

As shown in Table 3-2, construction of the proposed project would not generate ROG or PM10 emissions in excess of PCAPCD's thresholds. The proposed project would comply with the City's Design and Construction Standards, further reducing fugitive dust emissions during site grading through implementation of best management practices (BMP) such as application of chemical soil stabilizers, vehicle speed controls, and limits on grading during strong wind events.

While ROG and PM10 emissions would be below PCAPCD's thresholds, estimated maximum daily NO<sub>x</sub> emissions would exceed 82 pounds per day. Based on the construction schedule, peak construction activity and associated emissions would occur in late 2021/early 2022 when the following phases could occur concurrently: Grading/Excavation, Drainage/Utilities/Sub-Grade, and Overpass Construction. This is a potentially significant impact.

Mitigation Measure AQ-1 is required to reduce maximum daily NO<sub>x</sub> emissions to below PCAPCD's threshold. The measure requires all off-road equipment to meet USEPA-approved Tier 4 final emissions standards. The mitigation also requires construction equipment be maintained in proper working condition and minimize idling time, consistent with PCAPCD best practices. As shown in Table 3-3, with implementation of Mitigation Measure AQ-1, NO<sub>x</sub> emissions would be reduced below PCAPCD's significance threshold, reducing this potential impact to less than significant.

**Table 3-3. Estimated Mitigated Criteria Pollutant Emissions from Project Construction (pounds per day)**

| Construction Phase           | ROG | NO <sub>x</sub> | PM10 <sup>a</sup> |
|------------------------------|-----|-----------------|-------------------|
| Grubbing/Land Clearing       | 3   | 19              | 21                |
| Grading/Excavation           | 3   | 19              | 21                |
| Drainage/Utilities/Sub-Grade | 2   | 8               | 20                |

| Construction Phase         | ROG | NO <sub>x</sub> | PM10 <sup>a</sup> |
|----------------------------|-----|-----------------|-------------------|
| Paving                     | 1   | 8               | <1                |
| Overpass Construction      | 2   | 6               | <1                |
| Maximum daily <sup>b</sup> | 7   | 35              | 41                |
| PCAPCD threshold           | 82  | 82              | 82                |
| Exceed threshold?          | No  | No              | No                |

NO<sub>x</sub> = nitrogen oxides

PCAPCD = Placer County Air Pollution Control District

PM10 = particulate matter 10 microns or less in diameter.

ROG = reactive organic gases

<sup>a</sup> Accounts for fugitive dust control, as modeled by the Road Construction Emissions Model, achieved by use of on-site water trucks.

<sup>b</sup> Represents the highest emissions during concurrent construction activity.

## Operation

Operation of the proposed project would result in changes in travel patterns and VMT in the local and regional transportation network. Vehicle emissions were estimated using the California Department of Transportation's (Caltrans) CT-EMFAC model and vehicle activity data provided by the project traffic engineer, Kimley-Horn (Weir pers. comm.). Consistent with the traffic analysis performed for the Amoruso Ranch Specific Plan, emissions were modeled for existing (2011) and cumulative (2035) with and without project conditions. The VMT data includes vehicle activity for the entire SACOG region. The CT-EMFAC program assumed project operating conditions during average annual conditions for the SVAB portion of Placer County. CARB's (2019) adjustment factors to account for the effects of the Safer Affordable Fuel-Efficient (SAFE) Vehicles Rule were applied to the CT-EMFAC Output.<sup>1</sup>

Table 3-4 presents the estimated operational emissions under existing conditions and cumulative conditions. The net change in emissions is compared to PCAPCD's ROG, NO<sub>x</sub>, and PM10 thresholds. Appendix A provides the VMT and CT-EMFAC emission factors.

**Table 3-4. Estimated Criteria Pollutant Emissions from Project Operation (pounds per day)**

| Period                                            | ROG    | NO <sub>x</sub> | PM10    |
|---------------------------------------------------|--------|-----------------|---------|
| Existing (2011) no project                        | 15,036 | 109,971         | 126,065 |
| Existing (2011) plus project                      | 15,029 | 109,954         | 126,054 |
| Cumulative (2035) no project                      | 2,493  | 24,521          | 181,153 |
| Cumulative (2035) plus project                    | 2,490  | 24,494          | 181,101 |
| Existing plus project vs. existing no project     | -7     | -17             | -11     |
| Cumulative plus project vs. cumulative no project | -2     | -28             | -52     |

<sup>1</sup> The SAFE Vehicles Rule proposes to withdraw California's waiver to establish State-specific vehicle fuel economy standards and establish uniform, national carbon dioxide and fuel economy standards.

| Period                                                                                                                                                                                              | ROG | NO <sub>x</sub> | PM <sub>10</sub> |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----|-----------------|------------------|
| <i>PCAPCD threshold</i>                                                                                                                                                                             | 55  | 55              | 82               |
| <i>Exceed threshold?</i>                                                                                                                                                                            | No  | No              | No               |
| NO <sub>x</sub> = nitrogen oxides<br>PCAPCD = Placer County Air Pollution Control District<br>PM <sub>10</sub> = particulate matter 10 microns or less in diameter.<br>ROG = reactive organic gases |     |                 |                  |

As shown in Table 3-4, operation of the proposed project would not generate ROG, NO<sub>x</sub>, or PM<sub>10</sub> emissions in excess of PCAPCD's thresholds. Rather, emissions would be reduced relative to the no project condition under both modeling scenarios (existing and cumulative). Accordingly, this impact would be less than significant, and no mitigation is required.

### ***c) Exposure of sensitive receptors to substantial pollutant concentrations***

Sensitive receptors are facilities that house or attract children, the elderly, and people with illnesses, or others who are especially sensitive to the effects of air pollutants. Hospitals, schools, convalescent facilities, and residential areas are examples of sensitive receptors.

Industrial development borders the project site along most of the north and south boundaries and along the eastern third of the north boundary. Industrial development is also located near the project's west boundary, on the west side of Foothills Boulevard. The Highland Reserve residential development is located near the project's east end. The closest residential receptors are adjacent to the current intersection of Washington Boulevard and Roseville Parkway. There are no hospitals, schools, or convalescent facilities within 1,000 feet of the project area.

The primary pollutants of concern with respect to health risks to sensitive receptors are criteria pollutants (regional and local) and TAC. Ozone precursors (ROG and NO<sub>x</sub>) and PM are considered regional pollutants because they affect air quality on a regional scale. Localized pollutants are deposited and potentially affect population near the emissions source. Because these pollutants dissipate with distance, emissions from individual projects can result in direct and material health impacts on adjacent sensitive receptors. The localized criteria pollutants of concern that would be generated by the project are PM (fugitive dust) and CO.

## **Criteria Pollutants**

### **Regional Emissions (ROG, NO<sub>x</sub>, and PM)**

PCAPCD develops region-specific California Environmental Quality Act (CEQA) thresholds of significance in consideration of existing air quality concentrations and attainment or nonattainment designations under the NAAQS and CAAQS.

Recognizing that air quality is a cumulative problem, PCAPCD typically considers projects that generate criteria pollutants and ozone precursor emissions that are

below the thresholds to be minor in nature. Such projects would not adversely affect air quality or exceed the NAAQS or CAAQS. As described under response “b” above, construction of the project would not generate ROG, NO<sub>x</sub>, or PM<sub>10</sub> emissions in excess of PCAPCD’s thresholds with implementation of Mitigation Measure AQ-1. Operation of the project would reduce ROG, NO<sub>x</sub>, or PM<sub>10</sub>, and as such, the project would not be expected to contribute a significant level of air pollution that would degrade long-term, regional air quality within the SVAB.

The California Supreme Court’s decision in *Sierra Club v. County of Fresno* (6 Cal. 5th 502) (hereafter referred to as the Friant Ranch Decision) reviewed the long-term, regional air quality analysis contained in the environmental impact report (EIR) for the proposed Community Plan Update and Friant Ranch Specific Plan (Friant Ranch Project). The Friant Ranch Project is a 942-acre master-plan development in unincorporated Fresno County within the San Joaquin Valley Air Basin, an air basin currently in nonattainment under the NAAQS and CAAQS for ozone and PM<sub>2.5</sub>. The Court found that the EIR’s air quality analysis was inadequate because it failed to provide enough detail “for the public to translate the bare [criteria pollutant emissions] numbers provided into adverse health impacts or to understand why such a translation is not possible at this time.” The Court’s decision clarifies that environmental documents must attempt to connect a project’s regional air quality impacts to specific health effects or explain why it is not technically feasible to perform such an analysis.

While regional criteria pollutant emissions generated by construction of the project would not result in a significant impact, consistent with the Friant Ranch Decision, Table 3-5 provides a conservative estimate of potential health effects associated with these emissions. The estimates were developed using SMAQMD’s draft Project Health Effects Tool (version 1). The draft Minor Project Health Screening Tool was developed by SMAQMD, on behalf of regional air districts in the Sacramento Federal Nonattainment Area (SFNA), including western Placer County (Ramboll 2019). SMAQMD conducted photochemical and health effects modeling of hypothetical projects throughout the SFNA with NO<sub>x</sub>, ROG and PM<sub>2.5</sub> emissions at 82 pounds per day, which corresponds to the highest daily emissions threshold of all SFNA air districts. The tool outputs the estimated health effects at the 82 pound per day emissions rate by spatial interpolating the health effects from the hypothetical projects based on user inputs for the latitude and longitude coordinates of a project.

The results presented in Table 3-5 are conservative for two reasons. First, they are based on a source generating 82 pounds per day of ROG, NO<sub>x</sub>, and PM<sub>2.5</sub>. As shown in Table 3-3, maximum mitigated daily emissions during construction are well below 82 pounds. Second, the results assume the source would generate emissions 365 days per year. Construction of the project would require 240 working days over 9.5 months. For these reasons, any increase in regional health risks associated with project-generated construction emissions would be less than those presented in

Table 3-5, which are already very small increases over the background incident health effect. As such, related impacts are considered less than significant, and no mitigation is required.

**Table 3-5. Conservative Estimate of Increased Regional Health Effect Incidence Resulting from Construction of the Project (cases per year)**

| Health Endpoint                                      | Age Range <sup>a</sup> | Mean Incidences (per year) <sup>b</sup> | Percent of Background Health Incidence <sup>c</sup> |
|------------------------------------------------------|------------------------|-----------------------------------------|-----------------------------------------------------|
| Emergency Room Visits, Asthma                        | 0–99                   | 1                                       | <1%                                                 |
| Mortality, All Cause                                 | 30–99                  | 2                                       | <1%                                                 |
| Hospital Admissions, Asthma                          | 0–64                   | <1                                      | <1%                                                 |
| Hospital Admissions, All Cardiovascular <sup>d</sup> | 65–99                  | <1                                      | <1%                                                 |
| Hospital Admissions, All Respiratory                 | 65–99                  | <1                                      | <1%                                                 |
| Acute Myocardial Infarction, Nonfatal                | 18–24                  | <1                                      | <1%                                                 |
| Acute Myocardial Infarction, Nonfatal                | 25–44                  | <1                                      | <1%                                                 |
| Acute Myocardial Infarction, Nonfatal                | 45–54                  | <1                                      | <1%                                                 |
| Acute Myocardial Infarction, Nonfatal                | 55–64                  | <1                                      | <1%                                                 |
| Acute Myocardial Infarction, Nonfatal                | 65–99                  | <1                                      | <1%                                                 |
| Hospital Admissions, All Respiratory                 | 65–99                  | <1                                      | <1%                                                 |
| Mortality, Non-Accidental                            | 0–99                   | <1                                      | <1%                                                 |
| Emergency Room Visits, Asthma                        | 0–17                   | <1                                      | <1%                                                 |
| Emergency Room Visits, Asthma                        | 18–99                  | 1                                       | <1%                                                 |

Source: SMAQMD Minor Project Health Screening Tool, version 1, published January 2020.

Note: The analysis point is in the center of the project alignment at 38.787412, -121.307778.

<sup>a</sup> Affected age ranges are shown. Other age ranges are available, but the endpoints and age ranges shown here are the ones used by the USEPA in their health assessments. The age ranges are consistent with the epidemiological study that is the basis of the health function.

<sup>b</sup> Health effects are shown in terms of incidences of each health endpoint and how it compares to the base (2035 base year health effect incidences, or "background health incidence") values. Health effects and background health incidences are across the Northern California model domain.

<sup>c</sup> The percent of background health incidence uses the mean incidence. The background health incidence is an estimate of the average number of people that are affected by the health endpoint in a given population over a given period of time. In this case, these background incidence rates cover the modeled domain. Health incidence rates and other health data are typically collected by the government as well as the World Health Organization. The background incidence rates used here are obtained from BenMAP, as reported in SMAQMD's Minor Project Health Screening Tool, version 1.

<sup>d</sup> Less Myocardial Infarctions.

### Localized Fugitive Dust

During earthmoving activities required for construction, localized fugitive dust would be generated. The amount of dust generated by a project is highly variable and dependent on the size of the disturbed area at any given time, the amount of activity, soil conditions, and meteorological conditions. Dust emissions would be controlled through adherence to the City's Design and Construction Standards, which require chemical stabilizers and other on-site BMPs. Accordingly, the proposed project would not expose sensitive receptors to substantial fugitive dust concentrations. This impact would be less than significant, and no mitigation is required.



### **Localized Carbon Monoxide**

Continuous engine exhaust during project operations may elevate localized CO concentrations, resulting in hot spots. Receptors exposed to these CO hot spots may have a greater likelihood of developing adverse health effects, such as fatigue, headaches, confusion, dizziness, and chest pain. CO hot spots are typically observed at heavily congested intersections where a substantial number of gasoline-powered vehicles idle for prolonged durations throughout the day. As discussed above, PCAPCD has developed screening criteria to assist lead agencies in evaluating potential impacts from localized CO. Based on the analysis conducted using daily VMT and CT-EMFAC, operation of the proposed project would reduce CO emissions relative to the no project condition under both modeling scenarios (existing and cumulative). The traffic analysis report prepared by Kimley-Horn (2020) also indicates that operation of the project would neither degrade peak-hour LOS to an unacceptable level nor substantially worsen delay at affected intersections. Accordingly, the project meets PCAPCD's CO screening criteria and therefore would not expose sensitive receptors to substantial CO concentrations. This impact would be less than significant, and no mitigation is required.

### **Toxic Air Contaminants**

#### **Naturally Occurring Asbestos**

Naturally occurring asbestos (NOA) is a TAC and is the name given to naturally occurring fibrous silicate minerals. NOA can be released from serpentine and ultramafic rocks when the rock is broken or crushed during construction earthmoving activities. The inhalation of asbestos fibers into the lungs can result in a variety of adverse health effects, including inflammation of the lungs, respiratory ailments, and cancer (e.g., mesothelioma) (United States Environmental Protection Agency 2018). Projects located in an area "most likely" to contain NOA are required by PCAPCD to prepare and submit a naturally occurring asbestos dust mitigation plan (ADMP).

Accordingly to the California Department of Conservation's *A General Location Guide for Ultramafic Rocks in California*, there are no geologic features normally associated with NOA (i.e., serpentine rock or ultramafic rock near fault zones) in or near the project area (California Department of Conservation 2000). As such, there is no potential for impacts related to NOA emissions during construction activities and the project is not required to submit an ADMP. Accordingly, the proposed project would not expose sensitive receptors to substantial NOA concentrations. This impact would be less than significant, and no mitigation is required.

#### **Diesel Particulate Matter**

Diesel particulate matter (DPM) is a TAC generated by diesel-fueled equipment and vehicles. Short-term exposure to DPM can cause acute irritation (e.g., eye, throat, and bronchial), neurophysiological symptoms (e.g., lightheadedness and nausea),

and respiratory symptoms (e.g., cough and phlegm). Heavy-duty equipment used during construction would generate DPM, which could expose adjacent receptors to associated health risks. However, DPM emissions would be minor (less than 1 pound per day) and only occur over a period of 9.5 months. The short-term construction period is well below the 30-year exposure period typically associated with increased cancer risks. Moreover, DPM from construction equipment would be transitory and spread throughout the entire 0.75-mile segment, as opposed to being concentrated at a single location. Pursuant to Mitigation Measure AQ-1, all off-road equipment would also meet USEPA-approved Tier 4 final emissions standards. Accordingly, construction of the proposed project would not expose sensitive populations to substantial pollutant concentrations. This impact would be less than significant, and no mitigation is required.

### **Mobile Source Air Toxics**

USEPA has identified nine compounds as priority mobile source air toxics (MSAT)—1,3-Butadiene, acetaldehyde, acrolein, benzene, DPM, ethylbenzene, formaldehyde, naphthalene, and polycyclic organic matter. These air toxics are generated by motor vehicles and may result in an increase in risk of cancer and other serious health effects. The Federal Highway Administration (FHWA) (2016) has issued guidance that outlines a tiered for evaluating MSATs for transportation projects. Based on the three project categories outlined in FHWA's guidance, the proposed project is considered a project with low potential MSAT impacts because average daily traffic (ADT) in the project area would not exceed 20,000 vehicles under cumulative (2035) plus project conditions (Kimley-Horn 2020). Consequently, ADT would be below FHWA's MSAT ADT threshold of 140,000 vehicles for projects with higher potential for MSAT impacts.

VMT estimated for the proposed project is slightly lower than under no project conditions because the roadway connection provides a more direct and efficient travel route (Weir pers. comm.). This reduction in VMT would lead to lower overall MSAT emissions. The extension of Roseville Parkway at Washington Boulevard would move some traffic closer to nearby homes; therefore, there may be localized areas where ambient concentrations of MSATs could be higher than the cumulative no project condition. However, Roseville Parkway is not considered a high-traffic road or roadway with significant diesel volumes (California Air Resources Board 2005<sup>2</sup>). Accordingly, operation of the project would not expose sensitive receptors to substantial MSAT concentrations. This impact would be less than significant, and no mitigation is required.

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<sup>2</sup> CARB's (2005) *Air Quality and Land Use Handbook* defines high-traffic urban roads as those with greater than 100,000 vehicles per day and high-traffic rural roads as those with greater than 500,000 vehicles per day. ADT in the project area for the project under cumulative year (2035) conditions would not exceed 20,000 vehicles (Kimley-Horn 2020). Heavy-duty trucks on local roadways throughout the city typically comprise no more than approximately 2 percent of ADT.

***d) Other emissions (such as those leading to odors) adversely affecting a substantial number of people?***

Although offensive odors rarely cause any physical harm, they can be unpleasant, leading to citizen complaints to local governments and air districts. Diesel-powered equipment operating during construction may generate odors that are evident in the immediately surrounding area. These activities would be intermittent and temporary in duration and, therefore, would not result in nuisance odors. The project does not meet any of the facility types identified by CARB (2005) or PCAPCD (2017) as odor-generating; thus, the project would not generate substantial operational odors. Accordingly, the proposed project would not create objectionable odors affecting a substantial number of people. This impact would be less than significant, and no mitigation is required.

### **3.2.3.3 Mitigation Measures**

**Mitigation Measure AQ-1: Reduce construction-generated emissions from equipment exhaust**

The City shall require its prime construction contractor to implement the following measures to reduce construction-generated emissions from equipment and vehicle exhaust. The list of required measures was informed by PCAPCD's recommended construction mitigation measures.

- Use construction equipment with engines meeting USEPA Tier 4 Final or better emission standards. Equipment requirements may be waived by the City, but only under any of the following unusual circumstances: if a particular piece of off-road equipment with Tier 4 Final standards is technically not feasible; not commercially available; or there is a compelling emergency need to use off-road equipment that does not meet the equipment requirements above. If the City grants the waiver, the contractor shall use the next cleanest piece of off-road equipment available, in the following order: Tier 4 Interim, Tier 3, and then Tier 2 engines.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (California Code of Regulations, Title 13, sections 2449(d)(3) and 2485). Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications.

### 3.2.3.4 References Cited

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- U.S. Environmental Protection Agency. 2020. Greenbook. Last Revised: March 31. Available: <https://www.epa.gov/green-book>. Accessed: May 1, 2020.
- Weir, Matt. Vice President. Kimley-Horn. Sacramento, CA. May 28, 2020—email message to ICF regarding Roseville Parkway Extension | VMT by Speed Bin.

## 3.2.4 Biological Resources

| IV. Biological Resources                                                                                                                                                                                                                                                                                             | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                                                                                                                                                   |                                |                                                    |                              |                                     |
| a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service? | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>     | <input type="checkbox"/>            |
| b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?                                                           | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| c. Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?                                                                                         | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?                                                                                   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including essential fish habitat)?                                                                                                                                               | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| f. Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?                                                                                                                                 | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

### 3.2.4.1 Methods

This biological resources section is based on information provided by Madrone Ecological Consulting, LLC. (Madrone) that included a review of standard sources, and biological surveys conducted on September 5 and 25, 2019 (Madrone Ecological Consulting, LLC 2019a, 2019b). ICF biologists conducted additional

surveys on March 19 and April 10, 2020 to document existing conditions and to conduct focused special-status plant surveys. The 2020 surveys also assessed natural areas outside the project footprint to account for potential indirect effects on aquatic resources and special-status species. This buffer area includes undeveloped habitat consisting mostly of grassland within approximately 250 feet of the project footprint. The project footprint and buffer area comprise the study area.

The following sources of information were reviewed and used to support this analysis.

- A list of sensitive species from the California Natural Diversity Database (CNDDDB) records search of the Roseville, Sheridan, Lincoln, Gold Hill, Rocklin, Folsom, Citrus Heights, Rio Linda, and Pleasant Grove U.S. Geological Survey (USGS) 7.5-minute quadrangles (California Department of Fish and Wildlife 2020).
- California Native Plant Society's (CNPS) *Inventory of Rare and Endangered Plants of California* for the same USGS quadrangles listed above under CNDDDB (California Native Plant Society 2020).
- Aquatic Resources Delineation Report for Roseville Parkway Extension prepared for the City of Roseville and approved jurisdictional determination issued by the U.S. Army Corps of Engineers (USACE) (Madrone Ecological Consulting, LLC 2019a).
- Roseville Parkway Stockpile Study Area—Habitat Suitability Analysis for Special-Status Species memorandum prepared for the City of Roseville for the project site (Madrone Ecological Consulting, LLC 2019b).
- Approved Jurisdictional Determination and Approved Jurisdictional Determination Form from the Department of the Army, USACE, Sacramento District (U.S. Army Corps of Engineers 2019).
- Addendum to the North Industrial Planning Area (NIPA) Parcel 50-Foothills Corporate Center Grading Plan Mitigated Negative Declaration (SCH#2012092020, Adopted October 11, 2012) (City of Roseville 2012).
- Clean Water Act Section 401 Technically Conditioned Water Quality Certification; Coastal Partners, LLC, Foothill Distribution Center Project (WDID#5A31CR00331), Placer County (Central Valley Regional Water Quality Control Board 2012).
- Personal communication between Ms. Sarah VonderOhe (Madrone Ecological Consulting) and Ms. Stefanie Tadlock (Central Valley Regional Water Quality Control Board [RWQCB]) on December 5, 2019 regarding the state jurisdictional status of the artificially created features on the project site. During this telephone conversation, Ms. Tadlock concurred that the features would not be considered waters of the State.

This information was used to develop lists of special-status species and vegetation communities of special concern that could be present in the project vicinity, and to determine the extent of previous mitigation requirements (including habitat compensation for federally listed branchiopods) implemented for other nearby projects that overlap with the study area.

### 3.2.4.2 Setting

The study area is located in the transition zone between the Sacramento Valley and northern Sierra Nevada Foothill subregions of the California Floristic Province (Baldwin et al. 2012:42, 43). The topography in the study area is relatively level with some small hills, and elevations range from approximately 100 to 150 feet above mean sea level.

The natural communities in the study area are interspersed with roadways, UPRR tracks, commercial and industrial areas, and residential development. Natural communities identified during botanical field surveys are described in the following subsections. The descriptions of the aquatic resources are based primarily on information from the aquatic resources delineation report (Madrone Ecological Consulting, LLC 2019a).

The study area supports both common natural communities and natural communities of special concern. Common natural communities are habitats with low species diversity that are widespread, reestablish naturally after disturbance, or support primarily nonnative species. These communities are not generally protected by agencies unless the specific site is habitat for or supports special-status species (e.g., raptor foraging or nesting habitat, upland habitat in a wetland watershed). The common natural community in the study area is annual grassland.

Natural communities of special concern are habitats considered sensitive because of their high species diversity, high productivity, unusual nature, limited distribution, or declining status. Local, state, and federal agencies consider these habitats important. The CNDDDB contains a current list of rare natural communities throughout the state. There are no natural communities of special concern in the study area.

Natural communities and developed areas within the study area are described below.

#### Annual Grassland

The study area predominantly consists of a disturbed annual grassland, which is dominated by the following nonnative annual grasses and forbs: soft brome (*Bromus hordeaceus*), wild and slender oats (*Avena fatua* and *A. barbata*), Italian rye grass (*Festuca perennis*), Mediterranean barley (*Hordeum marinum* ssp. *gussoneanum*), medusahead grass (*Elymus caput-medusae*), yellow star-thistle (*Centaurea solstitialis*), winter vetch (*Vicia villosa*), prickly lettuce (*Lactuca serriola*), wild

geranium (*Geranium dissectum*), and big heron bill (*Erodium botrys*) (Madrone Ecological Consulting, LLC 2019a). Native species observed at lower densities include: slender tarweed (*Holocarpha virgata*), turkey mullein (*Croton setiger*), spikeweed (*Centromadia fitchii*), miniature lupine (*Lupinus bicolor*), small-flowered fiddleneck (*Amsinckia menziesii*), Spanish lotus (*Acmispan americanus*), and butter n' eggs (*Triphysaria eriantha* ssp. *eriantha*).

## Developed Areas

Developed land in an around the study area consists of commercial and industrial areas (e.g., Roseville RV storage, Celebrations Party Rentals and Tents, Erickson Framing, and FedEx), roadways, and UPRR tracks.

## Irrigated Wetlands

Six irrigated wetlands, totaling 0.259 acre, were mapped in the eastern half of the study area by Madrone (2019a) (Figure 3-1). These features are small, shallow depressions that contain plant species indicative of summer moisture, which is thought to originate from periodic irrigation runoff from adjacent landscaping (Madrone Ecological Consulting, LLC 2019a). Although 1.24 inches of rain had fallen between March 14 and 18, 2020, these features did not contain water during the March 19, 2020 site visit conducted by ICF (National Oceanic and Atmospheric Administration 2020). This lack of water suggests that these irrigated wetlands do not hold surface water for very long, which would discourage aquatic invertebrates from inhabiting these wetland features. The irrigated wetlands include the following dominant species: Italian rye grass, spike rush (*Eleocharis macrostachya*), Mediterranean barley, hyssop loosestrife (*Lythrum hyssopifolia*), tall flat sedge (*Cyperus eragrostis*), soft rush (*Juncus effusus*), sandbar willow (*Salix exigua*), black willow (*S. gooddingii*), and Fremont's cottonwood (*Populus fremontii*). The irrigated wetlands are artificially created features and were determined to be non-jurisdictional by the USACE and RWQCB (Madrone Ecological Consulting, LLC 2019a; U.S. Army Corps of Engineers 2019; VonderOhe pers.comm.).

## Artificially Created Seasonal Wetland

Three artificially created seasonal wetlands (totaling 0.035 acre) were mapped in the western portion of the study area in 2019 (Figure 3-1) (Madrone Ecological Consulting, LLC 2019a). Dominant plant observed species in the seasonal wetlands include: Italian rye grass, hyssop loosestrife, toad rush (*Juncus bufonius* var. *bufonius*), needle-leaf navarretia (*Navarretia intertexta*), and purslane speedwell (*Veronica peregrina*).

Historical aerial photography of the study area was reviewed and prior to 2016 no wetlands were present; therefore, it was determined that these features were the result of grading activities that occurred in 2016 (Madrone Ecological Consulting,



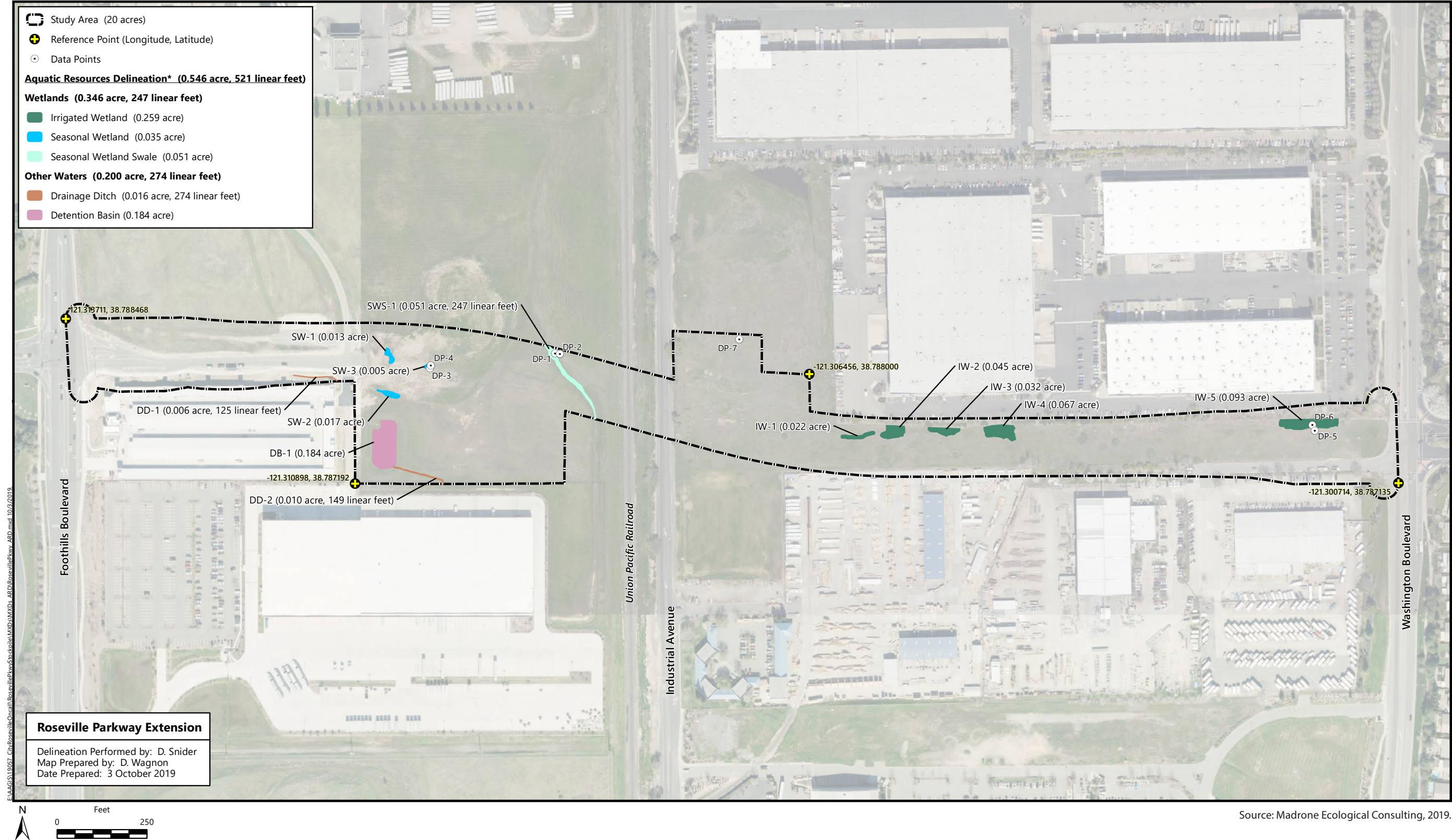


Figure 3-1 Biological Resources



LLC 2019a). During the March 2020 ICF site visit, these features contained moist soil, but lacked standing water, despite the 1.24 inches of rain that fell between March 14 and 18, 2020 (National Oceanic and Atmospheric Administration 2020).

The 2016 grading was part of a grading plan that covered two parcels, totaling 60 acres between Foothills Boulevard and Industrial Boulevard. The 60 acres graded in 2016 overlap with the eastern half of the proposed project. The grading plan was analyzed under the NIPA PCL 50-Foothills Corporate Center Grading Plan Mitigated Negative Declaration (City of Roseville 2012). Mitigation for the Foothills Corporate Center grading project included a payment to the National Fish and Wildlife Fund for the purchase of 0.272 acre of vernal pool creation credits to mitigate for 0.258 acre of impacts on waters of the United States (Central Valley Regional Water Quality Control Board 2012).

The seasonal wetlands are artificially created features and were determined to be non-jurisdictional by the USACE and RWQCB (Madrone Ecological Consulting, LLC 2019a; U.S. Army Corps of Engineers 2019; VonderOhe pers.comm.).

In the grassland north of and adjacent to the study area, 15 topographic depressions were observed during the April 10, 2020 site visit (a protocol delineation was not conducted); these features were either inundated or saturated, and were dominated by the same suite of plant species observed in the study area, with the addition of bracted popcorn flower (*Plagiobothrys bracteatus*). In the western half of the grassland containing the study area, there are two long linear features (approximately 475 and 725 feet long) draining north; the remaining features are relatively small and scattered in the grassland containing the study area. East of Industrial Avenue in the grassland containing the study area, a long wetland ditch extends to a larger wetland ringed with black willow, sandbar willow, and Fremont's cottonwood.

### **Seasonal Wetland Swale**

A 0.051-acre seasonal wetland swale was mapped in the western portion of the study area in 2019 (Figure 3-1) (Madrone Ecological Consulting, LLC 2019a). Dominant plant species in the swale included Italian rye grass, small quaking grass (*Briza minor*), medusahead, medusahead grass, Mediterranean barley, and hyssop loosestrife.

This feature is fed by runoff from an industrial building on the south side of the study area, ultimately draining to the storm drain system (Madrone Ecological Consulting, LLC 2019a). Although the seasonal wetland swale existed prior to construction of the industrial building, historic aerial imagery and the aquatic mapping for the grading in 2016 indicate that this feature did not receive sufficient water to function as a wetland (Madrone Ecological Consulting, LLC 2019a). During the March 19, 2020 site visit, ICF biologists observed the swale's continuation north through a

large topographical depression that had been recently tilled. Continuing north, beyond the topographical depression, the swale passes through the southeast corner of the Albertsons grocery store distribution center property and into a ditch. The ditch is bounded on the east by the railroad, and on the west by the Albertsons development. On March 19, 2020, surface water was present in the swale and the soil was saturated. No invertebrates were observed.

The seasonal wetland swale within the project boundary was determined to be non-jurisdictional by the USACE and RWQCB (Madrone Ecological Consulting, LLC 2019a; U.S. Army Corps of Engineers 2019; VonderOhe pers.comm.).

### **Drainage Ditch**

Two drainage ditches are located in the western half of the study area. Dominant plant species observed within the two western ditches include sedges (*Carex* sp.), cattails (*Typha* sp.), and Italian rye grass.

The features in the western half of the study area appear to have been excavated for drainage purposes in support of industrial development (Madrone Ecological Consulting, LLC 2019a) (Figure 3-1). These ditches are connected to other human-made features (culverts and detention basins). The two western ditches were determined to be non-jurisdictional by the USACE and RWQCB (Madrone Ecological Consulting, LLC 2019a; U.S. Army Corps of Engineers 2019; VonderOhe pers.comm.).

### **Detention Basin**

A 0.184-acre detention basin is located in the southwestern portion of the study area and abuts the FedEx Ground and Roseville Self Storage facilities (Figure 3-1). Dominant plant species observed in the detention basin included spike rush, cattails (*Typha* spp.), and rabbits foot grass (*Polypogon monspeliensis*).

This feature was constructed to capture runoff from the commercial facilities. The detention basin was determined to be non-jurisdictional by the USACE and RWQCB (Madrone Ecological Consulting, LLC 2019a; U.S. Army Corps of Engineers 2019; VonderOhe pers.comm.). On March 19, 2020, the basin was inundated (estimated to be less than 1 foot deep), which was likely the result of 1.24 inches of rain that had fallen between March 14 and 18, 2020 (National Oceanic and Atmospheric Administration 2020). Invertebrates and tadpoles (Pacific tree frog [*Pseudacris regilla*]) were observed in the detention basin during the March 19, 2020 site visit by ICF biologists.

#### **3.2.4.3 Special-Status Species**

For the purpose of this initial study/mitigated negative declaration (IS/MND), special-status species are plants and animals that are legally protected under the federal



Endangered Species Act (ESA), California Endangered Species Act (CESA), or other regulations, and species that are considered sufficiently rare by the scientific community to qualify for such listing. Special-status plants and animals are those species in any of the categories listed below.

- Species listed or proposed for listing as threatened or endangered under the federal ESA (50 Code of Federal Regulations Section 17.11 [listed animals], 50 Code of Federal Regulations Section 17.12 [listed plants], and various notices in the *Federal Register* [proposed species]).
- Species that are candidates for possible future listing as threatened or endangered under the federal ESA (80 *Federal Register* 80584, December 24, 2015).
- Species listed or proposed for listing by the State of California as threatened or endangered under CESA (14 California Code of Regulations Section 670.5).
- Species that meet the definitions of rare or endangered under CEQA (State CEQA Guidelines Section 15380).
- Plants listed as rare under California Native Plant Protection Act (California Fish and Game Code Section 1900 et seq.).
- Plants with a California Rare Plant Rank of 1 or 2.
- Animal species of special concern to the California Department of Fish and Wildlife (CDFW).
- Animals fully protected in California (California Fish and Game Code Section 3511 [birds], Section 4700 [mammals], Section 5050 [amphibians and reptiles], and Section 5515 [fish]).

Based on a review of this information and surveys conducted by Madrone (2019a, 2019b) and ICF biologists, the project site and adjacent areas that contain annual grasslands and seasonal wetlands and swales support potential habitat for the following special-status plant and wildlife species.

### **Special-Status Plant Species**

Based on queries of the CNDDDB, CNPS's rare plant inventory, the U.S. Fish and Wildlife Service (USFWS) website, a review of Madrone 2019a and 2019b, and ICF's vegetation survey, 15 special-status plant species were identified as occurring in the project region (Table 3-6). The natural communities in the study area contain potential habitat for eight of the 15 species. The remaining seven species have habitat or microhabitat requirements that are not present in the study area or that occur at elevations substantially higher than the study area. Additionally, the relatively high level of historical and ongoing disturbance drastically reduces the quality of potential habitat for special-status plant species in the study area.

The April 10, 2020 botanical survey of the study area coincided with the identifiable period of eight special-status plants with potential to occur in the study area. No special-status plant species were observed in the study area and as a result, are not further analyzed in this document.

**Table 3-6. Sensitive Plant Species Known or with Potential to Occur in the Project Region**

| Common Name<br>Scientific Name                                      | Status <sup>a</sup>    | Geographic Distribution                                                                      | General Habitat Description                                                                                                            | Blooming Period  | Likelihood for Occurrence in the Study Area                                                                                                                                                      |
|---------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                     | Federal/<br>State/CRPR |                                                                                              |                                                                                                                                        |                  |                                                                                                                                                                                                  |
| Big-scale balsamroot<br><i>Balsamorhiza macrolepis</i>              | —/—/1B.2               | Scattered occurrences in the Coast Ranges and Sierra Nevada Foothills                        | Sometimes on serpentine soils in chaparral, cismontane woodland, valley and foothill grassland; 295–5,101 feet.                        | March–June       | None: The disturbed grassland in the study area supports low-quality habitat. Species was not observed during appropriately timed April 10, 2020 botanical survey.                               |
| Valley brodiaea<br><i>Brodiaea rosea</i> ssp. <i>vallicola</i>      | —/—/4.2                | Northern Sierra Nevada Foothills, eastern Sacramento Valley, northeastern San Joaquin Valley | Valley and foothill grassland (swales), vernal pools, on old alluvial terraces composed of silty, sandy, gravelly loam; 30–1,100 feet. | April–May (June) | None: The disturbed grassland in the study area supports low-quality habitat. Species was not observed during appropriately timed April 10, 2020 botanical survey.                               |
| Hispid bird's-beak<br><i>Chloropyron molle</i> ssp. <i>hispidum</i> | —/—/1B.1               | Central Valley in Alameda, Fresno, Kern, Merced, Placer, and Solano Counties                 | Meadows and seeps, playas, valley and foothill grassland, on alkaline soils; 3–508 feet                                                | June–September   | None: The disturbed grassland does not contain suitable alkaline soil habitat. Species was not observed during appropriately timed September 5 and 25, 2019 wetland survey.                      |
| Brandegee's clarkia<br><i>Clarkia biloba</i> ssp. <i>brandegeae</i> | —/—/4.2                | Northern Sierra Nevada foothills from Butte County to El Dorado County                       | Chaparral, oak woodland; 970–2,900 feet                                                                                                | May–July         | None: Study area does not contain suitable habitat (chaparral or oak woodland).                                                                                                                  |
| Dwarf downingia<br><i>Downingia pusilla</i>                         | —/—/2B.2               | Central Valley                                                                               | Valley and foothill grassland (mesic), vernal pools; below 1,459 feet                                                                  | March–May        | None: The seasonal wetland swale supports marginally suitable hydrology and could provide suitable habitat. Species was not observed during appropriately timed April 10, 2020 botanical survey. |

| Common Name<br>Scientific Name                                            | Status <sup>a</sup>    | Geographic Distribution                                                                                                                                                                                                                  | General Habitat Description                                                                                                            | Blooming Period | Likelihood for Occurrence in the Study Area                                                                                                                                                                    |
|---------------------------------------------------------------------------|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------|-----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                           | Federal/<br>State/CRPR |                                                                                                                                                                                                                                          |                                                                                                                                        |                 |                                                                                                                                                                                                                |
| Stinkbells<br><i>Fritillaria agrestis</i>                                 | —/—/4.2                | Outer North Coast Ranges, Sierra Nevada Foothills, Central Valley, central western California                                                                                                                                            | Grasslands, foothill woodlands, and open grassy areas in chaparral, between 30–5,100 ft                                                | March–June      | None: The disturbed grassland in the study area supports low-quality habitat. Species was not observed during appropriately timed April 10, 2020 botanical survey.                                             |
| Boggs Lake hedge-hyssop<br><i>Gratiola heterosepala</i>                   | —/E /1B.2              | Inner North Coast Ranges, Central Sierra Nevada Foothills, Sacramento Valley and Modoc Plateau: Fresno, Lake, Lassen, Madera, Merced, Modoc, Placer, Sacramento, Shasta, Siskiyou, San Joaquin, Solano, and Tehama Counties; also Oregon | Clay soils in areas of shallow water, marshes and swamps (lake margins), vernal pools; 33–7,791 feet                                   | April–August    | None: Species requires vernal pools or seasonal wetlands with extended hydroperiod, which do not occur in the study area. Species was not observed during appropriately timed April 10, 2020 botanical survey. |
| Ahart's dwarf rush<br><i>Juncus leiospermus</i> var. <i>ahartii</i>       | —/—/1B.2               | Eastern Sacramento Valley, northeastern San Joaquin Valley with occurrences in Butte, Calaveras, Placer, Sacramento, Tehama, and Yuba Counties                                                                                           | Wet areas in valley and foothill grassland (mesic); 98–751 feet                                                                        | March–May       | None: Species requires vernal pools or seasonal wetlands with extended hydroperiod, which do not occur in the study area. Species was not observed during appropriately timed April 10, 2020 botanical survey. |
| Red Bluff dwarf rush<br><i>Juncus leiospermus</i> var. <i>leiospermus</i> | —/—/1B.1               | Northern Sacramento Valley and Cascade Range foothills with occurrences in Butte, Placer, Shasta, and Tehama Counties                                                                                                                    | Seasonally wet areas in chaparral, cismontane woodland, meadows and seeps, valley and foothill grassland, vernal pools; 115–4,101 feet | March–June      | None: Species requires vernal pools or seasonal wetlands with extended hydroperiod, which do not occur in the study area. Species was not observed during appropriately timed April 10, 2020 botanical survey. |



| Common Name<br>Scientific Name                                                | Status <sup>a</sup>    | Geographic Distribution                                                                                                          | General Habitat Description                                                                                 | Blooming Period | Likelihood for Occurrence in the Study Area                                                                                                                                                                                                                           |
|-------------------------------------------------------------------------------|------------------------|----------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------|-----------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                               | Federal/<br>State/CRPR |                                                                                                                                  |                                                                                                             |                 |                                                                                                                                                                                                                                                                       |
| Legenere<br><i>Legenere limosa</i>                                            | —/—/1B.1               | Primarily in the lower Sacramento Valley, also from north Coast Ranges, northern San Joaquin Valley and the Santa Cruz Mountains | Deep, seasonally wet habitats such as vernal pools, ditches, marsh edges, and river banks; below 2,887 feet | April–June      | None: The recently constructed detention basin contains potential low-quality habitat, but the feature is hydrologically isolated and species occurrence is extremely unlikely. Species was not observed during appropriately timed April 10, 2020 botanical survey.  |
| Pincushion navarretia<br><i>Navarretia myersii</i> ssp. <i>myersii</i>        | —/—/1B.1               | Central Valley in Amador, Calaveras, Merced, Placer, and Sacramento Counties                                                     | Edge of vernal pools; 66–1,083 feet                                                                         | April–May       | None: The seasonal wetland swale has low-quality potentially suitable habitat. Species was not observed during appropriately timed April 10, 2020 botanical survey.                                                                                                   |
| Adobe navarretia<br><i>Navarretia nigelliformis</i> ssp. <i>nigelliformis</i> | —/—/4.2                | Great Valley and adjacent foothills                                                                                              | Vernal pools and clay flats; below 3,280 feet                                                               | April–June      | None: The seasonal wetland swale has low-quality potentially suitable habitat. Species was not observed during appropriately timed April 10, 2020 botanical survey.                                                                                                   |
| Sacramento Orcutt grass<br><i>Orcuttia viscida</i>                            | E/E/1B.1               | Endemic to Sacramento County                                                                                                     | Vernal pools; 98–328 feet                                                                                   | April–July      | None: The seasonal wetland swale has low-quality potentially suitable habitat. Species was not observed during appropriately timed April 10, 2020 botanical survey.                                                                                                   |
| Sanford's arrowhead<br><i>Sagittaria sanfordii</i>                            | —/—/1B.2               | Scattered locations in Central Valley and Coast Ranges                                                                           | Marshes and swamps (assorted shallow, slow-moving freshwater); below 2,132 feet                             | May–Oct         | None: The recently constructed detention basin contains potential low-quality habitat, but the feature is hydrologically isolated and species occurrences is extremely unlikely. Species was not observed during appropriately timed April 10, 2020 botanical survey. |

<sup>a</sup> Status explanations:

| Status <sup>a</sup>                                                                                               |                         | General Habitat Description | Blooming Period | Likelihood for Occurrence in the Study Area |
|-------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------------------|-----------------|---------------------------------------------|
| Common Name                                                                                                       | Federal/ State/CRPR     |                             |                 |                                             |
| Scientific Name                                                                                                   | Geographic Distribution |                             |                 |                                             |
| Federal                                                                                                           |                         |                             |                 |                                             |
| E = Listed as endangered under the federal ESA.                                                                   |                         |                             |                 |                                             |
| — = No listing status.                                                                                            |                         |                             |                 |                                             |
| State                                                                                                             |                         |                             |                 |                                             |
| E = Listed as endangered under CESA.                                                                              |                         |                             |                 |                                             |
| — = No listing status.                                                                                            |                         |                             |                 |                                             |
| CRPR                                                                                                              |                         |                             |                 |                                             |
| 1B = rare, threatened, or endangered in California and elsewhere.                                                 |                         |                             |                 |                                             |
| 2 = rare, threatened, or endangered in California but more common elsewhere.                                      |                         |                             |                 |                                             |
| 4 = limited distribution; species on a watch list                                                                 |                         |                             |                 |                                             |
| .1 = seriously endangered in California (over 80% of occurrences threatened–high degree and immediacy of threat). |                         |                             |                 |                                             |
| .2 = fairly endangered in California (20–80% occurrences threatened).                                             |                         |                             |                 |                                             |

## Special-Status Wildlife Species

Based on a review of existing information, including a special-status species habitat evaluation conducted by Madrone (2019b), CNDDDB species occurrences within 5 miles of the study area [2020], and USFWS species list [2020] for the study area, 23 special-status wildlife species were determined to have the potential to occur in the project region (Table 3-7). After completion of the 2020 field surveys and review of species distribution and habitat requirements data, the biologists determined that 18 of the 23 species would not occur in the study area because the area lacks suitable habitat or is outside the species' known range. An explanation for the absence of each of these species from the study area is provided in Table 3-7.

Two special-status bat species (Townsend's big-eared bat [*Corynorhinus townsendii townsendii*] and western red bat [*Lasiurus blossevillei*]) could forage over the study area but are not expected to roost in the study area based on the lack of suitable roost trees or structures.

The CNDDDB contains records of vernal pool fairy shrimp (*Branchinecta lynchi*), a federally threatened species, and vernal pool tadpole shrimp (*Lepidurus packardii*), a federally endangered species, in the vicinity of the study area. Based on a special-status species habitat assessment conducted by Madrone in 2019 for the project (2019b), vernal pool tadpole shrimp and vernal pool fairy shrimp are not expected to occur in the study area. Madrone (2019b) provides the following rationale for the species absence. No aquatic resources within the study area were observed to have the appropriate hydroperiod for vernal pool tadpole shrimp (i.e., inundation of at least 54 days to complete life cycle, but with complete dry-down). Three seasonal wetlands and a seasonal wetland swale that occur within the study area may inundate sufficiently to support vernal pool fairy shrimp (i.e., 18-day life cycle); however, these wetlands were formed as a result of construction in the fall of 2016. The area where these wetlands formed was disturbed during the 2012/2013 construction and then again in 2016. It appears that the wetlands are located on fill material, and the relatively minimal vegetation that has established since their creation indicates that the fill soil was likely sterile. There are no aquatic resources upstream of the study area wetlands that could provide a source for the species to become established, and there is no apparent hydrological connection to any other wetland features. This effectively eliminates the transport of vernal pool shrimp or their eggs through watershed processes.

Suitable habitat is present in the study area for the remaining five species listed and discussed below.

- Western spadefoot (*Spea hammondi*)
- Swainson's hawk (*Buteo swainsoni*)

- Northern harrier (*Circus cyaneus*)
- White-tailed kite (*Elanus lucurus*)
- Burrowing owl (*Athene cunicularia*)

### **Western Spadefoot**

The western spadefoot is designated as a state species of special concern. Western spadefoot toads typically inhabit lowland habitats such as washes, floodplains of rivers, alluvial fans, playas, and alkali flats. This species may also be found in the foothills and mountain regions. Western spadefoot toads prefer areas of open vegetation and short grasses where the soil is sandy or gravelly (U.S. Fish and Wildlife Service 2005). They are found in the valley and foothill grasslands, open chaparral, and pine-oak woodlands. Spadefoot toads are primarily terrestrial and require upland habitats for feeding and for constructing burrows for their long dry-season dormancy (U.S. Fish and Wildlife Service 2005). They require wetlands for reproduction and have been observed in a variety of permanent and temporary wetlands including rivers, creeks, pools in intermittent streams, vernal pools, and temporary rain pools (U.S. Fish and Wildlife Service 2005). Larval development can be completed in 3 to 11 weeks but has been known to take up to 79 days from hatching to metamorphosis (U.S. Fish and Wildlife Service 2005). Vernal pools and other temporary wetlands may be optimal for breeding because of the absence or reduced abundance of predators (U.S. Fish and Wildlife Service 2005).

The detention basin provides potential breeding habitat for western spadefoot because it retains water for a sufficient period of time to support larval development (minimum of 30 days). The closest CNDDDB occurrences for spadefoot in the vicinity of the study area consists of a 1990 record in the vicinity of Pleasant Grove Boulevard and Woodcreek Oaks Boulevard, approximately 1.1 miles southwest of the study area (California Department of Fish and Wildlife 2020).

**Table 3-7. Sensitive Wildlife Species Known or with Potential to Occur in the Project Region**

| <b>Common Name<br/>Scientific Name</b>                                        | <b>Legal Status<br/>(Federal/State)<sup>a</sup></b> | <b>General Habitat Description</b>                                                                                                                                                                                                                                                                                                                                    | <b>Likelihood of Occurrence in the Study Area</b>                                                                                                                                                                                                                                     |
|-------------------------------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Invertebrates</b>                                                          |                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                       |
| Conservancy fairy shrimp<br><i>Branchinecta conservatio</i>                   | E/-                                                 | Largest California fairy shrimp species most often found in large (3,900 to 7,500 meter square) clay bottom vernal pools to very large (356,253 meter square) vernal lakes.                                                                                                                                                                                           | None: Wetland habitat in the study area does not provide the characteristics of occupied habitat known to support Conservancy fairy shrimp.                                                                                                                                           |
| Vernal pool fairy shrimp<br><i>Branchinecta lynchi</i>                        | T/-                                                 | Found in Central Valley, central and south Coast Ranges from Tehama County to Santa Barbara County; isolated populations also in Riverside County; common in vernal pools; also found in sandstone rock outcrop pools.                                                                                                                                                | None: Wetland habitat in the study area does not provide the characteristics of occupied habitat known to support vernal pool fairy shrimp.                                                                                                                                           |
| Vernal pool tadpole shrimp<br><i>Lepidurus packardii</i>                      | E/-                                                 | Found from Shasta County south to Merced County; occur in vernal pools and ephemeral stock ponds.                                                                                                                                                                                                                                                                     | None: Wetland habitat in the study area does not provide the characteristics of occupied habitat known to support vernal pool tadpole shrimp.                                                                                                                                         |
| Valley elderberry longhorn beetle<br><i>Desmocerus californicus dimorphus</i> | T/-                                                 | Stream side habitats below 3,000 feet throughout the Central Valley; occur in riparian and oak savanna habitats with elderberry shrubs; elderberries are the host plant.                                                                                                                                                                                              | None: No elderberry shrubs are present in the study area.                                                                                                                                                                                                                             |
| <b>Amphibians</b>                                                             |                                                     |                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                       |
| California red-legged frog<br><i>Rana aurora draytonii</i>                    | T/SSC                                               | Found along the coast and coastal mountain ranges of California from Marin County to San Diego County and in the Sierra Nevada from Tehama County to Fresno County; occur in permanent and semipermanent aquatic habitats, such as creeks and cold-water ponds, with emergent and submergent vegetation; may estivate in rodent burrows or cracks during dry periods. | None: No suitable perennial aquatic habitat is present within the study area and the species has not been previously documented within valley grassland habitat in western Placer County. The closest CNDDB occurrences are more than 30 miles north and northeast of the study area. |

| Common Name<br>Scientific Name                       | Legal Status<br>(Federal/State) <sup>a</sup> | General Habitat Description                                                                                                                                                                                                                                                                                                                                                                                 | Likelihood of Occurrence in the Study Area                                                                                                                                                                                                                                                                                                                                                              |
|------------------------------------------------------|----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Western spadefoot<br><i>Spea hammondi</i>            | –/SSC                                        | Breeding and egg laying in seasonal wetlands such as vernal pools and stock ponds, spends most of the year underground in burrows in annual grasslands and oak woodlands within the Sierra Nevada foothills, Central Valley and Coast Ranges.                                                                                                                                                               | Low: Potential habitat is present at the detention basin in the study area. However, this basin is bound by development to the south and west and annual grassland to the north and east and is routinely disturbed, which reduces the likelihood of occurrence in the study area. Closest CNDDB occurrence is 1.1 miles southwest of the study area (California Department of Fish and Wildlife 2020). |
| <b>Reptiles</b>                                      |                                              |                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Giant garter snake<br><i>Thamnophis couchi gigas</i> | T/T–                                         | Sloughs, canals, low gradient streams and freshwater marsh habitats where there is a prey base of small fish and amphibians; also found in irrigation ditches and rice fields; requires grassy banks and emergent vegetation for basking and areas of high ground protected from flooding during winter.                                                                                                    | None: No suitable perennial marsh or drainage habitat is present within the study area.                                                                                                                                                                                                                                                                                                                 |
| Pacific pond turtle<br><i>Actinemys marmorata</i>    | –/SSC                                        | Occurs throughout California west of the Sierra-Cascade crest; found from sea level to 6,000 feet; does not occur in desert regions except for along the Mojave River and its tributaries; occupies ponds, marshes, rivers, streams, and irrigation canals with muddy or rocky bottoms and with watercress, cattails, water lilies, or other aquatic vegetation in woodlands, grasslands, and open forests. | None: No suitable perennial aquatic habitat is present within the study area. The closest potential habitat is approximately 0.6 mile to the southwest at Woodcreek Golf Club (California Department of Fish and Wildlife 2020).                                                                                                                                                                        |
| <b>Birds</b>                                         |                                              |                                                                                                                                                                                                                                                                                                                                                                                                             |                                                                                                                                                                                                                                                                                                                                                                                                         |
| Bank swallow<br><i>Riparia riparia</i>               | –/T                                          | Occurs along the Sacramento River from Tehama County to Sacramento County, along the Feather and lower American Rivers, in the Owens Valley; and in the plains east of the Cascade Range in Modoc, Lassen, and northern Siskiyou Counties.                                                                                                                                                                  | None: No suitable river or stream bank habitat is present in study area. No known CNDDB occurrence within 2 miles of the study area.                                                                                                                                                                                                                                                                    |

| Common Name<br>Scientific Name                                      | Legal Status<br>(Federal/State) <sup>a</sup> | General Habitat Description                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Likelihood of Occurrence in the Study Area                                                                                                                                                                                                                                        |
|---------------------------------------------------------------------|----------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                                     |                                              | Small populations near the coast from San Francisco County to Monterey County. Nests in bluffs or banks, usually adjacent to water, where the soil consists of sand or sandy loam, along streams, coastal bluffs, and sand/gravel pits.                                                                                                                                                                                                                                                 |                                                                                                                                                                                                                                                                                   |
| Burrowing owl<br><i>Athene cunicularia hypugaea</i>                 | –/SSC                                        | Lowlands throughout California, including the Central Valley, northeastern plateau, southeastern deserts, and coastal areas; rare along south coast; level, open, dry, heavily grazed or low stature grassland or desert vegetation with available burrows.                                                                                                                                                                                                                             | Low: Grassland in the study area represents potential breeding and wintering habitat for the species. No known occurrences within the study area and species was not detected during September 2019 surveys conducted by Madrone (2019b) and March 2020 surveys conducted by ICF. |
| California black rail<br><i>Laterallus jamaicensis coturniculus</i> | –/T, FP                                      | Permanent resident in the San Francisco Bay and eastward through the Delta into Sacramento and San Joaquin Counties; small populations in Marin, Santa Cruz, San Luis Obispo, Orange, Riverside, and Imperial Counties; tidal salt marshes associated with heavy growth of pickleweed; also occurs in brackish marshes or freshwater marshes at low elevations. Recently discovered northern Sierra Nevada foothill population occupies shallow, densely vegetated freshwater wetlands. | None: No suitable freshwater marsh habitat is present within the study area. No known CNDDB occurrence within 2 miles of the study area.                                                                                                                                          |
| Grasshopper sparrow<br><i>Ammodramus savannarum</i>                 | –/SSC                                        | Dry, dense grasslands with a variety of grasses and tall forbs and scattered shrubs in the foothills of the Sierra Nevada and Coast Ranges from Mendocino and Trinity Counties south to San Diego County.                                                                                                                                                                                                                                                                               | Moderate: Suitable foraging and nesting habitat is present within annual grassland in the study area.                                                                                                                                                                             |
| Northern harrier<br><i>Circus cyaneus</i>                           | –/SSC                                        | Occurs in grasslands, meadows, marshes, and seasonal and agricultural wetlands throughout lowland California.                                                                                                                                                                                                                                                                                                                                                                           | High: Suitable nesting and foraging habitat is present within annual grassland in study area. Species was observed foraging in the vicinity of the study area during the March 2020 survey conducted by ICF.                                                                      |

| <b>Common Name<br/>Scientific Name</b>           | <b>Legal Status<br/>(Federal/State)<sup>a</sup></b> | <b>General Habitat Description</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <b>Likelihood of Occurrence in the Study Area</b>                                                                                                                                                                                                                                  |
|--------------------------------------------------|-----------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Purple martin<br><i>Progne subis</i>             | –/SSC                                               | Nests in abandoned woodpecker holes in oaks, cottonwoods, and other deciduous trees in a variety of wooded and riparian habitats. Also nests in vertical drainage holes under elevated freeways and highway.                                                                                                                                                                                                                                                                                                                                          | None: No suitable nesting habitat is present in the study area.                                                                                                                                                                                                                    |
| Swainson's hawk<br><i>Buteo swainsoni</i>        | –/T                                                 | Lower Sacramento and San Joaquin Valleys, the Klamath Basin, and Butte Valley; highest nesting densities occur near Davis and Woodland, Yolo County; nests in oaks or cottonwoods in or near riparian habitats; forages in grasslands, irrigated pastures, and grain fields.                                                                                                                                                                                                                                                                          | High: Annual grassland in the study area represents suitable foraging habitat. Trees adjacent to the study area could support nesting. The closest CNADB nest sites are located 1.4 and 1.8 miles northwest from the study area (California Department of Fish and Wildlife 2020). |
| Tricolored blackbird<br><i>Agelaius tricolor</i> | –/T, SSC                                            | Permanent resident in the Central Valley from Butte County to Kern County; breeds at scattered coastal locations from Marin County south to San Diego County; and at scattered locations in Lake, Sonoma, and Solano Counties; rare nester in Siskiyou, Modoc, and Lassen Counties; nests in dense colonies in emergent marsh vegetation, such as tules and cattails, or upland sites with blackberries, nettles, thistles, and grainfields; habitat must be large enough to support 50 pairs; probably requires water at or near the nesting colony. | None: No suitable nesting habitat is present within the study area. No known CNADB occurrence within 2 miles of the study area.                                                                                                                                                    |
| White-tailed kite<br><i>Elanus leucurus</i>      | –/FP                                                | Lowland areas west of Sierra Nevada from the head of the Sacramento Valley south, including coastal valleys and foothills to western San Diego County at the Mexico border; low foothills or valley areas with valley or live oaks, riparian areas, and marshes near open grasslands for foraging.                                                                                                                                                                                                                                                    | High: Annual grassland in the study area represents suitable foraging habitat. Trees adjacent to the study area could support nesting. The nearest CNADB occurrence is 0.8 mile southwest of the study area                                                                        |

## Mammals



| <b>Common Name<br/>Scientific Name</b>                                | <b>Legal Status<br/>(Federal/State)<sup>a</sup></b> | <b>General Habitat Description</b>                                                                                                                                                                                                                                         | <b>Likelihood of Occurrence in the Study Area</b>                                                                                                                      |
|-----------------------------------------------------------------------|-----------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Townsend's big-eared bat<br><i>Corynorhinus townsendii townsendii</i> | –/SSC                                               | Roosts in caves, tunnels, mines, and dark attics of abandoned buildings; very sensitive to disturbances and may abandon a roost after one on-site visit.                                                                                                                   | None: No suitable roosting habitat is present in the study area. May forage or drink in the study area.                                                                |
| Western red bat<br><i>Lasiurus blossevillii</i>                       | –/SSC                                               | Found throughout much of California at lower elevations. Found primarily in riparian and wooded habitats. Occurs at least seasonally in urban areas. Day roosts in trees within the foliage. Found in fruit orchards and sycamore riparian habitats in the Central Valley. | None: Typically requires larger expanses of wooded habitat for roosting. No suitable roost trees are present in the study area. May forage or drink in the study area. |

**Swainson's Hawk**

Swainson's hawk is a state-listed threatened species. Swainson's hawks forage in grasslands, grazed pastures, alfalfa and other hay crops, and certain grain and row croplands. Vineyards, orchards, rice, and cotton crops are generally unsuitable for foraging because of the density of the vegetation (California Department of Fish and Game 1994). They usually nest in large, mature trees. Most nest sites (87 percent) in the Central Valley are found in riparian habitats (Estep 1989), primarily because trees are more available there. Swainson's hawks also nest in mature roadside trees and in isolated trees in agricultural fields or pastures. The breeding season is from March through August (Estep 1989).

Within the study area, potential nesting habitat for Swainson's hawk is restricted to a few large ash trees along Industrial Avenue, and various other trees within nearby greenbelts that border adjacent industrial and residential developments. The closest documented Swainson's hawk nest sites are 1.4 miles to the northwest in William Huges Park and 1.9 miles to the west-northwest in Veteran's Memorial Park, both adjacent to Pleasant Grove Creek (California Department of Fish and Wildlife 2020). Annual grassland in the study area supports small rodents (e.g., mice, voles, pocket gopher), as evidenced by the numerous burrows and grass tunnels and paths throughout this habitat, and, therefore, represents suitable foraging habitat for Swainson's hawk.

**Northern Harrier**

Northern harrier is designated as California species of special concern. This species is a year-round resident throughout the Central Valley and is often associated with open grassland habitats and agricultural fields. Nests are found on the ground in tall, dense herbaceous vegetation (MacWhirter and Bildstein 1996). Northern harrier nests from April to September, with peak activity in June and July. The breeding population has been reduced, particularly along the southern coast, because of the destruction of wetland habitat, native grassland, and moist meadows and from the burning and plowing of nesting areas during early stages of breeding.

Suitable nesting and foraging habitat for northern harrier is present within annual grassland habitat throughout the study area.

**White-Tailed Kite**

White-tailed kite is designated as California species of special concern and a fully protected species under the California Fish and Game Code. White-tailed kite occurs in coastal and valley lowlands in California. White-tailed kites generally inhabit low-elevation grassland, savannah, oak woodland, wetlands, agricultural, and riparian habitats. Some large shrubs or trees are required for nesting and for communal roosting sites. Nest trees range from small, isolated shrubs and trees to

trees in relatively large stands (Dunk 1995). White-tailed kites make nests of loosely piled sticks and twigs, lined with grass and straw, near the top of dense oaks, willows, and other trees. The breeding season lasts from February through October and peaks from May to August. They forage in undisturbed, open grassland, meadows, farmland, and emergent wetlands.

White-tailed kite could forage within annual grassland habitat throughout the study area. Potential nesting habitat for white-tailed kites in the study area is restricted to a few large ash trees along Industrial Avenue, and in various other trees along nearby greenbelts that border adjacent industrial and residential developments as described above for Swainson's hawk. Nesting white-tailed kites have been documented 0.8 mile southwest of the study area along the border of Woodcreek Golf Course and Hewlett-Packard.

### **Burrowing Owl**

Burrowing owl is a state species of special concern and is protected during its nesting season under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code Section 3503.5. Burrowing owl is a ground-nesting raptor that typically uses burrows of other species, such as ground squirrels, for nesting, protection, and shelter. Burrowing owls are a year-long resident in a variety of grasslands, as well as in scrublands with a low density of trees and shrubs and low-growing vegetation. Burrowing owls that nest in the Central Valley may winter elsewhere. The primary habitat requirement of the burrowing owl is burrows appropriate for nesting. Burrowing owls usually nest in abandoned burrows, although they have been known to construct their own burrows in softer soils. In urban and agricultural areas, burrowing owls often use artificial burrows, such as cement culverts, cement, asphalt, or wood debris piles, or openings beneath cement or asphalt pavement, particularly pipes. This owl breeds from March through August and is most active while hunting during dawn and dusk (California Department of Fish and Game 1995).

Annual grassland in the study area represents potential wintering and breeding habitat for burrowing owls. Although no burrowing owl occurrences are known within the study area, small mammal burrows and piles of concrete rubble are present and provide potentially suitable burrow habitat. Burrowing owls or evidence of burrowing owl use (e.g., whitewash, pellets, feathers) were not observed in the study area during the September 2019 surveys conducted by Madrone (2019b) and during March 2020 surveys conducted by ICF.

### **Non-Special-Status Migratory Birds**

In addition to special-status species, non-special-status migratory birds and raptors could nest on or adjacent to the project site, and their occupied nests and eggs are

protected by California Fish and Game Code Sections 3503 and 3503.5 and the federal MBTA.

### 3.2.4.4 Impact Analysis

- a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

Work on the project site could directly or indirectly (through habitat modification) affect wildlife species identified as special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. There is no suitable habitat for special-status fish and botanical surveys did not identify any special-status plants on the project site. Therefore, special-status fish and plants are not analyzed in this section. A description of the potential effects on western spadefoot toad and ground-nesting migratory birds and raptors is provided below.

#### **Western Spadefoot Toad**

Although suitable breeding habitat in the detention basin would be avoided during construction, upland habitat would be removed or otherwise altered by construction activities such as grading, excavation, and stockpiling of soil. These activities could also result in injury or mortality to western spadefoot toads. Western spadefoot toads could also become entrapped in open trenches or other project facilities. Because the population of western spadefoots in western Placer County is expected to be small and a large amount of potential upland habitat would be disturbed as a result of the proposed project, the loss of individuals would be considered significant.

Implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 would reduce this impact to a less-than-significant level and ensure that the proposed project would avoid potential impacts on western spadefoot.

**Special-Status and Non-Special-Status Migratory Birds and Raptors.** Ground-nesting migratory birds and raptors could nest in and adjacent to the project site, including the burrowing owl and northern harrier (both California species of special concern). Riparian and oak woodland habitats in the vicinity of the project site contain numerous trees that provide suitable nesting habitat for raptor species, including Swainson's hawk (state-listed as threatened) and white-tailed kite (fully protected). Implementation of the proposed project could result in removal or disturbance of occupied bird or raptor nests during the breeding season (generally March 1–August 30). Construction activities during the breeding season that result in death of young or loss of reproductive potential would violate California Fish and Game Code Section 3503 (active bird nests) and Section 3503.5 (active raptor

nesses) and the MBTA. This impact would be significant. The City will implement Mitigation Measures BIO-1, BIO-2, and BIO-4 to reduce this impact to a less-than-significant level.

***b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?***

The proposed project would not have a substantial adverse effect on any riparian habitat or sensitive natural community because none occurs on the project site. There would be no impact.

***c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?***

The proposed project would not have a substantial adverse effect on state or federally protected wetlands as defined by Section 404 of the Clean Water Act because no jurisdictional wetlands and non-wetland waters occur on the project site. The aquatic resources delineation and corresponding approved jurisdictional determination by the USACE determined that no waters of the U.S. are present on the project site (Madrone Ecological Consulting, LLC 2019a; U.S. Army Corps of Engineers 2019). As discussed previously, the RWQCB concurred with this determination and provided confirmation that the disturbed and artificially created features on the project site would not be considered waters of the State. There would be no impact.

***d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?***

The study area is predominantly undeveloped but is bordered and divided by major roadways including Industrial Avenue, Foothill Boulevard, and Washington Boulevard. The study area is also bordered by industrial development to the north and south and residential development to the east. Therefore, the proposed project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. There would be no impact.

***e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance (including essential fish habitat)?***

The proposed project would not conflict with any local policies or ordinance protecting biological resources, including Chapter 19.66 (Tree Preservation) in the Roseville Municipal Code. The project site does not support native oaks that would meet the City's definition of protected trees. There would be no impact.

***f) Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan?***

There are no approved habitat conservation plans, natural community conservation plans, or other adopted plans that would apply to the proposed project. Accordingly, there would be no impact.

### **3.2.4.5 Mitigation Measures**

**Mitigation Measure BIO-1: Install Fencing and/or Flagging to Protect Sensitive Biological Resources**

Prior to construction, the City's contractor will install high-visibility orange construction fencing and/or flagging around the detention basin to ensure direct and indirect effects on suitable habitat for western spadefoot is avoided. The City will ensure that the final construction plans show the locations where fencing and/or flagging will be installed. The plans will also define the fencing installation procedure. The City or contractor (at the discretion of the City) will ensure that the fencing is maintained throughout the duration of the construction period. If the fencing is removed, damaged, or otherwise compromised during the construction period, construction activities will cease until the fencing is repaired or replaced. The project's special provisions package will provide clear language regarding acceptable fencing material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within environmentally sensitive areas. A note specifying this information will be included on the project Improvement Plans.

**Mitigation Measure BIO-2: Conduct Mandatory Environmental Awareness Training for Construction Personnel**

Before any work occurs in the project area, including grading, the City will retain a qualified biologist (familiar with the resources to be protected) to conduct a mandatory contractor/worker environmental awareness training for construction personnel. The awareness training will be provided to all construction personnel

(contractors and subcontractors) to brief them on the need to avoid effects on sensitive biological resources adjacent to construction areas.

The environmental training also will cover general restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on sensitive biological resources during project construction. The crew foreman will be responsible for ensuring that crew members adhere to these guidelines and restrictions, and that new personnel review the environmental training prior to starting work on-site.

**Mitigation Measure BIO-3: Provide Escape Ramps for Wildlife and Inspect Pits and Trenches Daily**

To prevent inadvertent entrapment of western spadefoot toads during construction in grassland habitat, all excavated, steep-walled holes, and trenches more than 6 inches deep, will be provided with one or more escape ramps constructed of earth fill or wooden planks and will be inspected prior to being filled to ensure that no wildlife are present. In the event that holes or pits cannot be ramped, they will be properly covered at night to prevent access by wildlife. Coverings may consist of wooden boards, metal plates, or tarps held down by soil or rocks, with no openings between the cover and the ground. The biological monitor or a designated construction crew member will inspect covered and open trenches and pits each morning and evening during construction to look for spadefoot toads or other wildlife that may have become trapped. It should be noted that spadefoot toads can fall into a trench or pit through the excavated wall of the trench or pit; therefore, these areas must be inspected daily, even if covered.

**Mitigation Measure BIO-4: Construct the Project during the Nonbreeding Season or Conduct Pre-Construction Surveys for Nesting Migratory Birds and Raptors**

Where vegetation removal is required to construct project features, the City will conduct this activity during the nonbreeding season for migratory birds and raptors (generally between September 1 and February 28), to the extent feasible.

If construction activities (including vegetation removal) cannot be confined to the nonbreeding season, the City will retain a qualified wildlife biologist with knowledge of the relevant species to conduct nesting surveys before the start of construction. The migratory bird and raptor nesting surveys will include a minimum of two separate surveys to look for active migratory bird and raptor nests. Surveys will include a search of all vegetation that provides suitable nesting habitat in the construction area. In addition, a 500-foot area around the construction area will be surveyed for raptors (including burrowing owl) and a 100-foot area around the construction area will be surveyed for song birds. In

addition, solitary trees and woodland habitats within 0.25 mile of the project site will be surveyed for nesting Swainson's hawks. For survey areas outside the project site, the surveyors will walk areas where property access is authorized. For portions of the survey area without property access, the biologist will scan vegetation using binoculars from the project site or from public roads. One survey should be conducted no more than 14 days prior to construction and the second survey should be conducted within 48 hours of the start of construction or vegetation removal. If no active nests are detected during these surveys, no protective measures are required.

If an active nest is found in the survey area, a no-disturbance buffer will be established around the nest site to avoid disturbance or destruction of the nest until the end of the breeding season (August 31) or after a qualified wildlife biologist determines that the young have fledged and moved out of the nesting substrate (this date varies by species). The extent of these buffers will be determined by the biologist and will depend on the level of construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species but will be established a minimum of 50 feet from active construction for passerine species and up to 500 feet for non-listed raptor species. A minimum buffer of 1,000 feet will be established for an active Swainson's hawk nest. If site-specific conditions or the nature of the activity (e.g., steep topography, dense vegetation, or minimal construction activities) indicate that a smaller buffer could be used, the City will coordinate with CDFW to determine the appropriate buffer size.

### 3.2.4.6 References

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### 3.2.5 Cultural Resources

| V. Cultural Resources                                                                                                | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact                           |
|----------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-------------------------------------|
| Would the project:                                                                                                   |                                |                                                    |                              |                                     |
| a. Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?      | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5? | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>     | <input type="checkbox"/>            |
| c. Disturb any human remains, including those interred outside of dedicated cemeteries?                              | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>     | <input type="checkbox"/>            |

#### 3.2.5.1 Setting Precontact Context

Although the Sacramento Valley may have been inhabited by humans as early as 10,000 years ago, the evidence for early human use likely is buried under deep alluvial sediments that accumulated rapidly during the late Holocene epoch. Archaeological remains of this early period, although rare, have been identified in and around the Central Valley (Johnson 1967; Treganza and Heizer 1953). Johnson (1967) presents evidence for some use of the Mokelumne River area, under what is now Camanche Reservoir, during the late Pleistocene. Archaeologists working at the reservoir found a number of lithic cores and a flake associated with Pleistocene gravels. These archaeological remains have been grouped into what is called the *Farmington Complex*, characterized by core tools and large, reworked percussion flakes (Treganza and Heizer 1953). The economy of this early period is generally thought to be based on exploitation of large game. Later periods are better understood due to more abundant representation in the archaeological record.

The taxonomic framework of the Sacramento Valley has been described in terms of archaeological patterns (Moratto 1984). A *pattern* is a general mode of life characterized archaeologically by technology, particular artifacts, economic systems, trade, burial practices, and other aspects of culture. Fredrickson (1973) identified three general patterns of resource use for the period between 4,500 and 3,500 years before present (BP): the Windmill, Berkeley, and Augustine Patterns.

The Windmill Pattern (4,500–3,000 BP) shows evidence of a mixed economy of game procurement and use of wild plant foods. Windmill archaeological assemblages include numerous projectile points and a wide range of faunal remains. Hunting was not limited to terrestrial animals; fishing hooks and spears have been

found in association with the remains of sturgeon, salmon, and other fish (Moratto 1984). Plants also were used, as indicated by ground stone artifacts and clay balls used for boiling acorn mush. Settlement strategies reflect seasonal adaptations: habitation sites in the valley were occupied during winter with populations moving into the foothills during summer (Moratto 1984).

The Windmill Pattern ultimately changed to a more specialized adaptation entitled the Berkeley Pattern (3,500–2,500 BP). At Berkeley Pattern sites, the use of manos and metates declines in favor of mortars and pestles, indicating greater dependence on acorns. Although gathered resources gained importance during this period, the continued presence of projectile points and atlatls (spear-throwers) in the archaeological record indicates that hunting was still an important activity (Fredrickson 1973).

The Berkeley Pattern was superseded by the Augustine Pattern around AD 500. The Augustine Pattern reflects a change in subsistence and land use patterns to those of the ethnographically known people, the Nisenan, of the historic era. This pattern exhibits high elaboration of ceremonial and social organization, including the development of social stratification. Augustine Pattern assemblages show that well-developed exchange networks were present, along with an increased emphasis on acorn use, evidenced by abundant shaped mortars and pestles, along with hopper mortars. Other notable elements of Augustine Pattern assemblages include flanged tubular smoking pipes, harpoons, clamshell disc beads, and an elaborate baked clay industry that included figurines and pottery vessels (Cosumnes Brownware). The use of the bow and arrow is suggested by the presence of small projectile point types (Gunther Barbed). Mortuary ritual of Augustine Pattern sites includes the introduction of pre-interment burning of offerings in grave pits. Also indicated by Augustine Pattern assemblages are increased village sedentism, population growth, and an incipient monetary economy in which beads were used as a standard of exchange (Moratto 1984).

### **3.2.5.2 Ethnographic Context**

The Nisenan occupied the project area at the time of Euroamerican contact and spoke a Maiduan language (Wilson and Towne 1978:387). The Maiduan family of languages is part of the Penutian stock (Shipley 1978:82, 83). Penutian speakers occupied the Central Valley, Central Sierra Nevada, and the San Francisco Bay area at the time of Euroamerican contact.

The Nisenan occupied the lower Feather River drainage and the drainages of the Yuba, Bear, and American Rivers. The boundary with the Miwok to the south was near the Cosumnes River. The western boundary was the Sacramento River, and the eastern boundary was the crest of the Sierra Nevada (Wilson and Towne 1978:387; Kroeber 1925 [1976]: Plate 37).

The principal Nisenan villages and associated smaller settlements controlled resources within a territory containing between 20 and 500 residents (Wilson and Towne 1978:388). Families in each territory controlled specific oak groves and fishing sites. A headman who lived in the principal village arbitrated disputes, directed festivities, provided advice, and consulted with family leaders. His authority was limited, however, absent the support of the family leaders and the shamans (Wilson and Towne 1978:393).

In the Sacramento Valley, principal villages were located on low natural rises along rivers and streams. In the project vicinity, villages were located along the American River, approximately 5 miles southeast of the project area at the nearest approach. Valley villages consisted of 5 to 50 houses that were dome-shaped and covered with earth, mats, and grass. Brush shelters were used in the summer and when people were away from the village. Major villages had semi-subterranean dance houses with post-and-beam construction (Wilson and Towne 1978:388).

Villages in the foothills were located on ridges and on flats along streams. Houses were conical and covered with brush bark and skins. Most villages had bedrock milling stations. Other site types included seasonal camps, quarries, ceremonial grounds, fishing stations, trading sites, and cemeteries (Wilson and Towne 1978:389). Some people lived away from the main village.

Early Nisenan contact with Europeans appears to have been limited to the southern reaches of Nisenan territory. Spanish expeditions began to cross Nisenan territory in the early 1800s. Unlike the Valley Nisenan, Hill Nisenan groups remained relatively unaffected by the European presence until the discovery of gold at Coloma in 1848. In the 2 or 3 years following the gold discovery, Nisenan territory was overrun by settlers from throughout the world. Gold seekers and the settlements established to support them, as well as the disease and violence accompanying them, almost caused extinction of the area's native inhabitants. Nisenan survivors worked as wage laborers and domestic help, living on the edges of foothill towns. Despite severe depredations, descendants of the Nisenan still live in Placer County and maintain their cultural identity.

### **3.2.5.3 Historic Context**

#### **Early History**

Placer County was established on April 25, 1851, from portions of Sutter and Yuba Counties. Placer refers to the "alluvial or glacial deposits containing gold particles" obtained by washing. The place name was appropriate for the county because placer mining was the principal employment in the area (Hoover et al. 2002:271). James Marshall's discovery of gold on January 24, 1848, along the South Fork of the American River brought thousands of miners and emigrants into the foothills of the Sierra Nevada. In Placer County, one of the more lucrative mining districts was

the Secret Ravine area from present-day Roseville to Newcastle (Barry-Schweyer and Alvarez 2005:7). Despite their initial high hopes, the vast majority of prospectors were unsuccessful and left the area disillusioned, with little to show for their efforts; however, many remained to stake out homesteads and to establish farms. The population of the county at its time of organization was about 10,000, of which 8,000 were Euroamerican and mostly men (Thompson & West 1882:101).

By the early 1850s, surface mining was already in decline, as permanent settlements, homesteads, and farms began to replace the temporary camps and transient mining communities. In southwestern Placer County, one of the first areas settled was the rich farmland around present-day Roseville. Farmers in the area engaged in commercial cultivation of wheat, fruit trees, and grapes. In addition to farming, many landowners were involved in raising cattle. By the mid-1870s, a number of large ranches were in the Rocklin area, including those of R.M. Nixon, D.C. Allen, and Joel Parker Whitney (Davis 1981:33).

### **The Coming of the Railroad**

The community of Roseville has its origins at the junction of two railroads, the California Central Railroad and the Central Pacific Railroad. The earlier of the two, the California Central Railroad, completed its line through southwestern Placer County in 1861. On January 29, 1864, the Central Pacific Railroad crossed the tracks of the California Central Railroad as it continued eastward over the Sierra Nevada to complete the nation's first transcontinental line (Davis 1975:25).

The junction between the two railroads was favorably located within a rich agricultural region and rapidly developed into a major shipping center. O.D. Lombard platted the town site of "Roseville Junction" in 1864 with blocks laid out and numbered from one to 55. Only five streets were named: Atlantic, Pacific, Vernon, Washington, and Lincoln Streets. The Central Pacific Railroad freight depot was the first building constructed in the new town. Other businesses such as a bank, blacksmith shop, shoe repair shop, butcher shop, dry goods stores, hotels, and saloons soon followed. Housed in wood-frame buildings, these businesses sprang up along Atlantic, Pacific, and Lincoln Streets. Overall development of the town from 1870 to 1906 was slow but steady (Davis 1975:29, 33).

In 1885, the Central Pacific Railroad was acquired by the Southern Pacific Railroad and consolidated into a vast national transportation system. By the early 1900s, the railroad's facility in the town of Rocklin had become inadequate to meet the demands of the Southern Pacific Railroad system. Consequently, in 1906 Southern Pacific Railroad officials made the decision to transfer the rail yard, roundhouse, and other maintenance facilities to Roseville. The removal of the terminal facilities also resulted in a substantial exodus of residents, homes, and businesses to Roseville.

One contemporary estimated that in 1908 at least 100 businesses and residential buildings were transported to Roseville on trucks (Davis 1981:59–61).

### **Development of the City of Roseville**

During the first quarter of the twentieth century, Roseville continued to have slow and steady growth as a fully established railroad community. The City proceeded to establish increased municipal services to support its growing population. By 1913 a new state highway was routed through the city, starting at Riverside Avenue and continuing to Vernon and Lincoln Streets. Only a limited portion of city streets was paved at this time, as local landowners were responsible for paving sections of streets in front of their businesses.

Roseville did not escape the economic wrath of the Great Depression, ushered in by the stock market crash of 1929. By the end of 1930, the Southern Pacific Railroad, the city's leading employer, had reduced its workforce from 1,360 to 1,128. Southern Pacific Railroad cut employee wages by 10 percent the following year.

As Placer County was transitioning out of the Great Depression, the Japanese attack on Pearl Harbor on December 7, 1941, led to the official U.S. entry into World War II. However, like many cities and towns across the nation, Roseville had already begun preparing for the possibility of war in 1940. In June of that year, City leaders announced that men who were drafted would retain their jobs upon returning from the war. At the same time, Southern Pacific Railroad began to make preparations for the ever-increasing movement of troops and munitions trains through the Roseville rail yard.

### **A Period of Transition**

Roseville experienced a slow but steady expansion of the downtown commercial and industrial center following World War II. By the 1960s, the wave of growth would move to the northern part of the state. Roseville's location only 18 miles northeast of Sacramento, coupled with newly completed highways and the existing junction between Southern Pacific's north- and eastbound railroad lines, made Roseville a hot spot for business and residential development in Placer County.

#### **3.2.5.4 Records Search**

A records search for the project site and a 0.25-mile radius around it was conducted by staff at the North Central Information Center of the California Historical Resources Information System on May 27, 2020. The records search indicated that five previous cultural resources studies have been conducted encompassing the project site. The records search also identified two previously recorded cultural resources within the project site and none within the 0.25-mile radius. One precontact site (P-31-003) was recorded in the western end of the project site and

was reported as a precontact activity area associated with vernal pool exploitation consisting of a thin scatter of pestles, manos, and fire cracked rocks.

The other resource (P-31-816H) consists of a segment of the UPRR. This segment of the UPRR that bisects the project is a modernized segment of grade running from Lincoln to Roseville as part of the Shasta Route. The Shasta Route is included in a multi-part 1998 Historic American Engineering Record (HAER) report, conducted by John Snyder of P.S. Preservation Services (Snyder John W. 1998). The HAER was prepared on behalf of the U.S. Department of Transportation and UPRR to mitigate for changes to contributing bridges on the Shasta Route. The contributing bridges subject to these earlier changes are not in the project site; however, the HAER concentrated on the entire Shasta Route and concluded the property is eligible for the National Register of Historic Places at the state level for Criterion A and B and is therefore eligible for the California Register of Historical Resources (CRHR) under Criterion 1 and 2.

### **3.2.5.5 Native American Consultation**

The Native American Heritage Commission (NAHC) was contacted on June 3, 2020, to request a search of its sacred lands file and a list of interested Native American tribes and individuals. On June 4, 2020, the NAHC responded, stating that the sacred lands file has no record of any recorded sacred lands in the immediate vicinity of the project site. Assembly Bill (AB) 52 tribal consultation efforts under CEQA were carried out by the city of Roseville and are provided in Section 3.2.18, *Tribal Cultural Resources*.

### **3.2.5.6 Field Survey**

Overall, two surveys encompassed the entirety of the project site. The western half of the site was surveyed in 2012 by ECORP Consulting, Inc. as part of the Foothills Corporate Center project and in 2019, the eastern half of the project site was surveyed by Natural Investigations as part of the Roseville Parkway Extension project. Both surveys were conducted using transects spaced no more than 15 meters apart, providing adequate coverage for identifying any cultural resources that may be revealed on the surface. An updated survey was performed by ICF in 2020 to revisit the western half of the project site as several years had passed since the last survey. As a result of the surveys, the only resource identified in the project site was the UPRR line. During the 2020 survey, it was found that the area of the previously recorded site P-31-003 had already been completely paved with the new road alignment.

### 3.2.5.7 Impact Analysis

***a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?***

The proposed project would construct an overpass above the UPRR tracks and Industrial Avenue. The overpass of the UPRR tracks and Industrial Avenue would be comprised of engineered fill approach ramps on the east and west sides and a concrete bridge structure. All improvements would be located outside the existing railroad 100-foot right-of-way and the proposed design accommodates the planned future widening of Industrial Avenue from two to four lanes without need for future overpass modification.

Although the introduction of an overpass above the UPRR grade is proposed as part of the project, the railroad grade would retain its historic character-defining features that would enable it to continue to convey its historical integrity. The UPRR would continue to demonstrate the evolution of railroad construction, would continue to function as a railroad, and the minor modifications to the setting would not involve a change in the character of the use or design features that support the structure's ability to convey historic significance. The structure's character-defining features include its current location, materials, workmanship, historic setting, and alignment. None of these features would be altered as a result of project implementation to an extent that the historical integrity of the UPRR grade would be compromised. As a result, the project would not cause a substantial adverse change in the significance of a historical resource. There would be no impact and therefore no mitigation is required.

***b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?***

There are no known cultural resources located on the proposed project site. One resource, P-31-003, was previously documented as being in the project; however, no indications of the site were present in the 2012 or 2020 survey. The resource was most likely misplotted or destroyed due to intense grading and plowing since its recordation in 1978. It is possible that buried archaeological materials could be present in other areas of the project site. If any buried resources were encountered and damaged during construction, the destruction of buried archaeological resources would be a potentially significant impact. Implementation of Mitigation Measure CUL-1 would reduce this impact to a less-than-significant level.

***c) Disturb any human remains, including those interred outside of formal cemeteries?***

There are no known formal cemeteries within the project site, and neither the results of the records search nor the pedestrian survey indicates that human remains are present within the project site. However, there is always the possibility that ground-



disturbing activities during construction may uncover previously unknown buried human remains; such disturbance would be a potentially significant impact. Implementation of Mitigation Measure CUL-2 would reduce this impact to a less-than-significant level.

### **3.2.5.8 Mitigation Measures**

#### **Mitigation Measure CUL-1: Implement Measures to Protect Previously Unidentified Cultural Resources**

The City shall ensure that construction specifications include the following information in the grading notes.

- Construction shall stop if potential cultural resources are encountered. It is possible that previous activities have obscured surface evidence of cultural resources. If signs of an archeological site, such as any unusual amounts of stone, bone, or shell, are uncovered during grading or other construction activities, work will be halted within 100 feet of the find and the City of Roseville will be notified. A qualified archeologist will be consulted for an onsite evaluation. If the site appears to be eligible for listing in state or federal registers, additional mitigation, such as further testing for evaluation or data recovery, may be necessary.
- In the event resources are discovered, the City will retain a qualified archaeologist to assess the find and to determine whether the resource requires further study. Any previously undiscovered resources found during construction will be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria.
- All work will stop in the immediate vicinity of the find, and, if the find is determined to be an important cultural resource, the City will make available contingency funding and a time allotment sufficient to allow recovery of an archaeological sample or to implement an avoidance measure. Construction work may continue on other parts of the project while archaeological mitigation takes place.

#### **Mitigation Measure CUL-2: Implement Measures if Construction Activities Inadvertently Discover or Disturb Human Remains**

The City shall ensure that construction specifications include the following in the grading notes.

- If human remains are discovered during any phase of construction, including disarticulated or cremated remains, the construction contractor will

- immediately cease all ground-disturbing activities within 100 feet of the remains and notify the City of Roseville.
- In accordance with California State Health and Safety Code Section 7050.5, no further disturbance will occur until the following steps have been completed:
    - The County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98.
    - If the remains are determined by the County Coroner to be Native American, NAHC will be notified within 24 hours, and the treatment and disposition of the remains will comply with NAHC guidelines.
  - It is further recommended that a professional archaeologist with Native American burial experience conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by NAHC. As necessary and appropriate, a professional archaeologist may provide technical assistance to the MLD, including excavation and removal of the human remains.

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### 3.2.6 Energy

|                                                                                                                                                                                   | Potentially<br>Significant<br>Impact | Less than<br>Significant with<br>Mitigation<br>Incorporated | Less-than-<br>Significant<br>Impact | No<br>Impact                        |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------|-------------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                |                                      |                                                             |                                     |                                     |
| a. Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?                                                                                     | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

#### 3.2.6.1 Setting

The proposed extension of Roseville Parkway is locally important in order to improve existing and future traffic conditions consistent with city adopted plans; enhance access and safety for motorists, pedestrians, and cyclists; meet railroad clearance requirements and future Industrial Boulevard widening requirements.

#### 3.2.6.2 Impact Analysis

***a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?***

During construction there would be a temporary consumption of energy resources for the movement of equipment and materials. Compliance with local, state, and federal regulations, which limit engine idling times and require recycling construction debris, would reduce short-term energy demand during the project's construction to the extent feasible and project construction would not result in a wasteful or inefficient use of energy. There are no unusual project characteristics or construction processes that would require the use of equipment that would be more energy intensive than is used for comparable activities or use of equipment that would not conform to current emissions standards and related fuel efficiencies. No impact would occur.

***b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?***

State and local authorities regulate energy use and consumption through various means and programs. Regulations at the state level are intended to reduce energy use and greenhouse gas (GHG) emissions. The proposed project would comply with

these regulations that include, among others, AB 1493–Light-duty Vehicle Standards, California Code of Regulations Title 24, Part 6–Energy Efficiency Standards, and California Code of Regulations Title 24.

The Roseville City Council adopted a Municipal Climate Action Plan in November 2009. The plan applied to GHG emissions from city facilities and operations (e.g., buildings, vehicle fleets, treatment plants, and other infrastructure). The City Council approved a GHG reduction goal of 22.8 percent by 2035 using various measures. The proposed project's construction methods are consistent with the goals and measures in the city's Climate Action Plan. Therefore, the proposed project would result in a less-than-significant impact and no mitigation measures are required.

## 3.2.7 Geology and Soils

| VI. Geology and Soils                                                                                                                                                                                                                                                               | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                                                                                                                  |                                |                                                    |                                     |                                     |
| a. Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:                                                                                                                                                      |                                |                                                    |                                     |                                     |
| Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42. | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| Strong seismic ground shaking?                                                                                                                                                                                                                                                      | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Seismic-related ground failure, including liquefaction?                                                                                                                                                                                                                             | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| Landslides?                                                                                                                                                                                                                                                                         | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Result in substantial soil erosion or the loss of topsoil?                                                                                                                                                                                                                       | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?                                              | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?                                                                                                                 | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e. Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?                                                                                         | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?                                                                                                                                                                             | <input type="checkbox"/>       | <input checked="" type="checkbox"/>                | <input type="checkbox"/>            | <input type="checkbox"/>            |

### 3.2.7.1 Setting

The project site is level to slightly undulating. The elevation is approximately 140 feet above mean sea level. The project site is in the Great Valley geomorphic province (California Geological Survey 2002). Thick sequences of alluvial (water-deposited)

sediments derived from erosion of the Sierra Nevada typify the geological formations on the east side of the Sacramento Valley, where the site is located.

The project site is underlain by the Turlock Lake Formation (map symbol Qtl) (California Geological Survey 2011), which consists of alluvial sand, silt and gravel of arkosic composition, with minor clay interbeds. Gravel composition is heterogeneous, featuring granitic, metamorphic, volcanic and vein-quartz clasts.

The project site is not within an Alquist-Priolo Earthquake Fault Zone, and there are no known active faults at the project site (California Geological Survey 2019a). Therefore, the potential for surface rupture to occur at the project site is low.

The project site lies between the seismically active Coast Ranges and the historically seismically active Foothills fault zone in the Sierra Nevada. The primary seismic hazard to the project site is associated with ground shaking from more distant faults, such as the San Andreas fault and the closer Hayward fault, which have the potential for generating strong seismic shaking. USGS has estimated that there is a 72 percent probability of at least one 6.7 or greater magnitude earthquake occurring that could cause widespread damage in the greater San Francisco Bay area before 2043 (U.S. Geological Survey 2016).

Other potential earthquake sources are the faults associated with the western edge of the Central Valley, recently defined as the Coast Range Central Valley Boundary Thrust Fault System. Various documents define portions of this little known system as the Midland Fault Zone or the Dunnigan Hills fault, where the 1892 Vacaville-Winters earthquake occurred (City of Roseville 2016a).

The Foothill Fault Zone, a complex series of northwest-trending faults that are related to the Sierra Nevada uplift, and whose activity also is little understood, extends from about Oroville in the north to east of Fresno in the south. Earthquakes on nearby faults in the zone can be the source of ground shaking in the greater Sacramento area. The closest potentially active faults to the project site are the Bear Mountain and Melones faults (City of Roseville 2016a). The closest recently active fault in the western Sierra Nevada foothills is the Cleveland Hills fault, about 36 miles northwest of Auburn.

No active faults are known to exist in Placer County. The following inactive faults have been identified within the city limits:

- The Volcano Hill fault extends northwest from Volcano Hill for a distance of 1 mile, terminating near Eureka Road. No activity has been recorded along this fault; therefore, it is considered inactive.
- Identified in 1973, the Linda Creek fault is located along Linda Creek in Roseville and Sacramento County. No activity has been recorded along this fault.

- The Willows fault and Stockton fault are in the Roseville vicinity and are considered inactive as displacement occurred more than 1.8 million years ago.
- An unnamed fault extends east to west between Folsom Lake and the City of Rocklin. Segments of the fault are concealed and therefore unmapped. However, the east/west alignment suggests that the fault could connect to the Bear Mountain fault, branches of which are located beneath Folsom Lake. The Bear Mountain fault is a fault that could be undergoing reactivation as a result of continental tectonic activity. However, no evidence has been identified along the unnamed fault alignment of such reactivation (City of Roseville 2016a).

The project site is classified as being in a low-severity earthquake shaking zone (California Geological Survey 2016). The maximum peak ground acceleration that can be expected to occur at the site based on a return period of 2 percent in 50 years is 0.317g, where 1 g is equal to the force of gravity (California Geological Survey 2019b).

Liquefaction is the loss of soil strength as a result of seismic forces acting on water-saturated, granular soils having low cohesion. During seismic shaking, the soil behaves like a liquid, causing a reduction in its bearing strength. The potential for liquefaction is based on soil particle size and density, depth to the groundwater table, and duration and intensity of ground shaking. Liquefaction most commonly occurs in low-lying areas of poorly consolidated to unconsolidated water-saturated sediments or similar deposits (California Geological Survey 2008). The City of Roseville is not specifically addressed in currently available State Division of Mines and Geology liquefaction risk data. No determination has been made as to whether liquefaction potential exists in Roseville. Based on project-specific analysis that has been done for many of Roseville's development projects, liquefaction has not been identified as a significant problem in Roseville (City of Roseville 2016a).

Based on the shallow slopes, landslides and other forms of slope instability are not expected to exist at the site.

Near-surface (i.e., approximately 60 inches) soils at the project site consist of Cometa-Fiddymment complex, 1 to 5 percent slopes (Rogers 1980). This soil map unit poses no significant constraints to site development that cannot be overcome using conventional construction approaches and engineering design. The Cometa-Fiddymment complex characteristics include the following: well drained, very high runoff, depth to water is 80 inches, no frequency of flooding or ponding, wind erosion hazard of 3 (soils assigned to group 1 are the most susceptible to wind erosion, and those assigned to group 8 are the least susceptible), and low-high shrink-swell potential.

Expansive soils are those that greatly increase in volume, or swell, when they absorb water and shrink when they dry out. Expansion may damage building



foundations, concrete slabs, hardscaping, pavement, and other improvements on or near the surface. The project site has a very low plasticity index rating of 15.5 percent, which means that project site soils are not considered expansive (Natural Resources Conservation Service 2019).

The eastern margin of the Central Valley is a nearly continuous series of coalescing alluvial fans, which form a continuous belt between the uplands of the Sierra Nevada and the relatively flat surface of the Central Valley floor. These deposits formed primarily during the Plio-Pleistocene by the streams that drained the adjacent uplands of the Sierra Nevada. The alluvial deposits accumulated on Central Valley alluvial fans consist of medium- to fine-grained sediment eroded from Tertiary and older volcanic, plutonic, and metamorphic rocks in the mountains to the east. The gravel, sand, and silt that compose these alluvial fans have in the past produced significant fossils, primarily large land mammals, such as mammoths, mastodons, camels, bison, and horses. (City of Roseville 2016b)

### 3.2.7.2 Impact Analysis

***a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:***

1. Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Because the project site is not located in an Alquist-Priolo Earthquake Fault Zone, the hazard of fault rupture at the project site is low. No impact would occur.

2. Strong seismic ground shaking?

The project site is not located in an area that is subject to strong seismic ground shaking. Therefore, the impact would be less than significant, and no mitigation is required.

3. Seismic-related ground failure, including liquefaction?

According to the City's General Plan, "based on project-specific analysis and past experience, liquefaction has not been a significant problem within the City." However, a site-specific geotechnical study would be needed to characterize liquefaction potential. The geotechnical study would be required as part of the building permit process and would be prepared prior to site development to ensure that the proposed project is appropriately designed (City of Roseville 2016b). Therefore, the impact would be less than significant, and no mitigation is required.

4. Landslides?

Because there are no known landslides in the project area and considering the site's relatively flat ground and limited ground-shaking potential, the hazard of a seismically induced landslide occurring at the site is very low. Additionally, the overpass would be built to current California Building Code (CBC) seismic standards (Chapter 18 in particular); therefore, there would be no impact and no mitigation is required.

***b) Result in substantial soil erosion or the loss of topsoil?***

The soils underlying the project site have a moderate water erosion hazard. Project construction activities would entail soil disturbance over approximately 12 acres. This is not expected to cause substantial accelerated soil erosion, especially because of the erosion and sediment control BMPs that must be implemented to comply with the state stormwater General Permit for Construction and Land Disturbance Activities (see Section 3.2.10, *Hydrology and Water Quality*, for a more detailed discussion of BMPs and General Permit compliance). Additionally, per Section 111-3 of the City's Design and Construction Standards, all grading improvements shall be installed in accordance with provisions in the CBC, recommendations of site-specific geotechnical reports and geotechnical engineers.

Relatively small areas of topsoil would be lost as a result of overcovering by the proposed project. The impact would be less than significant, and no mitigation is required.

***c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project and potentially result in an onsite or offsite landslide, lateral spreading, subsidence, liquefaction, or collapse?***

Because the Turlock Lake Formation generally consists of semi-consolidated sediments and given the relatively flat land of the project site, there appear to be no unstable ground conditions present. Further, while overcrossing approach ramps would be comprised of imported soil, they would be constructed consistent with the City's Design and Construction Standards, provisions in the CBC, and recommendations of site-specific geotechnical reports. The impact would be less than significant, and no mitigation is required.

***d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?***

As described above, the project site is not located on soils with expansive qualities, as defined in Table 18-1-B of the Uniform Building Code. Therefore, the project would not create substantial risks to life or property related to expansive subsoils. Standard engineering practices and compliance with the CBC and the City's Design and Construction Standards III-3 (Soil Testing and recommendations from

geotechnical report) would ensure that potential impacts are reduced to a less-than-significant level, and no mitigation is required.

***e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater?***

No septic tanks or alternative wastewater disposal systems are proposed for the project. No impact would occur.

***f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?***

The Turlock Lake Formation, which underlies the project site, is known to be sensitive for paleontological resources. Excavation work to construct the project could directly or indirectly destroy such resources or alter their stratigraphic context. The impact could be significant. The City would implement Mitigation Measures GEO-1 and GEO-2 to reduce this potential impact to a less-than-significant level.

### **3.2.7.3 Mitigation Measures**

**Mitigation Measure GEO-1: If Paleontological Resources Found Cease Work until Review Conducted by Qualified Paleontologist and Recommendations Implemented**

Should evidence of sensitive paleontological resources (e.g., fossils) be encountered during grading or excavation, work shall be suspended within 100 feet of the find, and the City of Roseville shall be immediately notified. At that time, the City shall coordinate all necessary investigation of the site with a qualified paleontologist to assess the resource and provide proper management recommendations. Possible management recommendations for sensitive resources could include resource avoidance or data recovery excavations. The contractor shall implement any measures deemed necessary by the paleontologist for the protection of sensitive paleontological resources.

**Mitigation Measure GEO-2: Prepare and Implement a Worker Education Program for Those Involved with Earthwork**

A worker education program, prepared by a qualified professional paleontologist, shall review applicable local, state, and federal ordinances, laws, and regulations pertaining to paleontological resources; describe the types of fossils that can be encountered and their general appearance; discuss site avoidance requirements and notification procedures to be followed in the event that a sensitive paleontological resource is found during construction; and describe disciplinary and other actions that can be taken against persons violating such laws.

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### 3.2.8 Greenhouse Gas Emissions

| VII. Greenhouse Gas Emissions                                                                                                     | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                |
|-----------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|--------------------------|
| Would the project:                                                                                                                |                                |                                                    |                                     |                          |
| a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?       | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b. Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

#### 3.2.8.1 Setting

The process known as the *greenhouse effect* keeps the atmosphere near Earth's surface warm enough for the successful habitation of humans and other life forms. The greenhouse effect is created by sunlight that passes through the atmosphere. Some of the sunlight striking Earth is absorbed and converted to heat, which warms the surface. The surface emits a portion of this heat as infrared radiation, some of which is re-emitted toward the surface by GHGs. Human activities that generate GHGs increase the amount of infrared radiation absorbed by the atmosphere, thus enhancing the greenhouse effect and amplifying the warming of Earth.

Increases in fossil fuel combustion and deforestation have exponentially increased concentrations of GHGs in the atmosphere since the Industrial Revolution (Intergovernmental Panel on Climate Change 2018). Rising atmospheric concentrations of GHGs in excess of natural levels result in increasing global surface temperatures—a process commonly referred to as *global warming*. Higher global surface temperatures, in turn, result in changes to Earth's climate system, including increased ocean temperature and acidity, reduced sea ice, variable precipitation, and increased frequency and intensity of extreme weather events (Intergovernmental Panel on Climate Change 2018). Large-scale changes to Earth's system are collectively referred to as *climate change*.

The principle anthropogenic (human-made) GHGs contributing to global warming are carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), nitrous oxide (N<sub>2</sub>O), and fluorinated compounds, including sulfur hexafluoride (SF<sub>6</sub>), hydrofluorocarbons (HFC), and perfluorocarbons (PFC). Unlike criteria air pollutants, which occur locally or regionally, the long atmospheric lifetimes of these GHGs allow them to be well mixed in the atmosphere and transported over distances. Within California, transportation is the largest source of GHG emissions (41 percent of emissions in 2017), followed by industrial sources (24 percent) (California Air Resources Board 2020).

There is currently no federal law specifically related to climate change or the reduction of GHGs. California has adopted statewide legislation addressing various aspects of climate change and GHG emissions mitigation. Much of this establishes a broad framework for the state's long-term GHG reduction and climate change adaptation program. Of particular importance is Senate Bill (SB) 32, which establishes statewide target to reduce GHG emissions to 40 percent below 1990 levels by 2030. Although not legislatively adopted, the governor has also issued Executive Order (EO) B-55-18, which establishes a goal for state agencies to achieve carbon neutrality as soon as possible, and no later than 2045, and to achieve and maintain net negative emissions thereafter. SB 375 and SB 743 support attainment of the states GHG targets through policies and requirements that will achieve statewide reductions in VMT-associated mobile source emissions.

As discussed in Section 3.2.3, *Air Quality*, PCAPCD has the primary responsibility for air quality management in Placer County. PCAPCD (2017) has adopted a *de minimis* threshold of 1,100 metric tons carbon dioxide equivalent (CO<sub>2</sub>e) for operation of land use development projects, such as new residential and commercial projects. The air district also has a bright line threshold of 10,000 metric tons CO<sub>2</sub>e, where land use development projects in excess of the *de minimis* threshold (1,100 metric tons CO<sub>2</sub>e) can be found less than cumulatively considerable if the emission intensity (emissions per capita) meets certain criteria.

### 3.2.8.2 Impact Analysis

***a) Generation of greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?***

Construction of the proposed project would generate emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O from mobile and stationary construction equipment exhaust and employee and haul truck vehicle exhaust. Emissions were estimated using the methods described in Section 3.2.3; the results are summarized in Table 3-8. Please refer to Appendix A for complete construction assumptions and calculation spreadsheets.

**Table 3-8. Estimated Greenhouse Gas Emissions from Project Construction (metric tons per year)**

| Construction Year        | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e <sup>a</sup> |
|--------------------------|-----------------|-----------------|------------------|--------------------------------|
| 2021                     | 485             | <1              | <1               | 492                            |
| 2022                     | 378             | <1              | <1               | 383                            |
| <i>PCAPCD threshold</i>  | -               | -               | -                | <i>10,000</i>                  |
| <i>Exceed threshold?</i> | -               | -               | -                | <i>No</i>                      |

<sup>a</sup> Refers to carbon dioxide equivalent, which includes the relative warming capacity (i.e., global warming potential) of each GHG.

CH<sub>4</sub> = methane

CO<sub>2</sub> = carbon dioxide

N<sub>2</sub>O = nitrous oxide

Once operational, the project would result in GHG emissions from changes in VMT. Emissions were estimated for existing (2011) and cumulative (2035) with and without project conditions using the methods described in Section 3.2.3. Table 3-9 presents the estimated operational emissions.

**Table 3-9. Estimated Greenhouse Gas Emissions from Project Operation (metric tons per year)**

| Period                                          | CO <sub>2</sub> | CH <sub>4</sub> | N <sub>2</sub> O | CO <sub>2</sub> e <sup>a</sup> |
|-------------------------------------------------|-----------------|-----------------|------------------|--------------------------------|
| Existing (2011) no project                      | 8,259,150       | 381             | 554              | 1,579,885,903                  |
| Existing (2011) plus project                    | 8,257,469       | 380             | 554              | 1,578,895,569                  |
| Cumulative (2035) no project                    | 6,949,044       | 8               | 368              | 28,962,059                     |
| Cumulative (2035) plus project                  | 6,945,702       | 8               | 368              | 28,939,431                     |
| Existing plus project vs. existing no project   | -1,681          | <0              | <0               | -990,334                       |
| Cumulative plus project vs. existing no project | -3,342          | <0              | <0               | -22,628                        |

<sup>a</sup> Refers to carbon dioxide equivalent, which includes the relative warming capacity (i.e., global warming potential) of each GHG.

CH<sub>4</sub> = methane

CO<sub>2</sub> = carbon dioxide

N<sub>2</sub>O = nitrous oxide

As shown in Table 3-8, construction of the project would generate minor amounts of GHGs. These emissions would be short-term and well below PCAPCD's construction threshold. Operation of the project would achieve long-term reductions in GHG emissions relative to the no project condition under both modeling scenarios (existing and cumulative) (see Table 3-9). As discussed further in Section 3.2.17, *Transportation*, implementation of the project would reduce regional VMT. The GHG emissions benefit is a direct result of these VMT reductions. Because the project would reduce GHG emissions, this impact would be less than significant, and no mitigation is required.



***b) Conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of greenhouse gases?***

The most applicable legislation for the purpose of reducing transportation related GHG emissions are SB 375 and SB 743. These policies support attainment of the state's GHG reduction targets, as expressed under SB 32 and EO B-55-18.

SB 375 was enacted to reduce GHG emissions from automobiles and light trucks through integrated transportation, land use, housing and environmental planning. Under this law, SACOG is tasked with developing an SCS that provides a plan for meeting per capita CO<sub>2</sub> emissions levels allocated to SACOG by CARB. The Final EIR for the 2020 MTP/SCS demonstrates that projects identified in the MTP/SCS meet CARB's issued SB 375 GHG targets for the SACOG region in 2020 and 2035. As discussed in Section 3.2.3, the proposed project was included in SACOG's 2020 MTP/SCS, and therefore would not conflict with SACOG's regional strategies implemented pursuant to SB 375.

The purpose of SB 743 is to integrate and better balance the needs of congestion management, infill development, active transportation, and GHG emissions reduction through, among other things, future reductions in VMT growth. As discussed further in Section 3.2.17, implementation of the project would reduce regional VMT, which in turn achieves long-term GHG reductions. This is consistent with SB 743 and the state's climate change goals, including SB 32 and EO B-55-18.

Because the proposed project is identified in SACOG's 2020 MTP/SCS and will reduce long-term GHG emissions, it would not conflict with applicable plans and legislation adopted to reduce GHG emissions. Accordingly, this impact would be less than significant, and no mitigation is required.

### **3.2.8.3 References Cited**

California Air Resources Board. 2020. GHG Current California Emission Inventory Data. Available: <https://ww2.arb.ca.gov/ghg-inventory-data>. Accessed: May 1, 2020

Intergovernmental Panel on Climate Change. 2018. *Global Warming of 1.5°C*. Chapter 1, Framing and Context. Summary for Policymakers. Allen, M.R., O.P. Dube, W. Solecki, F. Aragón-Durand, W. Cramer, S. Humphreys, M. Kainuma, J. Kala, N. Mahowald, Y. Mulugetta, R. Perez, M. Wairiu, and K. Zickfeld.

Placer County Air Pollution Control District. 2017. *2107 CEQA Handbook*. November.

### 3.2.9 Hazards and Hazardous Materials

| VIII. Hazards and Hazardous Materials                                                                                                                                                                                                                                         | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                                                                                                            |                                |                                                    |                                     |                                     |
| a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?                                                                                                                                       | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?                                                                               | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?                                                                                                               | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?                                                 | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e. For a project located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?                                                                                                                                                     | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| g. Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?                                                                                                                                      | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

#### 3.2.9.1 Setting

The project site and nearby undeveloped areas consist primarily of disturbed annual grassland near urban land uses. Industrial development borders the site along most of the south boundary, and along the eastern third of the north boundary. Industrial Avenue and the UPRR tracks transect the project site in a north/south direction. The

Roseville Fire Department operates eight fire stations that provide hazardous material management and other services. The project site is within Fire Protection Districts 7 and 2, served by Fire Station No. 7 and No. 2. Fire Station No. 7 is approximately 1 mile east of the project site at 911 Highland Point Drive. Fire Station No. 2 is approximately 2 miles south of the project site at 1398 Junction Boulevard (City of Roseville 2017).

The closest school to the project site is George A. Buljan Middle School approximately 0.75 mile south of the project site. The next closest school is Arbor View Montessori approximately 1.1 miles south of the project site.

There are no airports within 2 miles of the project site. The closest airport to the project site is the Lincoln Regional Airport approximately 8 miles to the north.

The project site is located in a Local Responsibility Area where the Roseville Fire Department is responsible for fire protection services.

### 3.2.9.2 Impact Analysis

***a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?***

Construction and operation of the project could involve small quantities of commonly used hazardous materials, such as fuels, lubricants, and oils, to operate construction equipment and motor vehicles. Standard construction BMPs, including preparation and implementation of a stormwater pollution prevention plan (SWPPP), erosion control, temporary fencing, and hazardous material management practices, would be implemented to reduce exposure to, or potential for, accidental spills involving these materials. A toxic materials control and spill response plan, which includes the preparation of a hazardous material spill prevention, control, and countermeasure plan before construction and implemented during construction, would be prepared to avoid or minimize the risk of spills or discharges of toxic materials into waterways. Additionally, a health and safety plan (prepared by a registered industrial hygienist) would be prepared that addresses release prevention measures, employee training, notification, and evacuation procedures, and adequate emergency response protocols and cleanup procedures.

No hazardous materials would be disposed of on the project site. Therefore, this impact would be less than significant, and no mitigation is required.

***b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?***

Site workers, the public, and the environment in general could be inadvertently exposed to existing contaminants on-site during project construction. Small quantities of potentially toxic substances (such as petroleum and other chemicals

used to operate and maintain construction equipment) would be used at the project site and transported to and from the area during construction. However, the handling and disposal of these materials would be governed according to regulations enforced by the Certified Unified Program Agency, California Division of Occupational Safety and Health (Cal-OSHA), California Department of Toxic Substances Control (DTSC), State Water Resources Control Board (SWRCB) and the city.

In addition, the following plans and special provisions would be followed.

- Compliance with the City's Multi-Hazard Mitigation Plan (approved by the Federal Emergency Management Agency), which requires contractors to transport and store materials in approved containers along designated truck routes, maintain required clearances, and handle materials using fire department-approved protocols, as illustrated in Roseville Fire Code Ordinance 4594.
- Implementation of a hazardous material spill prevention and countermeasure plan to minimize the exposure of people and the environment to potentially hazardous materials. The plan is intended to ensure that transport, storage, and handling of hazardous materials required for construction is conducted in a manner consistent with relevant regulations and guidelines.
- A SWPPP would be implemented as part of the NPDES Permit and a General Construction Activity Storm Water Permit to minimize the potential for sediments or contaminants to enter waterways.
- Compliance with the City's Design and Construction Standards and the City's Stormwater Quality BMP Guidance Manual for Construction.

In addition, the City Fire Department would review construction plans and would respond to hazardous materials complaints or emergencies, if any, during construction. Because hazardous materials discovered or accidentally released during construction would be handled in accordance with federal, state, and local regulations, the impact would be less than significant and no mitigation is required.

***c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?***

There are no public or private K–12 schools within 0.25 mile of the project site. The closest school to the project site is George A. Buljan Middle School approximately 0.75 mile south of the project site. It is highly unlikely that project-related hazardous materials would be emitted or released within 0.25 mile of any school. Also, implementation of the standard BMPs identified in Section 2.6, *Best Management Practices*, by contractors would reduce the potential for a hazardous materials spill. No impact would occur.

***d) Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?***

The project site is not included on any of the hazardous materials sites of the Cortese list as identified below:

- DTSC EnviroStor database (California Department of Toxic Substances Control 2020a)
- SWRCB GeoTracker database (State Water Resources Control Board 2020a)
- SWRCB Sites Identified with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit (State Water Resources Control Board 2020b)
- SWRCB List of active Cease and Desist Orders and Cleanup or Abatement Orders (State Water Resources Control Board 2020b)
- DTSC hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code (California Department of Toxic Substances Control 2020b)

Any hazardous materials encountered on the site would be handled and disposed of in compliance with state and local regulations that protect the public and the environment from exposure to such materials. No impact would occur.

***e) For a project located within an airport land use plan area or, where such a plan has not been adopted, be within two miles of a public airport or public use airport, and result in a safety hazard or excessive noise for people residing or working in the project area?***

The project site is not located within an airport land use plan area or within 2 miles of a public airport. The closest airport to the project site is the Lincoln Regional Airport approximately 8 miles to the north. There would be no impact.

***f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?***

Construction of the proposed project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. The City would require the construction contractor to implement a traffic management plan, including a construction schedule and plan to meet the City's notice procedures, before construction activities are initiated. This plan would identify general methods by which construction activities would be managed to minimize substantial delays to traffic as discussed below in section 3.2.17

Transportation. The impact would be less than significant, and no mitigation is required.

***g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?***

The project site consists of undeveloped disturbed annual grassland. Residential development is located immediately east of Washington Boulevard and industrial uses surround the project site to the north, south, and west. There is also limited undeveloped disturbed annual grassland north of the project site. The project area is not within a State Responsibility Area; therefore, it is not designated a very high fire hazard severity zone.

Project construction would involve the use of heavy equipment, welding, and other activities that have the potential to ignite fires. Malfunction of equipment that could cause a fire is extremely unlikely during project construction.

The Roseville Fire Department would provide fire protection, with the closest station approximately 1 mile east of the project site (Fire Station No. 7). In addition, the Roseville Fire Department has mutual and automatic aid agreements with the following fire departments: the California Department of Forestry and Fire Protection/Placer County Fire Department, the Sacramento Metropolitan Fire District, the South Placer Fire Protection District, and the Rocklin Fire Department.

The contractor would comply with Cal-OSHA standards for the storage and handling of fuels, flammable materials, and common construction-related hazardous materials and for fire prevention. In addition, the project would meet the minimum standards set forth by Public Resources Code Section 4290, Title 14, for fire protection and emergency water standards. As a result, impacts associated with wildland fires would be less than significant, and no mitigation is required.

### **3.2.9.3 Mitigation Measures**

The proposed project would result in either no or less-than-significant impacts related to hazards and hazardous waste. No mitigation is required.

### **3.2.9.4 References**

California Department of Toxic Substances Control. 2020a. EnviroStor Hazardous Waste and Substance Site List (Cortese). Available: [https://www.envirostor.dtsc.ca.gov/public/map/?global\\_id=31400006](https://www.envirostor.dtsc.ca.gov/public/map/?global_id=31400006). Accessed: April 10, 2020.

California Department of Toxic Substances Control. 2020b. Cortese List: Section 65962.5(a). Available: <https://calepa.ca.gov/sitecleanup/corteselist/section-65962-5a/>. Accessed: April 10, 2020.

City of Roseville. 2017. *Location of Roseville Fire Stations*. March. Roseville, California. Available: [https://www.roseville.ca.us/UserFiles/Servers/Server\\_7964838/File/Government/](https://www.roseville.ca.us/UserFiles/Servers/Server_7964838/File/Government/)

Departments/Fire%20Dept/Fire%20Station%20Locations/Location%20of%20Roseville%20Fire%20Stations%20-%202017.pdf. Accessed: April 10, 2020.

State Water Resources Control Board. 2020a. *Geotracker*. Available: [https://geotracker.waterboards.ca.gov/map/?global\\_id=T0606191422](https://geotracker.waterboards.ca.gov/map/?global_id=T0606191422). Accessed: April 10, 2020.

State Water Resources Control Board. 2020b. Sites Identified with Waste Constituents Above Hazardous Waste Levels Outside the Waste Management Unit. Available: <https://calepa.ca.gov/wp-content/uploads/sites/6/2016/10/SiteCleanup-CorteseList-CurrentList.pdf>. Accessed: April 10, 2020.

## 3.2.10 Hydrology and Water Quality

| IX. Hydrology and Water Quality                                                                                                                                                                                       | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                                                    |                                |                                                    |                                     |                                     |
| a. Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?                                                                            | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?                                 | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would: |                                |                                                    |                                     |                                     |
| i. result in substantial erosion or siltation on- or off-site;                                                                                                                                                        | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| ii. substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite;                                                                                            | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| iii. create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or                            | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| iv. impede or redirect flood flows?                                                                                                                                                                                   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| d. In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?                                                                                                                   | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| e. Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?                                                                                               | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

### 3.2.10.1 Setting

The climate in the project vicinity is characterized by hot, dry summers and cool, moist winters. National Weather Service cooperative weather station number 047516 (Rocklin) is the closest weather station to the project site, approximately 4 miles east-northeast at an elevation of approximately 240 feet above mean sea level. Average annual precipitation at this weather station is 22.8 inches, with most



precipitation falling as rain from November through March (Western Regional Climate Center 2020).

The project site is located in the Upper Coon–Upper Auburn hydrologic unit (hydrologic unit code 18020127) (U.S. Geological Survey 2019). Surface water in the project area is driven by rainfall, outfalls from adjacent industrial buildings, and irrigation runoff. The water from the detention basin and drainage ditch appears to infiltrate or evaporate unless there are extreme storm events that fill the basin, at which point overflow goes into a drop inlet, which goes to the municipal storm drain system. No natural drainages are present in the eastern portion of the project site. It is surrounded entirely by industrial development or roadways and excess runoff from any extreme storm event drains to the municipal storm drain system (Madrone Ecological Consulting, LLC 2019).

Surface runoff rates of the soils at the project site range from slow to very high, depending on the soil map unit. The erosion hazard for sheet and rill erosion is slight. After intense rainstorms, the soil is saturated for a short time (Rogers 1980).

The Federal Emergency Management Agency Flood Insurance Rate Map (Federal Emergency Management Agency 2018) shows that the site is in Zone X, indicating that the project site is outside the 500-year floodplain of Pleasant Grove Creek.

Pleasant Grove Creek and Pleasant Grove Creek, South Branch appear on the SWRCB's 2010 California 303(d) List of Water Quality Limited Segments for oxygen, dissolved; pyrethroids; and sediment toxicity (the latter only upstream of Fiddymont Road) (State Water Resources Control Board 2010).

Because of the project site's elevation above sea level and because no large waterbody exists at the site, there is no chance for a tsunami or seiche to occur at the site. The hazard for a mudflow (i.e., a debris flow) at the project site is likely low, based on the site's shallow slopes and lack of significant concave areas.

### 3.2.10.2 Impact Analysis

#### ***a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or ground water quality?***

The SWPPP that would be prepared for the project would specify erosion control, sediment control, non-stormwater management, and housekeeping BMPs that, if properly selected and implemented, would prevent substantial sediment and other pollutant movement from the site, such that the project would not violate any water quality standards. The BMPs, provided that they are properly implemented and maintained, are expected to be effective in preventing violations of water quality standards and waste discharge requirements because of the low erosion hazard at the site. Refer to Section 2.6 for a complete description of all construction BMPs the project would implement. Potential impacts related to water quality standards and

waste discharge requirements would be less than significant and no mitigation is required.

***b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?***

The project would not use groundwater. The project would create additional impervious surfaces in the project area but would not substantially interfere with groundwater recharge. The impact related to depletion of groundwater supplies or interference with groundwater recharge would be less than significant and no mitigation is required.

***c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces in a manner which would:***

***i) Result in substantial erosion or siltation on- or off-site?***

The project would involve clearing and grubbing, excavation and filling, soil stockpiling, and soil compaction, and undulating slopes would be flattened. However, these activities would not alter the overall drainage pattern of the area and runoff which currently drains into the detention basin and drainage ditches, and the municipal storm drain system, would not change as a result of the project.

Site grading would expose soils to accelerated erosion by runoff if soils are not properly protected. However, as part of the project, erosion and sediment control BMPs and post-construction BMPs to avoid hydromodification effects would be implemented. The SWPPP would include such practices as seeding, mulching, installation of erosion control blankets, and installing sediment barriers such as fiber rolls and silt fences, as well as the stormwater management measures that are included in the project design. Therefore, the project would not result in substantial erosion or siltation on-site or off-site. The impact would be less than significant, and no mitigation is required.

***ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?***

*And*

***iii) Impede or redirect flood flows?***

The project would cause an increase in runoff rates and amounts during and shortly after construction, but runoff management measures required by the state Stormwater General Permit for Construction and Land Disturbance Activities and contained in the SWPPP would limit such increases to an acceptable level.

The project would not substantially alter the existing natural drainage pattern of the site or area. Because of the small area that the project would disturb relative to the watershed in which it is located, any increases in the rate or amount of surface runoff would not be sufficient to result in flooding on-site or off-site. The roadway extension and overpass would be constructed to current city design and construction standards. Additionally, no aspect of the project would impede or redirect flood flows. Therefore, the impact related to flooding on-site or off-site would be less than significant, and no mitigation is required.

***iv) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?***

The project would not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. See responses to checklist questions c) i and ii above. The impact would be less than significant, and no mitigation is required.

***d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?***

The project site is in Zone X, indicating that the project site is outside the 500-year floodplain of Pleasant Grove Creek. No large bodies of water are located in the project vicinity; therefore, there is no risk of inundation by seiche. The project area is located over 100 miles from the Pacific Ocean; therefore, there is no inundation risk related to tsunami. No impact would occur.

***e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?***

The project site is within the Sacramento Valley basin, North American subbasin. The water quality control plan (i.e., Basin Plan) that covers the project area is the California Regional Water Quality Control Board, Central Valley Region's Sacramento River Basin Plan revised in May 2018. The Basin Plan covers the entire Sacramento and San Joaquin River Basins. Basin Plans consist of a designation or establishment for the waters within a specified area of beneficial uses to be protected, water quality objectives to protect those uses, and a program of implementation needed for achieving the objectives.

The project would incorporate erosion and sediment control BMPs and post-construction BMPs into the project to avoid substantial degradation of water quality. The SWPPP would include such practices as seeding, mulching, installation of erosion control blankets, and installing sediment barriers such as fiber rolls and silt fences, as well as the stormwater management measures that are included in the project design. Refer to Section 2.6 for a complete description of all construction BMPs the project would implement. No aspect of the project would conflict with or

obstruct implementation of the Basin Plan. Therefore, the impact is less than significant, and no mitigation is required.

### 3.2.10.3 Mitigation Measures

The proposed project would not result in significant impacts related to hydrology and water quality; therefore, no mitigation measures are required.

### 3.2.10.4 References

- Federal Emergency Management Agency. 2018. *FEMA Flood Map Service Center: Search by Address*. Map Number 06061C0941 H. Available: <https://msc.fema.gov/portal/search?AddressQuery=roseville%2C%20ca#searchresultsanchor>. Accessed: April 20, 2020.
- Madrone Ecological Consulting, LLC. 2019. *Draft Aquatic Resources Delineation Report for Roseville Parkway Extension*. Prepared for the City of Roseville. Published on October 14, 2019.
- Rogers, J.H. 1980. *Soil Survey of Placer County, California, Western Part*. USDA Soil Conservation Service in cooperation with University of California Agricultural Experiment Station.
- State Water Resources Control Board. 2010. *2010 California 303(d) List of Water Quality Limited Segments*. Available: [http://www.waterboards.ca.gov/water\\_issues/programs/tmdl/2010state\\_ir\\_reports/category5\\_report.shtml](http://www.waterboards.ca.gov/water_issues/programs/tmdl/2010state_ir_reports/category5_report.shtml). Accessed: April 20, 2020.
- U.S. Geological Survey. 2019. *Science in Your Watershed. USGS Water Resources Links for: 18020127 – Upper Coon-Upper Auburn*. Available: <http://water.usgs.gov/lookup/getwatershed?18020127/www/cgi-bin/lookup/getwatershed>. Accessed: April 20, 2020.
- Western Regional Climate Center. 2020. *Rocklin, California (047516)—Period of Record Monthly Climate Summary*. Available: <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca7516>. Accessed April 20, 2020.

## 3.2.11 Land Use and Planning

| X. Land Use and Planning                                                                                                                                                               | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact                           |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                     |                                |                                                    |                              |                                     |
| a. Physically divide an established community?                                                                                                                                         | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| b. Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

### 3.2.11.1 Setting

The project site is located in north Roseville between Foothills Boulevard on the west, and Washington Boulevard on the east (Figures 1-1 and 1-2). The project site is currently dominated by disturbed annual grasslands. Industrial development borders the site along most of the south boundary and along the eastern third of the north boundary. The Highland Reserve residential development is located near the project's eastern end, along the east side of Washington Boulevard and along both sides of the existing Roseville Parkway. Industrial development is located near the project's western boundary, on the west side of Foothills Boulevard.

The General Plan land use designations for the project site include Industrial and Light Industrial, and zoning is General Industrial and Light Industrial. The project site is within the North Industrial Area, which is not subject to a specific plan but is a recognized planning subarea of the city.

### City of Roseville General Plan 2035

The *City of Roseville General Plan 2035* guides the general distribution and intensity of land uses within the city. The General Plan Land Use and Circulation Elements include the following relevant goals and policies.

**Land Use Goal 7.** Potential population growth in Roseville must be based on the long-term carrying capacities and limits of the roadway system, sewer and water treatment facilities, and electrical utility service, as defined in the Circulation Element and the Public Facilities Element.

**Circulation Goal 1.** Maintain an adequate level of transportation service for all of Roseville's residents and employees through a balanced transportation system, which considers automobiles, transit, bicyclists, and pedestrians.

**Circulation Level of Service Policy 2.** Strive to meet the level of service standards through a balanced transportation system that reduces the auto emissions that contribute to climate

change by providing alternatives to the automobile and avoiding excessive vehicle congestion through roadway improvements, Intelligent Transportation Systems, and transit improvements.

The project site is designated easement/right-of-way and Industrial and Light Industrial. The Industrial land use designation is intended to provide areas for industrial uses that tend to generate noise, vibration, odor, dust, smoke, light, and an aesthetic appearance not compatible with residential and other sensitive receptors (City of Roseville 2016). The Light Industrial land use designation is applied to lands reserved for office, industrial, and research and development uses that generate very limited noise, vibration, odor, dust, smoke, light, or other pollutants, and are either integrated or compatible with surrounding uses (City of Roseville 2016).

Lands immediately surrounding the project site to the north, south and west also carry designations of Industrial and Light Industrial.

### **City of Roseville Zoning Ordinance**

The City of Roseville Zoning Ordinance codifies the land uses allowed within the incorporated city limits. The zoning ordinance defines and maps a series of zoning districts, establishes regulatory standards for development and resource protection, and identifies the specific uses permitted within each of those districts (City of Roseville 1996a). The project site is zoned General Industrial (M2) and Light Industrial (M1) by the zoning ordinance (City of Roseville 1996b). Section 19.14 of the zoning ordinance defines the purpose of the M1 and M2 zoning districts as follows.

**Light Industrial (M1) District.** The Light Industrial district is intended to designate areas appropriate for light industrial uses such as manufacturing, processing, assembly, high technology, research and development and storage uses. The use types permitted within the M-1 district do not include outdoor manufacturing but may include limited outdoor storage and the emission of limited amount of visible gasses, particulates, steam, heat, odor, vibration, glare, dust, and noise. These uses may be compatible operating in relatively close proximity to commercial and residential uses.

**General Industrial (M2) District.** The General Industrial district is intended to designate areas suitable for a broad range of industrial uses including manufacturing, assembly, wholesale distribution, and warehousing.

### **3.2.11.2 Impact Analysis**

#### ***a) Would the project physically divide an established community?***

The project site is located on undeveloped disturbed annual grassland, adjacent to industrial, residential, and undeveloped disturbed annual grassland. The project constitutes use planned in the *City of Roseville General Plan 2035* and would not physically divide the community; rather, it would simply extend Roseville Parkway between Foothills Boulevard and Washington Boulevard. There would be no impact.

***b) Would the project cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?***

The project is a use planned in the *City of Roseville General Plan 2035* and is consistent with the goals and policies of the general plan. The project would comply with the development standards and requirements specified by the City of Roseville Zoning Ordinance and the improvement standards of the General Plan. The project would not conflict with any applicable land use plans, policies, or regulations adopted for the purpose of avoiding or mitigating an environmental effect. There would be no impact.

### **3.2.11.3 Mitigation Measures**

The proposed project would not result in significant impacts related to land use. Therefore, no mitigation measures are required.

### **3.2.11.4 References**

City of Roseville. 1996a. *City of Roseville Zoning Map*. Adopted July 26, 1996. Last updated: March 2017. Available:  
<https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=10990649>. Accessed: April 14, 2020.

City of Roseville. 1996b. *City of Roseville Zoning Ordinance*. Last Amended April 6, 2016. Available:  
<https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=10990649>. Accessed: April 14, 2020.

City of Roseville. 2016. *City of General Plan 2035*. Adopted June 15, 2016. Amended August 17, 2016. Available:  
<https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8774544>. Accessed: April 14, 2020.

## 3.2.12 Mineral Resources

| XI. Mineral Resources                                                                                                                                                  | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact | No Impact                           |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                     |                                |                                                    |                              |                                     |
| a. Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?                                 | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |
| b. Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>     | <input checked="" type="checkbox"/> |

### 3.2.12.1 Setting

The California Geological Survey identifies areas that contain or that could contain significant mineral resources so as to provide context for local agency land use decisions and to protect availability of known mineral resources. Classifications ranging from MRZ-1 to MRZ-4 are based on knowledge of a resource's presence and the quality of the resource.

The project site is classified as MRZ-4, which is defined as "areas of no known mineral occurrences where geologic information does not rule out either the presence or absence of significant mineral resources" (California Department of Conservation, Division of Mines and Geology 1995). No mineral extraction operations exist in or adjacent to the project site. The *City of Roseville General Plan 2035* does not designate territory within the city limits for resource extraction.

### 3.2.12.2 Impact Analysis

**a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

Because no known mineral occurrences are present within the project site, the proposed project would not result in the loss of any known mineral resources that are of value to the region and residents of the state. No impact would occur.

**b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?**

The city's general plan does not designate lands for mineral resource recovery, and no known mineral occurrences are present within or adjacent to the project site. No impact would occur.



### **3.2.12.3 Mitigation Measures**

The proposed project would not result in significant impacts related to mineral resources. Therefore, no mitigation measures are required.

### **3.2.12.4 References**

California Department of Conservation, Division of Mines and Geology. 1995. *Mineral Lands Classification Map of Placer County*. By Ralph C. Loyd. Available: file:///C:/Users/40895/Downloads/OFR%2095-10\_Plate\_2.pdf. Accessed: April 14, 2020.

## 3.2.13 Noise

| XII. Noise                                                                                                                                                                                                                                                                                                | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| Would the project result in:                                                                                                                                                                                                                                                                              |                                |                                                    |                                     |                                     |
| a. Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?                                                            | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Generation of excessive groundborne vibration or groundborne noise levels?                                                                                                                                                                                                                             | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| c. For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### 3.2.13.1 Noise Background

Noise is commonly defined as unwanted sound that annoys or disturbs people and potentially causes an adverse psychological or physiological effect on human health. The sound pressure level, expressed along the decibel (dB) scale, is the most common descriptor used to characterize the loudness of ambient (existing) noise. However, because the dB scale does not accurately describe how sound intensity is perceived by human hearing, noise measurements are weighted more heavily for frequencies to which humans are sensitive. This process is called *A-weighting*, written as dBA, and referred to as *A-weighted decibels*. In general, human sound perception is such that a change in sound level of 1 dB cannot typically be perceived by the human ear, a change of 3 dB is barely noticeable, a change of 5 dB is clearly noticeable, and a change of 10 dB is perceived as doubling or halving the sound level.

Sound attenuates based on geometry, or at a rate of 6 dB per doubling of distance for a point source (e.g., stationary compressor or construction equipment) and 3 dB per doubling of distance for a line source (e.g., traffic on a freeway). Atmospheric conditions, including wind, temperature gradients, and humidity, can change how sound propagates over distance and can affect the level of sound received at a given location. The degree to which the ground surface absorbs acoustical energy also affects sound propagation. Sound that travels over an acoustically absorptive

surface, such as grass, attenuates at a greater rate than sound that travels over a hard surface, such as pavement. The increased attenuation is typically in the range of 1 to 2 dB per doubling of distance. Barriers such as buildings and topography that block the line of sight between a source and receiver also increase the attenuation of sound over distance.

Different types of measurements are used to characterize the time-varying nature of sound. These measurements include the equivalent sound level ( $L_{eq}$ ), the minimum and maximum sound levels ( $L_{min}$  and  $L_{max}$ ), the day-night sound level ( $L_{dn}$ ), and the community noise equivalent level (CNEL).

### 3.2.13.2 Vibration Background

Operation of heavy construction equipment creates seismic waves that radiate along the surface of the earth and downward into the earth. These surface waves can be felt as ground vibration. Vibration from operation of this equipment can result in effects ranging from annoyance of people to damage to structures. Varying geology and distance result in different vibration levels with different frequencies and displacements. In all cases, vibration amplitudes decrease with increasing distance. As seismic waves travel outward from a vibration source, they excite the particles of rock and soil through which they pass and cause the particles to oscillate. The actual distance that these particles move is usually only a few ten-thousandths to a few thousandths of an inch. The rate or velocity (in inches per second [in/sec]) at which these particles move is the commonly accepted descriptor of the vibration amplitude, referred to as the peak particle velocity (PPV). Table 3-10 summarizes typical vibration levels generated by construction equipment at various distances.

**Table 3-10. Vibration Source Levels for Demolition and Construction Equipment**

| Equipment        | PPV at<br>25 feet | PPV at<br>50 feet | PPV at<br>75 feet | PPV at<br>100 feet |
|------------------|-------------------|-------------------|-------------------|--------------------|
| Hoe ram          | 0.089             | 0.032             | 0.017             | 0.011              |
| Large bulldozer  | 0.089             | 0.032             | 0.017             | 0.011              |
| Loaded trucks    | 0.076             | 0.027             | 0.015             | 0.010              |
| Jackhammer       | 0.035             | 0.012             | 0.007             | 0.004              |
| Vibratory roller | 0.003             | 0.001             | 0.001             | <0.001             |

Sources: California Department of Transportation 2013 and Federal Transit Administration 2018.

PPV = peak particle velocity

Vibration amplitude attenuates over distance and is a complex function of how energy is imparted into the ground and the soil conditions through which the vibration is traveling. Caltrans has developed vibration guidelines for damage and annoyance potential from transient and continuous vibration usually associated with

construction activity. Vibration from construction equipment usually falls under the category of continuous/frequent intermittent sources. Tables 3-11 and 3-12 summarize these Caltrans guidelines for vibration damage and annoyance.

**Table 3-11. Guideline Vibration Damage Potential Threshold Criteria**

| Structure and Condition                                        | Maximum PPV (inches/second) |                                          |
|----------------------------------------------------------------|-----------------------------|------------------------------------------|
|                                                                | Transient Sources           | Continuous/Frequent Intermittent Sources |
| Extremely fragile historic buildings, ruins, ancient monuments | 0.12                        | 0.08                                     |
| Fragile buildings                                              | 0.20                        | 0.10                                     |
| Historic and some old buildings                                | 0.50                        | 0.25                                     |
| Older residential structures                                   | 0.50                        | 0.30                                     |
| New residential structures                                     | 1.00                        | 0.50                                     |
| Modern industrial/commercial buildings                         | 2.00                        | 0.50                                     |

Source: California Department of Transportation 2013.

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory-compaction equipment.

PPV = peak particle velocity

**Table 3-12. Guideline Vibration Annoyance Potential Criteria**

| Structure and Condition | Maximum PPV (inches/second) |                                          |
|-------------------------|-----------------------------|------------------------------------------|
|                         | Transient Sources           | Continuous/Frequent Intermittent Sources |
| Barely perceptible      | 0.04                        | 0.01                                     |
| Distinctly perceptible  | 0.25                        | 0.04                                     |
| Strongly perceptible    | 0.9                         | 0.10                                     |
| Severe                  | 2.0                         | 0.4                                      |

Source: California Department of Transportation 2013.

PPV = peak particle velocity

### 3.2.13.3 Existing Setting

The project site is located within the North Industrial Area of Roseville, about 0.5 mile south of Blue Oaks Boulevard, and would provide a new east-west facility between Foothills Boulevard and Washington Boulevard.

The Highland Reserve development consisting of single-family residences is located along Washington Boulevard at the eastern terminus of the project. The residences on both sides of the existing alignment of Roseville Parkway have continuous solid privacy walls that extend along the frontage of Roseville Parkway and Washington Boulevard. Apart from this development, land use in the project area consists primarily of commercial and industrial uses, with no apparent areas of frequent

outdoor use. The area adjacent to the proposed East Roseville Parkway westbound lanes is undeveloped and zoned for industrial use.

Sources of ambient noise include local traffic on Foothills Boulevard and Washington Boulevard. UPRR tracks extend parallel to the north-south route of Industrial Avenue, and both would cross under the new bridge that would be added with the proposed extension project. Wayside noise from freight rail locomotives and cars are an intermittent source of noise in the project area, in addition to horn noise at the nearest grade crossings at Blue Oaks Boulevard, Pleasant Grove Boulevard, and Industrial Avenue during train passbys. Aircraft from local airports are a source of noise during overflights. The closest airport to the project site is the Lincoln Regional Airport approximately 8 miles to the north. The nearest major airports are McLellan Airport, approximately 8 miles south of the project site, and Sacramento International Airport, approximately 15 miles southwest of the project site. Industrial and HVAC equipment from activities at land uses adjacent to the project also contribute to ambient sound levels in the area.

According to the noise analysis conducted for the *Amoruso Ranch Specific Plan EIR* (City of Roseville 2016a), the 60-dB  $L_{dn}$  noise contour extends 98 feet from the roadway centerline of Foothills Boulevard and 110 feet from the centerline of Washington Boulevard under existing conditions (under year 2014 as analyzed in the EIR).

### 3.2.13.4 Applicable Noise Standards

The project is located entirely within the city of Roseville, and as such city standards are used to determine significance under CEQA.

The *City of Roseville General Plan 2035* (City of Roseville 2016b) establishes maximum allowable noise exposure levels for transportation noise sources in terms of  $L_{dn}$ , shown in Table 3-13. The General Plan also includes criteria for nontransportation or stationary noise sources, which may be considered applicable to the temporary use of construction equipment. The standards for nontransportation sources are also used in Section 9.24.100 of the Roseville Municipal Code. These criteria are shown in Table 3-14.

**Table 3-13. Maximum Allowable Noise Levels from Transportation Sources**

| Land Use                 | Outdoor Activity Areas <sup>a</sup><br>$L_{dn}/CNEL$ , dB | Interior Spaces    |                            |
|--------------------------|-----------------------------------------------------------|--------------------|----------------------------|
|                          |                                                           | $L_{dn}/CNEL$ , dB | $L_{eq}$ , dB <sup>b</sup> |
| Residential              | 60 <sup>c</sup>                                           | 45                 | --                         |
| Transient Lodging        | 60 <sup>c</sup>                                           | 45                 | --                         |
| Hospitals, Nursing Homes | 60 <sup>c</sup>                                           | 45                 | --                         |

| Land Use                           | Outdoor Activity Areas <sup>a</sup><br>L <sub>dn</sub> /CNEL, dB | Interior Spaces           |                                   |
|------------------------------------|------------------------------------------------------------------|---------------------------|-----------------------------------|
|                                    |                                                                  | L <sub>dn</sub> /CNEL, dB | L <sub>eq</sub> , dB <sup>b</sup> |
| Theaters, Auditoriums, Music Halls | --                                                               | --                        | 35                                |
| Churches, Meeting Halls            | 60 <sup>c</sup>                                                  | --                        | 40                                |
| Office Buildings                   | 65                                                               | --                        | 45                                |
| Schools, Libraries, Museums        | --                                                               | --                        | 45                                |
| Playgrounds, Neighborhood Parks    | 70                                                               | --                        | --                                |

Source: City of Roseville 2016b.

Notes:

Where a proposed use is not specifically listed on this table, the use shall comply with the noise exposure standards for the nearest similar use as determined by the Planning Division. Commercial and industrial uses have not been listed because such uses are not considered to be particularly sensitive to noise exposure.

<sup>a</sup> Outdoor activity areas for residential developments are considered to be the backyard patios or decks of single-family dwellings, and the patios or common areas where people generally congregate for multi-family developments.

Outdoor activity areas for non-residential developments are considered to be those common areas where people generally congregate, including pedestrian plazas, seating areas and outside lunch facilities.

Where the location of outdoor activity areas is unknown, the exterior noise level standard shall be applied to the property line of the receiving land use.

<sup>b</sup> As determined for a typical worst-case hour during periods of use.

<sup>c</sup> Where it is not possible to reduce noise in outdoor activity areas to 60 dB L<sub>dn</sub>/CNEL or less using a practical application of the best-available noise reduction measures, an exterior noise level of up to 75 dB L<sub>dn</sub>/CNEL may be allowed provided that available exterior noise level reduction measures have been implemented and interior noise levels are in compliance with this table.

CNEL = community noise equivalent level

dB = decibel

L<sub>dn</sub> = day-night sound level

**Table 3-14. Hourly Noise Level Performance Criteria for Nontransportation Noise Sources**

| Noise Level Descriptor            | Daytime (7 a.m.–10 p.m.) | Nighttime (10 p.m.–7 a.m.) |
|-----------------------------------|--------------------------|----------------------------|
| Hourly average (L <sub>eq</sub> ) | 50 dB                    | 45 dB                      |
| Maximum level (L <sub>max</sub> ) | 70 dB                    | 65 dB                      |

Source: City of Roseville, 2016.

Notes:

For municipal power plants consisting primarily of broadband, steady state noise sources, the hourly (L<sub>eq</sub>) noise standard may be increased up to 10 dBA, but may not exceed 55 dBA hourly L<sub>eq</sub> dB. Each of the specified noise levels should be lowered by 5 dB for simple tone noises, noises consisting primarily of speech or music, or for recurring impulsive noises. Such noises are generally considered by residents to be particularly annoying and are a primary source of noise complaints. These noise level standards do not apply to residential units established in conjunction with industrial or commercial uses (e.g., caretaker dwellings).

No standards have been included for interior noise levels. Standard construction practices should, with exterior noise levels identified, result in acceptable interior noise levels.

dB = decibel

dBA = A-weighted decibel

L<sub>eq</sub> = equivalent sound level

L<sub>max</sub> = maximum sound level

The municipal code provides an exemption for construction noise. Section 9.24.030, *Exemptions*, of the City Municipal Code indicates the following activities are exempt from city noise regulations:

Private construction (e.g., construction, alteration or repair activities) between the hours of 7:00 a.m. and 7:00 p.m. Monday through Friday, and between the hours of 8:00 a.m. and 8:00 p.m. Saturday and Sunday; provided, however, that all construction equipment shall be fitted with factory installed muffling devices and that all construction equipment shall be maintained in good working order.

### 3.2.13.5 Impact Analysis

- a) Would the project result in generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in a local general plan or noise ordinance or applicable standards of other agencies?***

#### Construction

The assessment of potential construction noise levels was based on methodology developed by the Federal Transit Administration (2018) and construction noise criteria from applicable local guidance (such as local general plan documents or noise ordinances). Noise levels produced by commonly used construction equipment are shown in Table 3-15. Individual types of heavy construction equipment are expected to generate maximum noise levels ranging from 80 to 89 dBA at a reference distance of 50 feet. The construction noise level at a given receiver location depends on the type of construction activity and the distance and shielding between the activity and noise-sensitive receivers.

**Table 3-15. Commonly Used Construction Equipment Noise Emission Levels**

| Equipment   | Typical Noise Level (dBA)<br>50 Feet from Source |
|-------------|--------------------------------------------------|
| Rock Drill  | 95                                               |
| Hoe Ram     | 90                                               |
| Heavy Truck | 84                                               |
| Excavator   | 85                                               |
| Bulldozer   | 85                                               |
| Generator   | 81                                               |
| Mixer       | 80                                               |
| Grader      | 85                                               |
| Compactor   | 82                                               |
| Scraper     | 85                                               |
| Backhoe     | 85                                               |
| Roller      | 85                                               |
| Loader      | 84                                               |

Source: Federal Transit Administration 2018.  
dBA = A-weighted decibel.

Construction equipment used would vary by construction phase of the proposed project and would involve the use of excavators, bulldozers, heavy trucks, pumps, generators, graders, compactors, and other heavy equipment.

To characterize the overall noise level of the worst-case noise condition during a given phase of construction, the two loudest pieces of equipment were assumed to operate simultaneously along a construction site perimeter location relative to the nearest receptors. All types of heavy equipment were assumed to operate up to 50 percent of a given hour. Sound levels by project phase are shown in Table 3-16.

**Table 3-16. Construction Noise Levels by Activity and Distance to Allowable Sound Levels**

| Construction Activity       | Equipment Used <sup>a</sup> | Combined Source Level at 50 feet (L <sub>eq</sub> , dBA) <sup>b</sup> | Distance to Exceedance of Daytime Sound Level Limit of 50 dBA L <sub>eq</sub> (feet) <sup>c</sup> | Distance to Exceedance of Nighttime Sound Level Limit of 45 dBA L <sub>eq</sub> (feet) <sup>d</sup> |
|-----------------------------|-----------------------------|-----------------------------------------------------------------------|---------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------|
| Grubbing/Land Clearing      | Scraper, Grader             | 85                                                                    | 1,100                                                                                             | 1,750                                                                                               |
| Grading/Excavation          | Scraper, Grader             | 85                                                                    | 1,100                                                                                             | 1,750                                                                                               |
| Draining/Utilities/Subgrade | Hoe ram, Dozer              | 86                                                                    | 1,150                                                                                             | 1,850                                                                                               |
| Paving                      | Paver, Roller               | 85                                                                    | 1,100                                                                                             | 1,750                                                                                               |
| Overpass Construction       | Rock drill, Excavator       | 92                                                                    | 2,450                                                                                             | 3,900                                                                                               |

Note: Distance calculation do not include the effects, if any, of local shielding from walls, topography or other barriers which may further reduce sound levels.

L<sub>eq</sub> = equivalent sound level; dBA = A-weighted decibel.

<sup>a</sup> The two loudest pieces of equipment that may operate in one location simultaneously.

<sup>b</sup> Based on a usage factor of up to 50 percent.

<sup>c</sup> The maximum distance where the combined equipment level may potentially exceed the City daytime threshold of 50 dBA L<sub>eq</sub> for nontransportation sources. Daytime is defined as the hours between 7:00 a.m. to 10:00 p.m.

<sup>d</sup> The maximum distance where the combined equipment level may potentially exceed the City nighttime threshold of 45 dBA L<sub>eq</sub> for nontransportation sources. Nighttime is defined as the hours between 10:00 p.m. to 7:00 a.m.

The nearest sensitive receptors are single-family residences in the Highland Reserve development along Washington Boulevard. Commercial, industrial and undeveloped land uses along the proposed corridor do not include any apparent areas of frequent outdoor use and are generally not considered to be noise sensitive according to City General Plan noise compatibility standards.

As shown in Table 3-16, noise levels during the phases of road construction would potentially exceed city standards for nontransportation sources on construction sites at distances of up to 1,150 feet during daytime hours and 1,850 feet during nighttime hours. Use of a drill rig during construction of the overpass would potentially exceed city standards at distances of up to 2,450 feet during daytime hours and 3,900 feet during nighttime hours.



All construction work is planned to be done during daytime hours of 7:00 a.m. to 5:00 p.m., Monday through Friday, when noise from construction is exempt from the provisions of the City Municipal Code. No nighttime work is anticipated during construction. The use of heavy equipment would be temporary and short-term relative to a given work area, as construction progresses along the alignments of levee and channel areas throughout the construction window. As such, noise from heavy equipment would affect different areas at different times over the course of project construction, and the duration of excessive noise exposure that an individual receptor would experience would be somewhat limited. In addition, construction would only occur for a total of approximately 6 months, and only a portion of the work may potentially exceed city standards at the nearest single-family residences at the eastern terminus of the project.

Construction of the project would require up to 20 worker trips per day during peak traffic hours to commute to the work site. Relative to existing volumes on Foothills Boulevard and Washington Boulevard, this would result in a noise level increase of less than 1 dB relative to existing conditions, which would not be a perceptible increase.

Although use of heavy equipment during construction would potentially generate noise in excess of the city nontransportation standards, noise would be generated during exempt hours as defined in the municipal code. Noise from construction would be temporary, intermittent and would cease once work is complete. Therefore, the temporary impact of increased noise during construction is considered to be less than significant. No mitigation is required.

## **Operations**

Traffic noise levels were predicted using FHWA Traffic Noise Model, version 2.5. Geometric inputs to the traffic noise model include the locations of roadways, shielding features (e.g., topography and buildings), noise barriers, and receptors, as well as ground type. Appendix B-2 contains ADT and peak hour traffic volumes used for the existing and future model conditions.

Traffic noise modeling was conducted for existing (year 2020) no project conditions, existing plus proposed project conditions, and cumulative (year 2035) plus proposed project conditions. The comparison of plus project to no project conditions indicates the direct effect of the project excluding the effects of future growth in traffic. Traffic modeling results are shown in Appendix B-3 (see initial study Appendix B). Modeling results are rounded to the nearest dB.

As shown in Table B-3A contained in Appendix B, traffic noise levels at modeled receiver locations for existing plus project conditions are predicted to be in the range of 55 to 62 dBA  $L_{dn}$ , accounting for all types of land use in the study area. Under

cumulative plus project conditions, traffic noise levels are predicted to range from 59 to 67 dBA  $L_{dn}$ .

Predicted traffic noise levels were compared to exterior and interior maximum allowable levels from the General Plan to determine noise compatibility of the project with existing land uses. The modeled locations are shown in Figure B-1 of Appendix B. At single-family residences, exterior noise levels would have a maximum value of 57 dBA  $L_{dn}$  in the existing year (2020) under the plus project condition, and a maximum value of 60 dBA  $L_{dn}$  under the cumulative (2035) plus project condition, as shown in Table B-3B of Appendix B. The modeled level of 60 dBA  $L_{dn}$  is equal to the City maximum allowable exterior noise standard for residential use. As such, traffic noise levels from the project under both existing year and cumulative conditions would be considered compatible with single-family residences. Commercial and industrial uses along the Roseville Parkway Extension are not considered to be noise sensitive, as indicated in the City General Plan.

Building interior noise levels under the future build condition were predicted based on outdoor-to-indoor noise reduction values for typical building components used in Department of Housing and Urban Development guidance (2009). Interior noise levels at single-family residences are shown in Table B-3C of Appendix B. The analysis assumes a building noise reduction factor of 30 dB, which is associated with standard framing double-hung windows, with up to 30 percent coverage of windows on the building structure. Based on this assumption, interior noise levels at all receiver locations are predicted have values of less than 45 dBA  $L_{dn}$  under both existing year and cumulative conditions.

Based on the above analysis, operation of the project would not expose persons to or generate noise levels in excess of standards established in the 2035 General Plan. Therefore, this impact is considered less than significant, and no mitigation is required.

***b) Would the project result in generation of excessive groundborne vibration or groundborne noise levels?***

Operation of construction equipment may potentially result in perceptible levels of groundborne vibration in the immediate vicinity of heavy equipment during construction of the road. In general, noticeable levels of groundborne vibration are highly localized around the source of vibration. Vibration-generating equipment that would be operated along the project alignment include a hoe ram, rollers, bulldozers, and heavy trucks. These types of equipment typically produce PPV vibration levels of less than 0.10 in/sec at a reference distance of 25 feet. Vibration at this level may intermittently be noticeable inside of buildings during times when equipment is operating 25 feet from a building façade, but this is not anticipated to occur at any point during project construction.

Use of heavy equipment during construction of the project would be temporary and would cease once construction is complete. The types of equipment scheduled for use in work areas would produce a level of vibration that is not expected to result in exceedance of the Caltrans guidelines for damage and annoyance. Rubber-tired vehicles are not a significant source of groundborne vibration and operation of the project is not expected to generate noticeable levels of vibration. Therefore, this impact would be less than significant. No mitigation is required.

**c) *For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?***

The closest airport to the project site is the Lincoln Regional Airport approximately 8 miles to the north. The nearest major public airports to the project site are McClellan Airport and Sacramento International Airport. The project lies outside of these airport influence areas and is more than 5 miles away from the 60 L<sub>dn</sub> contour of both of the major airports. There are no private airstrips in the vicinity of the project site. Therefore, there would be no impact related to excessive noise from public use airports.

### **3.2.13.6 Mitigation Measures**

The proposed project would not result in temporary or permanent significant impacts from noise or vibration. Therefore, no mitigation is required.

### **3.2.13.7 References Cited**

- California Department of Transportation. 2013. *Transportation and Construction Vibration Guidance Manual*. September. Available: [http://www.dot.ca.gov/hq/env/noise/pub/TCVGM\\_Sep13\\_FINAL.pdf](http://www.dot.ca.gov/hq/env/noise/pub/TCVGM_Sep13_FINAL.pdf).
- City of Roseville. 2016a. *Amoruso Ranch Specific Plan Final EIR*. Prepared by AES. May.
- City of Roseville. 2016b. *City of Roseville General Plan 2035*. Development Services Department – Planning Division. Adopted June 15, 2016.
- Federal Transit Administration. 2018. *Transit Noise and Vibration Impact Assessment Manual*. September. U.S. Department of Transportation. Available: [https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123\\_0.pdf](https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf). Accessed: December 12, 2019.
- U.S. Department of Housing and Urban Development, Office of Community Planning and Development. 2009. *The Noise Guidebook*. Washington, D.C. April.

## 3.2.14 Population and Housing

| XIII. Population and Housing                                                                                                                                                                          | Potentially Significant Impact | Less than Significant with Mitigation Incorporated | Less-than-Significant Impact        | No Impact                           |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------|----------------------------------------------------|-------------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                                    |                                |                                                    |                                     |                                     |
| a. Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)? | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Displace a substantial number of existing people or housing, necessitating the construction of replacement housing elsewhere?                                                                      | <input type="checkbox"/>       | <input type="checkbox"/>                           | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### 3.2.14.1 Setting

The project site is undeveloped disturbed annual grassland. The *City of Roseville General Plan 2035* land use map designates the project site for general and light industrial uses. No new homes are proposed for the project site.

### 3.2.14.2 Impact Analysis

**a) *Would the project induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., through extension of roads or other infrastructure)?***

The proposed project is identified in the City of Roseville Transportation System Capital Improvement Program and General Plan Circulation Element. Employment-generating activities, such as construction of the roadway and overpass, would bring some workers into the area, but these activities are not anticipated to directly result in substantial population growth.

The project would not indirectly induce population growth by extension of Roseville Parkway, rather it would provide for more efficient east-west travel in the project area. This impact is less than significant, and no mitigation is required.

**b) *Would the project displace a substantial number of existing people or housing units, necessitating the construction of replacement housing elsewhere?***

There are no residences on the project site; therefore, the proposed project would not displace housing. No impact would occur.

### **3.2.14.3 Mitigation Measures**

The proposed project would not have a significant impact on population and housing. Therefore, no mitigation is required.

## 3.2.15 Public Services

| <b>XIV. Public Services</b>                                                                                                                                                                                                                                                                                                                                                                                              | <b>Potentially<br/>Significant<br/>Impact</b> | <b>Less than<br/>Significant<br/>with Mitigation<br/>Incorporated</b> | <b>Less-than-<br/>Significant<br/>Impact</b> | <b>No<br/>Impact</b>                |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------|-----------------------------------------------------------------------|----------------------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                                                                                                                                                                                                                                                       |                                               |                                                                       |                                              |                                     |
| a. Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services: |                                               |                                                                       |                                              |                                     |
| Fire protection?                                                                                                                                                                                                                                                                                                                                                                                                         | <input type="checkbox"/>                      | <input type="checkbox"/>                                              | <input type="checkbox"/>                     | <input checked="" type="checkbox"/> |
| Police protection?                                                                                                                                                                                                                                                                                                                                                                                                       | <input type="checkbox"/>                      | <input type="checkbox"/>                                              | <input type="checkbox"/>                     | <input checked="" type="checkbox"/> |
| Schools?                                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/>                      | <input type="checkbox"/>                                              | <input type="checkbox"/>                     | <input checked="" type="checkbox"/> |
| Parks?                                                                                                                                                                                                                                                                                                                                                                                                                   | <input type="checkbox"/>                      | <input type="checkbox"/>                                              | <input type="checkbox"/>                     | <input checked="" type="checkbox"/> |
| Other public facilities?                                                                                                                                                                                                                                                                                                                                                                                                 | <input type="checkbox"/>                      | <input type="checkbox"/>                                              | <input type="checkbox"/>                     | <input checked="" type="checkbox"/> |

### 3.2.15.1 Setting

#### Fire Protection

The Roseville Fire Department operates nine fire stations that provide fire protection, suppression, emergency medical services, and hazardous material management within the city of Roseville, including the project site. The project site is within Fire Protection Districts 7 and 2, served by Fire Station No. 7 and No. 2. Fire Station No. 7 is approximately 1 mile east of the project site at 911 Highland Point Drive. Fire Station No. 2 is approximately 2 miles south of the project site at 1398 Junction Boulevard (City of Roseville 2017).

#### Police Protection

The Roseville Police Department, headquartered approximately 1.7 miles south of the project site at 1051 Junction Boulevard, provides police protection services to Roseville.

#### Schools

The closest school to the project site is George A. Buljan Middle School approximately 0.75 mile south of the project site. The next closest school is Arbor View Montessori approximately 1.1 miles south of the project site.

## **Parks**

The nearest existing park to the project site is Summerhill Park, approximately 0.25 mile northeast of the project site's eastern boundary. Additional parks in the project vicinity include Duran, Gilbert A. & Helen K. Park, Buljian Park, and Brown Vencil Park. Woodcreek Golf Club is to the southwest.

### **3.2.15.2 Impact Analysis**

***a) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities or a need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:***

#### ***Fire protection?***

The Roseville Parkway extension and overpass would be constructed in compliance with applicable city codes and regulations. The proposed project would improve east-west accessibility in the project area by providing additional east-west circulation options for service calls in North Roseville. No impact would occur.

#### ***Police protection?***

Because the proposed project would not introduce new residents to the area, it would not result in a need for new or physically altered police facilities in order to maintain adequate service levels. The proposed project would improve east-west accessibility in the project area by providing additional east-west circulation options for service calls in North Roseville. No impact would occur.

#### ***Schools?***

The proposed project would not introduce additional residents to the area. The proposed project would improve east-west accessibility in the project area by providing additional east-west circulation options. Because the proposed project would not increase the demand for school facilities, there would be no impact.

#### ***Parks and Other Public Facilities?***

Because the proposed project would not introduce new residents to the area, it would not result in the need for new or expanded parks or other public facilities. No impact would occur.

### **3.2.15.3 Mitigation Measures**

The proposed project would have no impact on public services and therefore, no mitigation is required.

### 3.2.15.4 References

City of Roseville. 2017. *Location of Roseville Fire Stations*. March. Roseville, California. Available:  
[https://www.roseville.ca.us/UserFiles/Servers/Server\\_7964838/File/Government/Departments/Fire%20Dept/Fire%20Station%20Locations/Location%20of%20Roseville%20Fire%20Stations%20-%202017.pdf](https://www.roseville.ca.us/UserFiles/Servers/Server_7964838/File/Government/Departments/Fire%20Dept/Fire%20Station%20Locations/Location%20of%20Roseville%20Fire%20Stations%20-%202017.pdf). Accessed: April 10, 2020.



## 3.2.16 Recreation

|                                                                                                                                                                                              | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with Mitigation<br>Incorporated | Less-than-<br>Significant<br>Impact | No<br>Impact                        |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>XV. Recreation</b>                                                                                                                                                                        |                                      |                                                             |                                     |                                     |
| Would the project:                                                                                                                                                                           |                                      |                                                             |                                     |                                     |
| a. Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?                        | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

### 3.2.16.1 Setting

The project site is on land designated for right-of-way or general and light industrial uses, as described in the *City of Roseville General Plan 2035* and the City's Zoning Ordinance.

Reference Section 3.2.15, *Public Services*, for information on parks in the project area.

### 3.2.16.2 Impact Analysis

**a) *Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?***

The proposed project would not introduce new residents to the area and would not increase the use of existing neighborhood and regional parks or other recreational facilities. No impact would occur.

**b) *Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?***

The proposed project does not include construction of recreational facilities and would not require the construction of new recreational facilities or the expansion of existing recreational facilities that might have an adverse physical effect on the environment. Therefore, the proposed project would have no potential adverse physical effects on the environment associated with the construction of recreational facilities. No impact would occur.

### **3.2.16.3 Mitigation Measures**

The proposed project would have no impact on recreational facilities. Therefore, no mitigation is required.

## 3.2.17 Transportation

|                                                                                                                                                                  | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with Mitigation<br>Incorporated | Less-than-<br>Significant<br>Impact | No<br>Impact                        |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>XVI. Transportation</b>                                                                                                                                       |                                      |                                                             |                                     |                                     |
| Would the project:                                                                                                                                               |                                      |                                                             |                                     |                                     |
| a. Conflict with a program, plan, ordinance, or policy addressing the circulation system including transit, roadway, bicycle and pedestrian facilities?          | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?                                                          | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. Result in inadequate emergency access?                                                                                                                        | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

The transportation analysis is based on the *Roseville Parkway Extension Traffic Evaluation Memorandum* prepared by Kimley-Horn (Kimley-Horn 2020). The Kimley-Horn traffic memorandum was prepared to support CEQA and to document project consistency with prior, more comprehensive environmental studies, and to inform the intersections' lane geometries to achieve acceptable operations.

### 3.2.17.1 Setting

#### Regulatory Setting

##### State

Caltrans is responsible for operating and maintaining all state-owned roadways and interstate highways in California. Caltrans sets maximum load limits for trucks and safety requirements for oversized vehicles that operate on highways. Highways in Placer County are under the jurisdiction of Caltrans District 3.

The California Vehicle Code, Division 15, Chapters 1 through 5 (Size, Weight, and Load) gives Caltrans discretionary authority to issue special permits for the movement of vehicles and loads exceeding statutory limitations on the size, weight, and loading of vehicles operated on highways. A special permit issued by Caltrans is required to authorize the operation of oversize or overweight trucks. In addition, Sections 660–711 of the California Streets and Highways Code require permits from Caltrans for any roadway encroachment during truck transportation and delivery.

The regulations for the care and protection of state and county highways require permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.

Finally, state law requires each city and county to adopt a comprehensive, long-range general plan, including a circulation element, to guide its physical development. The applicable local documents are described below.

## **Local**

### ***Placer County 2036 Regional Transportation Plan***

The Placer County Transportation Planning Agency's (PCTPA) *Placer County Regional Transportation Plan 2040*, approved November 21, 2019, outlines the existing modes of transportation and identifies needed improvements to guide the systematic development of a balanced, comprehensive, multimodal transportation system integrated with land use and air quality planning to meet Placer County's transportation needs (Placer County Transportation Planning Agency 2019). PCTPA serves as the County's designated Congestion Management Agency and implements an alternative transportation outreach effort as part of the *Placer County Regional Transportation Plan 2040* to meet its congestion management program requirements (Placer County Transportation Planning Agency 2019). The *Placer County Regional Transportation Plan 2040* also functions as the local transportation plan incorporated into the larger SACOG MTP/SCS. As one of the cities within Placer County, Roseville is a member of PCTPA. The *Placer County Regional Transportation Plan 2040* includes the following relevant goals and policies.

**Goal 1: Highways/Streets/Roadways.** Maintain and upgrade a safe, efficient, and convenient countywide roadway system that meets the travel needs of people and goods through and within the region.

**Goal 5: Goods Movement.** Provide for the safe and efficient movement of goods through, within, and into Placer County.

**Goal 9: Integrated Land Use, Air Quality and Transportation Planning.** By integrating land, air, and transportation planning, build and maintain the most efficient and effective transportation system possible while achieving the highest possible environmental quality standards.

**Objective A, Policy 3.** Provide technical support to jurisdictions' local roadway improvement efforts through circulation system analysis, and other transportation studies, as requested.

**Objective B, Policy 4.** Encourage local jurisdictions to develop and implement complete street practices in the design and maintenance of local roads.

### ***City of Roseville General Plan 2035***

The Circulation Element of the *City of Roseville General Plan 2035* includes the following relevant goals and policies.

**Functional Classification Goal 1.** Provide guidance to the long-range planning of the City's roadway system including design standards, right-of-way requirements and coordination with surrounding jurisdictions.

**Functional Classification Policy 4.** Maintain a system of truck routes to provide for the safe and efficient movement of goods and to avoid impacting residential neighborhoods.

**Level of Service Goal 1.** Maintain an adequate level of transportation service for all of Roseville's residents and employees through a balanced transportation system, which considers automobiles, transit, bicyclists, and pedestrians.

**Level of Service Policy 1.** Maintain a level of service (LOS) "C" standard at a minimum of 70 percent of all signalized intersections and roadway segments in the City during the a.m. and p.m. peak hours. Exceptions to the LOS "C" standard may be considered for intersections where the City finds that the required improvements are unacceptable based on established criteria identified in the implementation measures. In addition, Pedestrian Districts may be exempted from the LOS standard.

**Bikeways/Trails Goal 2.** Establish and maintain a safe, comprehensive and integrated bikeway and trail system that encourages the use of bikes and walking for commuting, recreational and other trips.

## Environmental Setting

### Project Roadways

The proposed project is located in the North Industrial Planning Area of Roseville. The project includes extension of Roseville Parkway by approximately 0.75 mile from its current terminus at Washington Boulevard westerly to Foothills Boulevard. The project includes construction of an overpass of the UPRR tracks and Industrial Avenue.

The transportation analysis evaluated the following study intersections (see Figure 3-2):

1. Roseville Parkway at Foothills Boulevard
2. Roseville Parkway at Washington Boulevard

The primary focus of study was to document project consistency with prior environmental studies related to the above intersections and proposed road extension. Accordingly, this traffic evaluation considered the following analysis scenarios:

**A. Existing (2020) Conditions.** Conditions representative of on-the-ground conditions established using traffic count data provided by the City's Intelligent Transportation System from February 2020.

**B. Existing (2020) plus Proposed Project Conditions.** Conditions representative of year 2020 conditions resulting from the addition of and network connectivity achieved

from the Roseville Parkway Extension. Traffic volumes were approximated using the City's Travel Demand Model to establish these "plus project" conditions.

**C. Cumulative (2035) plus Proposed Project Conditions.** Conditions obtained directly from the Amoroso Ranch Specific Plan in which the Roseville Parkway Extension is included.

### Methodology

The traffic evaluation was performed in accordance with the City's preferred methodologies (City of Roseville 2020) and general guidelines for the preparation of traffic studies.

Analysis of transportation facility operations is based on the concept of LOS. The LOS of a facility is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity. LOS for this study were determined using methods defined in the Highway Capacity Manual (HCM) 6th Edition. The HCM includes procedures for analyzing a variety of intersection traffic control, including traffic signals. The signalized intersection procedures define LOS as a function of average control delay for the intersection as a whole. Table 3-17 presents intersection LOS definitions as defined in the HCM. LOS was determined using the Synchro® traffic analysis software.

**Table 3-17. Intersection Level of Service Criteria**

| Level of Service (LOS) | Signalized Average Control Delay (sec/veh) |
|------------------------|--------------------------------------------|
| A                      | ≤ 10                                       |
| B                      | > 10 – 20                                  |
| C                      | > 20 – 35                                  |
| D                      | > 35 – 55                                  |
| E                      | > 55 – 80                                  |
| F                      | > 80                                       |

### Results

This section summarizes the technical analyses completed for the study intersections. These facilities were analyzed under existing (2020) conditions with and without the proposed project, and cumulative (2035) conditions with the proposed project. Figure 3-3 depicts the study intersections' lane geometries, while Figure 3-4 and Figure 3-5 present the analysis scenarios' peak-hour intersection turning movement volumes. The traffic count data sheets are provided the Traffic Evaluation Memorandum Appendix A (see Initial Study Appendix C). Traffic Evaluation Memorandum Appendices B-E include the scenarios' analysis





NOT TO SCALE



### LEGEND

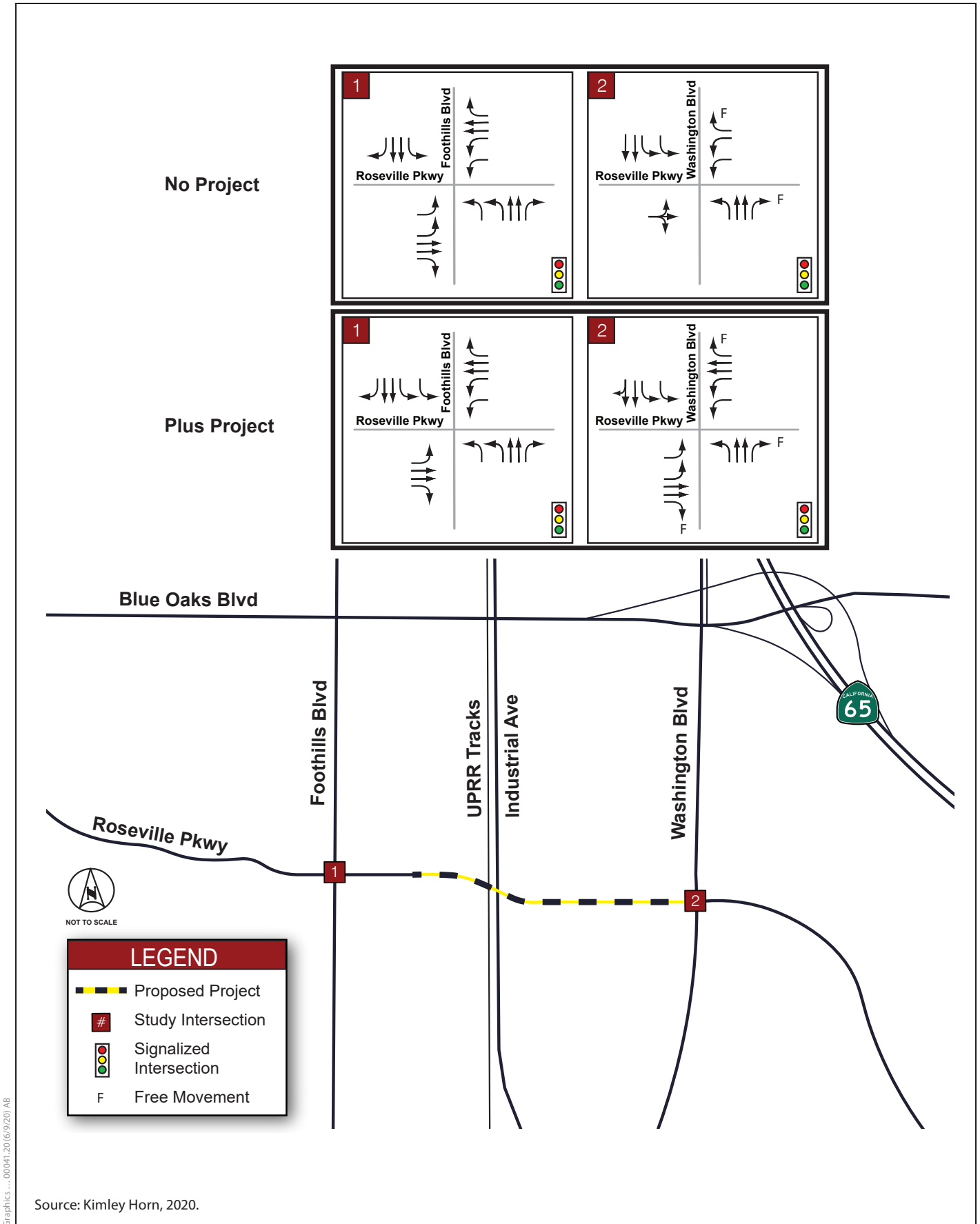
-  Proposed Project
-  Study Intersection

Source: Kimley Horn, 2020.

**Figure 3-2**  
**Project Vicinity**

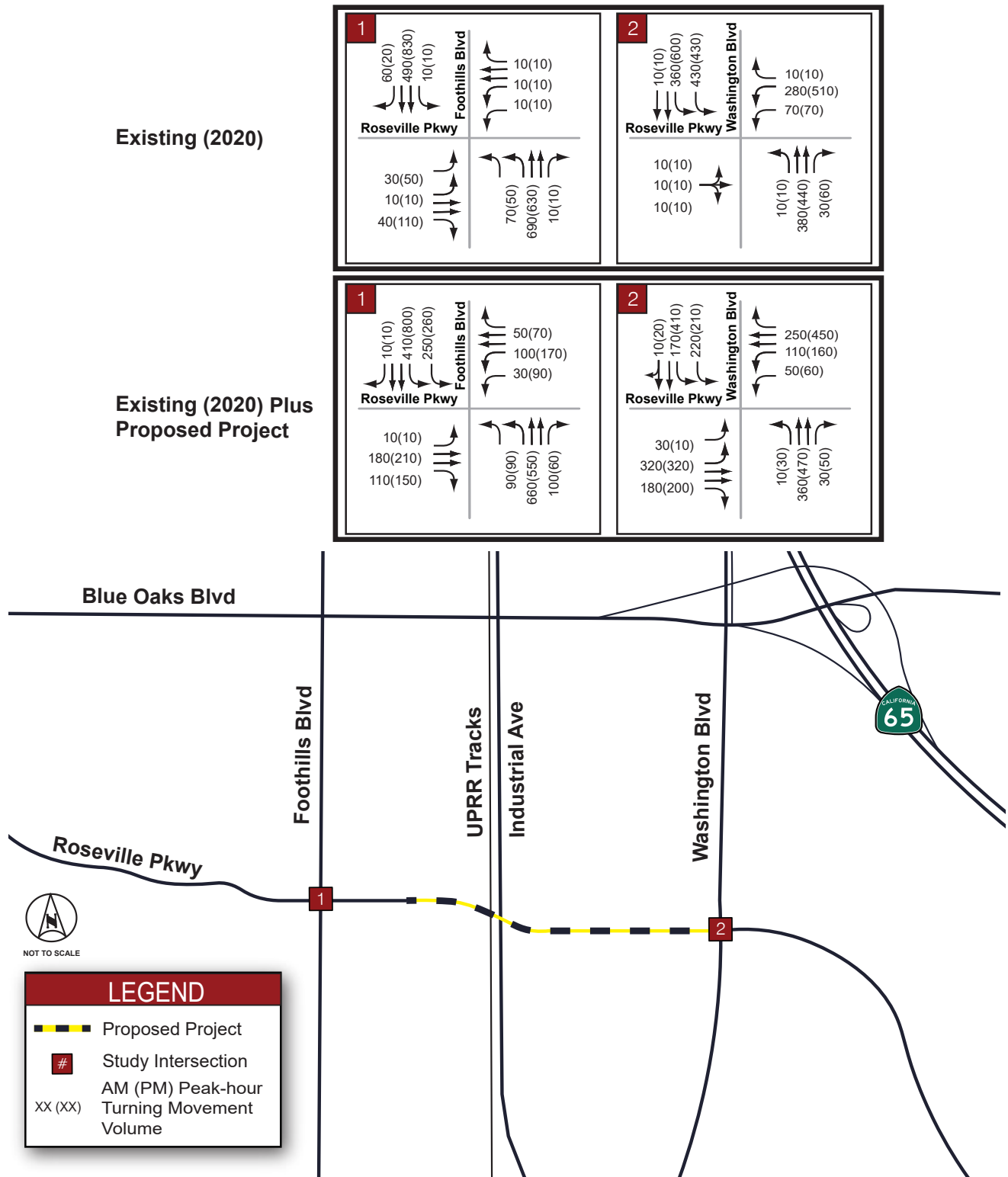






**Figure 3-3**  
**Study Intersections, Traffic Control, and Lane Geometries**

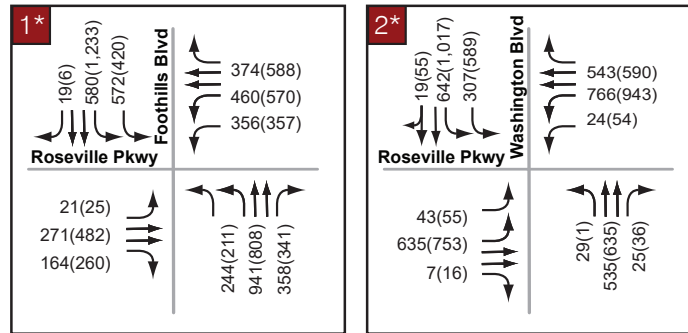




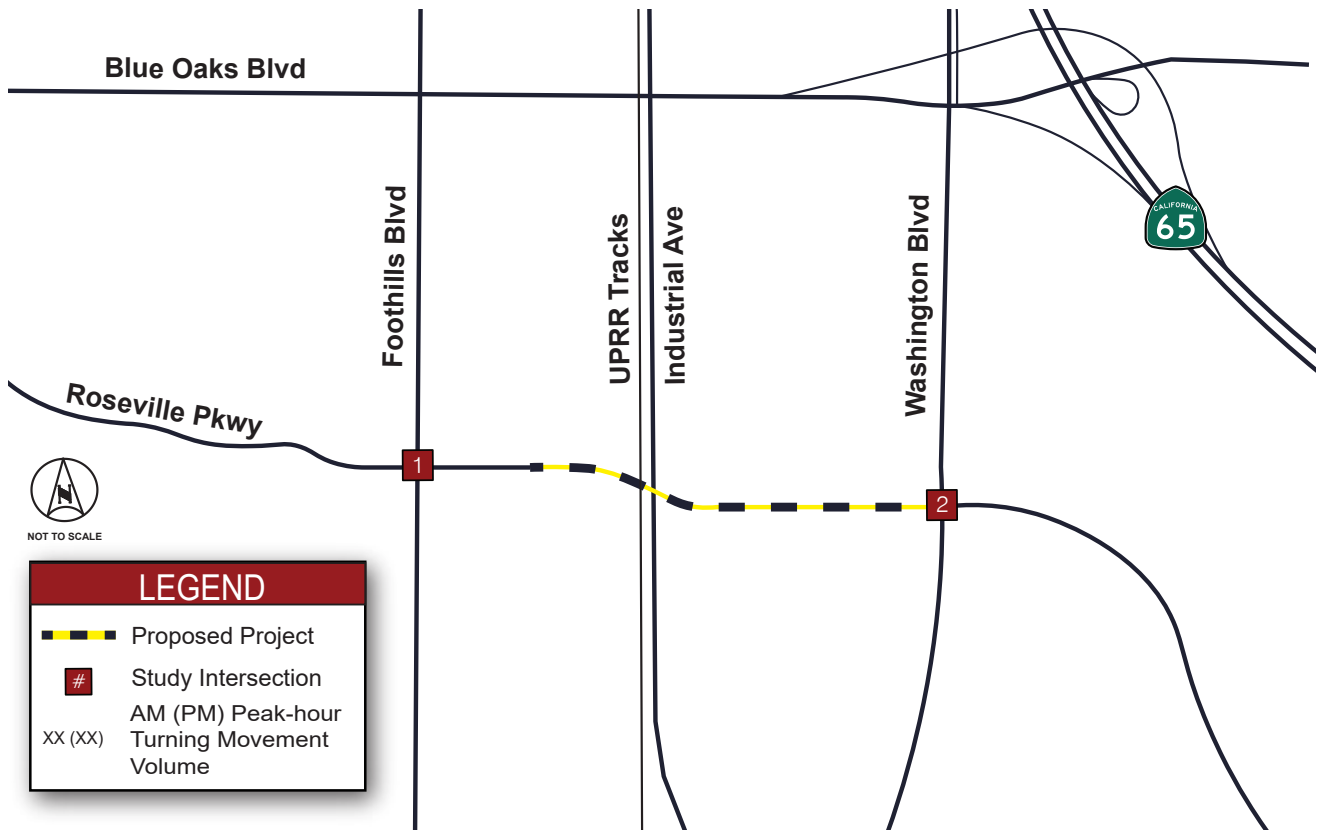
Source: Kimley Horn, 2020.

**Figure 3-4**  
**Existing (2020) Conditions Peak-Hour Volumes**





\*Peak-Hour Volumes were obtained directly from the Amoruso Ranch Traffic Study's 2035 Cumulative Plus Project Conditions



Source: Kimley Horn, 2020.

**Figure 3-5**  
**Cumulative (2035) plus Proposed Project Conditions Peak-Hour Volumes**



worksheets (see Initial Study Appendix C). The results of the intersection LOS analyses are presented in Table 3-18.

As shown in Table 3-18, the study intersections operate at acceptable LOS D or better during both peak hours, for all analysis scenarios.

**Table 3-18. Intersection Levels of Service**

| ID | Intersection                                   | Peak Hour | Existing (2020) |     | Existing (2020)<br>plus Project |     | Cumulative (2035)<br>plus Project |     |
|----|------------------------------------------------|-----------|-----------------|-----|---------------------------------|-----|-----------------------------------|-----|
|    |                                                |           | Delay (sec)     | LOS | Delay (sec)                     | LOS | Delay (sec)                       | LOS |
| 1  | Roseville Parkway<br>@ Foothills<br>Boulevard  | AM        | 13.8            | B   | 17.2                            | B   | 37.5                              | D   |
|    |                                                | PM        | 16.0            | B   | 18.3                            | B   | 42.2                              | D   |
| 2  | Roseville Parkway<br>@ Washington<br>Boulevard | AM        | 15.4            | B   | 19.0                            | B   | 25.5                              | C   |
|    |                                                | PM        | 15.2            | B   | 20.0                            | C   | 37.3                              | D   |

### 3.2.17.2 Impact Analysis

**a) Conflict with a program, plan, ordinance, or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?**

The proposed project, through its extension of Roseville Parkway between Foothills Boulevard and Washington Boulevard, does not conflict with the City of Roseville's applicable planning documents including the *General Plan 2035*, *Bicycle Master Plan*, *Pedestrian Master Plan*, and *Short-Range Transit Plan*. The following is an overview of the project's consistency with these guiding documents:

- Circulation System
  - Consistent with the proposed project, the facility is indicated to have four future lanes (City of Roseville 2016: Figure III-3)
  - Additionally, consistent with the proposed project, the facility is designated as a four-lane facility in the Year 2035 mitigated network (City of Roseville 2016:Table III-4)
- Transit Facilities
  - Although not a designated transit route, the proposed project connects to Roseville Transit Route R that operates weekdays in both directions along Foothills Boulevard. There is currently a southbound bus stop located south of the proposed project intersection with Foothills Boulevard.
- Bicycle Facilities

- Consistent with the proposed project, the facility is indicated to have Class II Bike Lanes along the entire stretch of Roseville Parkway, as well as along both Foothills Boulevard and Washington Boulevard (City of Roseville 2016: Figure III-6; City of Roseville 2008: Figure 5).
- Additionally, the proposed project includes a separated 10-foot multi-use path that further supports the City's *General Plan* and *Bicycle Master Plan* goals.
- Pedestrian Facilities
  - The proposed project includes both an attached 8-foot sidewalk and a separated 10-foot multi-use path. Through its inclusion of these facilities, the proposed Project supports the City's *General Plan* and *Pedestrian Master Plan* goals.

As discussed above, the project is found consistent with applicable plans, ordinances and policies. There would be no impact.

***b) Would the project conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?***

SB 743 was enacted by the California legislature in 2013 and required the Office of Planning and Research to adopt new guidelines for assessing CEQA-related transportation impacts. The City has determined that the proposed project does not require VMT analyses in response to SB 743 for the following reasons:

- The proposed project is included in the MTP/SCS recently adopted by SACOG.
- The proposed project is included in the Amoruso Ranch Specific Plan EIR, which is also incorporated into the current General Plan and the pending General Plan Update.
- The General Plan Update, scheduled to be adopted in Fall 2020, includes "grandfathering" of all previously adopted specific plans and will also include a VMT Policy that will only apply to new project proposals.
- As outlined in CEQA Guidelines Section 15064.3(b)(2) for roadway capacity projects, agencies have the discretion to determine the appropriate measure of transportation impact consistent with CEQA and other applicable requirements. To the extent that such impacts have already been adequately addressed at a programmatic level, such as in a regional transportation plan EIR, a lead agency may tier from that analysis as provided in CEQA Section 15152.

The proposed project is found to be consistent with CEQA Guidelines 15064.3 subdivision (b) and there would be no impact.



**c) *Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?***

The project has been designed in a manner consistent with all applicable, published design standards at the onset of the project including the City of Roseville's Design and Construction Standards, Caltrans' Highway Design Manual, and the American Association of State Highway and Transportation Officials' A Policy on Geometric Design of Highways and Streets. Consistent with the City's expansive transportation system, the project would support all compatible uses and the surrounding land uses that are reasonably anticipated to contribute traffic to and rely on this facility are compatible with the design considerations. Accordingly, through its consistency with these standards, as well as resulting from its improved network connectivity, the proposed project would not increase hazards and would support all compatible uses. There would be no impact.

**d) *Result in inadequate emergency access?***

The City previously analyzed the proposed project's effect on the emergency response times and access during the project development phase as part of the *City of Roseville Roadway System Capital Improvements Project Sensitivity Analysis Update* (City of Roseville 2019). Through a comprehensive sensitivity analysis, the City documented the proposed project's, as well as other significant projects' effects on peak-hour travel times and general vehicular access to emergency and medical service facilities, with a focus on travel times between the northwest portion of the city and two emergency hospital providers (Sutter Roseville and Kaiser Roseville). These previous efforts concluded the following as relates to the proposed projects' improvements to emergency access:

The Roseville Parkway extension project provides congestion reductions on the Blue Oaks Boulevard/Industrial Avenue overcrossing by reducing the 10-year peak-hour traffic volumes on the Blue Oaks Boulevard bridge. Furthermore, Roseville Parkway serves as another means to get from the west side of the City to the east side without having to access State Route 65. This parallel capacity would be helpful in emergency situations and as an alternate route during construction of the Blue Oaks Boulevard bridge widening. (City of Roseville 2019)

The project plans would be reviewed by the appropriate City departments to ensure conformance with all applicable fire-safety code and ordinance requirements for emergency access. There would be no impact.

### **3.2.17.3 Mitigation Measures**

The proposed project would have no impact on transportation. Therefore, no mitigation is required.

### 3.2.17.4 References

- City of Roseville. 2008. *Bicycle Master Plan*. Available:  
[https://www.roseville.ca.us/UserFiles/Servers/Server\\_7964838/File/Government/Departments/Public%20Works/Biking%20&%20Walking/Planning/2008%20Bicycle%20Master%20Plan2.pdf](https://www.roseville.ca.us/UserFiles/Servers/Server_7964838/File/Government/Departments/Public%20Works/Biking%20&%20Walking/Planning/2008%20Bicycle%20Master%20Plan2.pdf).
- City of Roseville. 2016. *Roseville General Plan 2035*. Available:  
[http://www.roseville.ca.us/gov/development\\_services/planning/general\\_plan\\_n\\_development\\_guidelines.asp?grpxver=mob](http://www.roseville.ca.us/gov/development_services/planning/general_plan_n_development_guidelines.asp?grpxver=mob). Accessed: September 29, 2017.
- City of Roseville. 2019. *Roadway System Capital Improvements Project Sensitivity Analysis Update*. Presented at the April 17, 2019 Roseville City Council Meeting.
- City of Roseville. 2020. *Section 4 Traffic Impact Studies, City of Roseville Design Standards*. January.
- Kimley-Horn. 2020. *Roseville Parkway Extension Traffic Evaluation Memorandum*. June 5.
- Placer County Transportation Planning Agency. 2019. *Final Placer County 2036 Regional Transportation Plan*. Available:  
[http://www.pctpa.net/library/rtp/2036/RTP/Final\\_2036\\_RTP\\_Full.pdf](http://www.pctpa.net/library/rtp/2036/RTP/Final_2036_RTP_Full.pdf). Accessed: September 29, 2017.

### 3.2.18 Tribal Cultural Resources

|                                                                                                                                                                                                                                                                                                                                                                                                                         | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with Mitigation<br>Incorporated | Less-than-<br>Significant<br>Impact | No<br>Impact                        |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------|-------------------------------------|-------------------------------------|
| <b>XVII. Tribal Cultural Resources</b>                                                                                                                                                                                                                                                                                                                                                                                  |                                      |                                                             |                                     |                                     |
| Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:                             |                                      |                                                             |                                     |                                     |
| a. Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k), or                                                                                                                                                                                                                          | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe. | <input type="checkbox"/>             | <input checked="" type="checkbox"/>                         | <input type="checkbox"/>            | <input type="checkbox"/>            |

#### 3.2.18.1 Setting

Tribal cultural resources are defined in CEQA as:

1. Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American Tribe that are either of the following:
  - a. Included in or determined to be eligible for inclusion in the CRHR.
  - b. Included in a local register of historical resources as defined in subdivision (k) of Section 5020.1.
2. A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

AB 52 defines a California Native American Tribe as a Native American tribe located in California that is on the contact list maintained by the NAHC (Public Resources Code Section 21073). A cultural landscape that meets the criteria of subdivision (a) is a tribal cultural resource to the extent that the landscape is geographically defined in terms of the size and scope of the landscape. Sacred places can include Native American sanctified cemeteries, places of worship, religious or ceremonial sites, and sacred shrines. Both unique and non-unique archaeological resources, as defined in Public Resources Code Section 21083.2, can be tribal cultural resources if they meet the criteria for listing in the CRHR (Public Resources Code Section 524.1(c)). The lead agency relies upon substantial evidence to make the determination that a resource qualifies as a tribal cultural resource when it is not already listed in the CRHR or a local register.

On September 23, 2019, the City of Roseville sent certified letters to the following tribes requesting consultation or information regarding tribal resources in the project area. The letters requested a response within 30 days.

- UAIC (Gene Whitehouse, Chairman)
- SSBMI (Nicholas Fonseca, Chairperson)
- Tsi Akim Maidu (Don Ryberg, Chairperson)
- Lone Band of Miwok Indians (Sara D. Setshwaelo, Cultural Committee Chair)

To date, two responses regarding consultation have been received from the UAIC and SSBMI. On October 17, 2019, the City of Roseville received a letter dated October 8, 2019 from Gene Whitehouse, Chairman of the UAIC. The letter requested to consult under AB 52, identified the area of the project as sensitive for tribal cultural resources, requested copies of drafted or completed technical reports, requested one meeting to discuss the project and potential impacts, and identified the UAIC's point of contact as Anna Starkey. Terri Shirhall with the City of Roseville followed up with an email to Anna Starkey of the UAIC on October 23, 2019. The email acknowledged the request for continued consultation and provided survey reports and permits associated with the project. Additional outreach between the City and Starkey resumed in January and April of 2020 with Starkey requesting to review the Draft IS/MND before it goes public to review for incorporation of UAIC's preferred mitigation measures. In July 2020 Terri Shirhall emailed the admin draft IS/MND to Ms. Starkey. Ms. Starkey replied in a July 20 email to Terri Shirhall that she had no further comment and consultation could be closed with City agreement. The City concurred and consultation was closed with agreement on July 20, 2020.

On October 21, 2019, the City of Roseville received a letter dated October 14, 2019 from Daniel Fonseca, Cultural Resources Director for the SSBMI. The letter stated that the SSBMI was not aware of any known cultural resources in the project; however, they would like to have continued consultation as the project progresses.

The letter also requested copies of drafted or completed technical reports and would like to be notified of human remains are found. Terri Shirhall with the City of Roseville followed up with an email to Kara Perry of the SSBMI on October 23, 2019. The email acknowledged the request for continued consultation and provided survey reports and permits associated with the project. On January 13, 2020 Kara Perry responded with an email to Terri Shirhall stating that the City can close consultation with the SSBMI but would like to be informed if any changes are made to the project.

As of release of this document, no tribal cultural resources have been identified by any of the consulting tribes and AB 52 tribal consultations were closed with agreement.

### 3.2.18.2 Impact Analysis

***a) Cause a substantial adverse change in the significance of a tribal cultural resource that is listed or eligible for listing in the California Register of Historical Resources or other local register as defined in Public Resources Code Section 5020.1(k)?***

No tribal resources were identified through consultation efforts. Therefore, it is expected that the project would not result in impacts on tribal cultural resources. There would be no impact.

***b) Cause a substantial adverse change in the significance of a tribal cultural resource that is determined by the lead agency to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1? In applying the criteria, the lead agency shall consider the significance of the resource to a California Native American tribe.***

No tribal resources were identified through consultation efforts. Therefore, it is expected that the project would not result in impacts on tribal cultural resources. However, it is possible that unknown buried tribal cultural resources could be present on the project site. Should buried or otherwise unknown tribal cultural resources be encountered and damaged during construction, a potentially significant impact would result. Implementation of Mitigation Measure TCR-1 would reduce this impact to less than significant.

### 3.2.18.3 Mitigation Measures

#### **Mitigation Measure TRC-1: Implement Measures to Protect Previously Unidentified Tribal Cultural Resources**

If subsurface deposits believed to be cultural or human in origin, or tribal cultural resources, are discovered during construction, all work shall halt within a 100-foot radius of the discovery, and the Construction Manager shall immediately

notify the City of Roseville Development Services Director by phone. The Construction Manager shall also immediately coordinate with the monitoring archaeologist or project archaeologist, or, in the absence of either, contact a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for archaeology and subject to approval by the City, to evaluate the significance of the find and develop appropriate management recommendations. All management recommendations shall be provided to the City in writing for the City's review and approval. If recommended by the qualified professional and approved by the City, this may include modification of the no-work radius.

The professional archaeologist must make a determination, based on professional judgement and supported by substantial evidence, within one business day of being notified, as to whether or not the find represents a cultural resource or has the potential to be a tribal cultural resource. The subsequent actions will be determined by the type of discovery, as described below. These include: (1) a work pause that, upon further investigation, is not actually a discovery and the work pause was simply needed in order to allow for closer examination of soil (a "false alarm"); (2) a work pause and subsequent action for discoveries that are clearly not related to tribal resources, such as can and bottle dumps, artifacts of European origin, and remnants of built environment features; and (3) a work pause and subsequent action for discoveries that are likely related to tribal resources, such as midden soil, bedrock mortars, groundstone, or other similar expressions.

Whenever there is question as to whether or not the discovery represents a tribal resource, culturally affiliated tribes shall be consulted in making the determination. The following processes shall apply, depending on the nature of the find, subject to the review and approval of the City:

- Response to False Alarms: If the professional archaeologist determines that the find is negative for any cultural indicators, then work may resume immediately upon notice to proceed from the City's representative. No further notifications or tribal consultation is necessary, because the discovery is not a cultural resource of any kind. The professional archaeologist shall provide written documentation of this finding to the City.
- Response to Non-Tribal Discoveries: If at the time of discovery a professional archaeologist determines that the find represents a non-tribal cultural resource from any time period or cultural affiliation, the City shall be notified immediately, to consult on a finding of eligibility and implementation of appropriate treatment measures, if the find is determined to be a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. The professional archaeologist shall provide a photograph of the

find and a written description to the City of Roseville. The City of Roseville will notify any tribe(s) who, in writing, requested notice of unanticipated discovery of non-tribal resources. Notice shall include the photograph and description of the find, and a tribal representative shall have the opportunity to determine whether or not the find represents a tribal cultural resource. If a response is not received within 24 hours of notification (none of which time period may fall on weekends or City holidays), the City will deem this portion of the measure completed in good faith as long as the notification was made and documented. If requested by a tribe(s), the City may extend this timeframe, which shall be documented in writing (electronic communication may be used to satisfy this measure). If a notified tribe responds within 24 hours to indicate that the find represents a tribal cultural resource, then the Response to Tribal Discoveries portion of this measure applies. If the tribe does not respond or concurs that the discovery is non-tribal, work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: (1) is not a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or (2) that the treatment measures have been completed to its satisfaction.

- Response to Tribal Discoveries: If the find represents a tribal or potentially tribal cultural resource that does not include human remains, the tribe(s) and City shall be notified. The City will consult with the tribe(s) on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be either a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines, or a tribal cultural resource, as defined in Section 21074 of the Public Resources Code. Preservation in place is the preferred treatment, if feasible. Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: (1) is not a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or (2) not a tribal cultural resource, as defined in Section 21074 of the Public Resources Code; or (3) that the treatment measures have been completed to its satisfaction.
- Response to Human Remains: If the find includes human remains, or remains that are potentially human, the construction supervisor or on-site archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641) and shall notify the City and Placer County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and AB 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American MLD for the project (Public Resources Code

Section 5097.98). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. Public Resources Code Section 5097.94 provides structure for mediation through the NAHC if necessary. If no agreement is reached, the City shall rebury the remains in a respectful manner where they will not be further disturbed (Public Resources Code Section 5097.98). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.



## 3.2.19 Utilities and Service Systems

| <b>XVIII. Utilities and Service Systems</b>                                                                                                                                                                                                                                       | <b>Potentially Significant Impact</b> | <b>Less than Significant with Mitigation Incorporated</b> | <b>Less-than-Significant Impact</b> | <b>No Impact</b>                    |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------|-------------------------------------|-------------------------------------|
| Would the project:                                                                                                                                                                                                                                                                |                                       |                                                           |                                     |                                     |
| a. Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects? | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| b. Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?                                                                                                                        | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?                                                  | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?                                                                                           | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| e. Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?                                                                                                                                                                | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |

### 3.2.19.1 Setting

#### Wastewater

Wastewater services in Roseville are provided by the City. Two wastewater treatment facilities, the Dry Creek Wastewater Treatment Plant and the Pleasant Grove Wastewater Treatment Plant, serve the city. The Dry Creek Wastewater Treatment Plant is located on the southern edge of the city on an 80-acre parcel at 1800 Booth Road. The Pleasant Grove Wastewater Treatment Plant is located on the city's west side on a 110-acre parcel at 5051 Westpark Drive. These plants are owned and operated by the City of Roseville on behalf of the Regional Partners consisting of the City, the South Placer Municipal Utility District, and portions of

unincorporated Placer County (primarily Granite Bay and Sunset Industrial Area) (City of Roseville 2016).

## **Water**

The City of Roseville provides water service to areas within the city, including the project site. Roseville uses multiple water sources, including surface water, recycled water for landscaping, and, in dry years or emergency situations, groundwater.

## **Stormwater Drainage**

Stormwater drainage facilities in urbanized areas of Roseville, including developed portions of the project area, consist of surface gutters, subsurface drainage pipes, canals, and retention basins. The project site is undeveloped disturbed annual grassland bordered on the east by residential development and industrial development and vacant parcels to the north, south, and west. The project site is located in a partially developed area; stormwater runoff drains primarily through natural drainage swales, and in the developed areas through surface gutters and subsurface drainage pipes. No developed stormwater drainage facilities are present on the project site. See Section 3.2.10 for further discussion of project site drainage characteristics.

## **Solid Waste Disposal**

The city collects solid waste generated in Roseville and hauls it to the Materials Recovery Facility (MRF) at the Western Placer Waste Management Authority's Western Regional Sanitary Landfill. The Western Placer Waste Management Authority is a joint powers authority made up of Placer County and the Cities of Roseville, Rocklin, and Lincoln. The landfill is a Class II/III non-hazardous municipal solid waste facility located southeast of the Athens Avenue and Fiddymont Road intersection between Roseville and Lincoln in unincorporated Placer County. The MRF has a municipal solid waste processing capacity of approximately 1,900 tons per day and a green waste processing capacity of approximately 205 tons per day (California Department of Resources Recycling and Recovery 2019a). As of July 1, 2013, the landfill had a remaining capacity of 25,677,600 cubic yards (City of Roseville 2016). The landfill has an estimated closure date of 2058 (California Department of Resources Recycling and Recovery 2019b).

### **3.2.19.2 Impact Analysis**

- a) Require or result in the relocation or construction of new or expanded water, wastewater treatment, stormwater drainage, electric power, natural***

***gas, or telecommunications facilities, the construction or relocation of which could cause significant environmental effects?***

The project includes the extension of Roseville Parkway between Foothills Boulevard and Washington Boulevard. Required utility relocations are described in Section 2.4.5, *Utility Relocations*. The project would not include extension of any new water, wastewater, natural gas, or telecommunications facilities, although some existing facilities may be slightly relocated within the disturbance footprint. The only exception is that electricity would be extended within underground conduits along the new roadway and overpass to allow for connection with existing electric facilities on both sides. Electricity for streetlights would also be extended along the roadway.

Roadway construction would include low-impact development measures and underground storm drain improvements to convey stormwater runoff from the new roadway. The new storm drain system would tie into existing storm drains at the east and west ends of the project. The new storm drain system would be built to city and SWRCB standards and would include construction BMPs as identified in Section 2.6, thereby reducing any potential impacts to a less-than-significant level.

***b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?***

The proposed project would not require the provision of water from public sources and no water supply system would be built as part of the project. The only water used by the project would be water trucked on-site during construction activities for soil compaction and dust suppression. No impact would occur.

***c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?***

The project would not exceed applicable wastewater treatment requirements because the proposed project would not generate wastewater. Because the project would not require wastewater treatment service, no construction or expansion of wastewater systems would be required, and the project would not affect wastewater treatment capacity. During construction, one or more portable toilets would be placed on the project site; wastewater would be contained within the portable toilet and ultimately disposed of at an approved site. No impact would occur.

***d) Generate solid waste in excess of state or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?***

And

**e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?**

The project would not generate solid waste during operation. Solid waste generated during construction would include debris such as concrete, scrap metal, and similar materials. Waste materials generated during construction would be disposed of appropriately at the Western Regional Sanitary Landfill or its associated MRF.

The majority of earthwork would involve soil import and compaction to ready the road base and build-up the overpass approach ramps. The project requires approximately 165,000 cubic yards of fill import, primarily for the overpass approach ramps. It is expected that excess soil from local development projects would provide a portion of this material. The balance would be obtained from available commercial supplies.

With an estimate closure date of 2058 and a remaining capacity of slightly more than 25 million cubic yards, the Western Regional Sanitary Landfill would be capable of accommodating the project's construction solid waste disposal needs.

Given the nominal demand that the project would place on remaining landfill capacity, the project would have a limited impact on landfill capacity and would comply with relevant statutes and regulations related to solid waste. This impact would be less than significant, and no mitigation is required.

### **3.2.19.3 Mitigation Measures**

The proposed project would have less-than-significant impacts on utilities and service systems. Therefore, no mitigation is required.

### **3.2.19.4 References**

California Department of Resources Recycling and Recovery. 2019a. *SWIS Facility Detail, Western Placer Waste Mgmt Authority MFR (31-AA-0001)*. Available: <https://www2.calrecycle.ca.gov/swfacilities/Directory/31-AA-0001>. Accessed: April 15, 2020.

California Department of Resources Recycling and Recovery. 2019b. *SWIS Facility Detail Western Regional Landfill (31-AA-0210)*. Available: <https://www2.calrecycle.ca.gov/swfacilities/Directory/31-AA-0210/>. Accessed: April 15, 2020.

City of Roseville. 2016. *City of General Plan 2035*. Adopted June 15, 2016. Amended August 17, 2016. Available: <https://www.roseville.ca.us/cms/One.aspx?portalId=7964922&pageId=8774544>. Accessed: April 14, 2020.

### 3.2.20 Wildfire

|                                                                                                                                                                                                                                                                     | Potentially<br>Significant<br>Impact | Less than<br>Significant<br>with Mitigation<br>Incorporated | Less-than-<br>Significant<br>Impact | No<br>Impact                        |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------|-------------------------------------------------------------|-------------------------------------|-------------------------------------|
| If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:                                                                                                                                    |                                      |                                                             |                                     |                                     |
| a. Substantially impair an adopted emergency response plan or emergency evacuation plan?                                                                                                                                                                            | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b. Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?                                                     | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c. Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment? | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d. Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?                                                                             | <input type="checkbox"/>             | <input type="checkbox"/>                                    | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

#### 3.2.20.1 Setting

The project area is not within a State Responsibility Area; therefore, not designated a very high fire hazard severity zone. The project site is located in a Local Responsibility Area where the Roseville Fire Department is responsible for fire protection services.

**a) Substantially impair an adopted emergency response plan or emergency evacuation plan?**

*And*

**b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks of, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?**

*And*

- c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts on the environment?***

*And*

- d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?***

Extension of Roseville Parkway would improve emergency response in the project area by providing an additional east-west emergency response route. The project site is on relatively flat ground in an urbanized area of North Roseville, so not susceptible to downstream flooding or landslide. The project area is not within a State Responsibility Area; therefore, not designated a very high fire hazard severity zone. No impact would occur.

### **3.2.20.2 Mitigation Measures**

The proposed project would have less-than-significant impacts on wildfire. Therefore, no mitigation is required.

### 3.2.21 Mandatory Findings of Significance

| <b>XIX. Mandatory Findings of Significance</b>                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>Potentially Significant Impact</b> | <b>Less than Significant with Mitigation Incorporated</b> | <b>Less-than-Significant Impact</b> | <b>No Impact</b>         |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------------------------|-------------------------------------|--------------------------|
| a. Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/>              | <input checked="" type="checkbox"/>                       | <input type="checkbox"/>            | <input type="checkbox"/> |
| b. Does the project have impacts that are individually limited but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)                                                                                                                                         | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c. Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?                                                                                                                                                                                                                                                                                                                                            | <input type="checkbox"/>              | <input type="checkbox"/>                                  | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

**a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory?**

As stated in Section 3.2.4, *Biological Resources*, project construction could directly or indirectly (through habitat modification) affect wildlife species identified as special-status species in local or regional plans, policies, or regulations, or by CDFW or USFWS. For example, project construction could include potential effects on western spadefoot toad and ground-nesting migratory birds and raptors. However implementation of Mitigation Measures BIO-1, BIO-2, and BIO-3 would reduce these impacts to a less-than-significant level.

As discussed in Section 3.2.6, *Cultural Resources*, the project would avoid impacts on the UPRR grade and would not significantly affect examples of the major periods of California history or prehistory.

With implementation of mitigation measures, the project does not have the potential to degrade the quality of the environment, substantially reduce the habitat of any wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory. These impacts would be less than significant with mitigation.

***b) Does the project have impacts that are individually limited but cumulatively considerable?***

The analysis in this chapter concludes that the project would have either no impact or less-than-significant localized impacts (with mitigation) on a number of resources (aesthetics, agricultural and forestry resources, air quality, biological resources, cultural resources, energy, geology and soils, GHG emissions, hazardous materials, hydrology and water quality, land use, mineral resources, noise, population and housing, public services, recreation, transportation, tribal cultural resources, utilities and service systems, and wildfire). Because the project would not induce population growth or result in the development of new housing or employment-generating uses, it would not combine with cumulative development to increase the demand for public services, recreation facilities, or utilities, the expansion of which could result in significant environmental effects. Further, the analysis indicates that operation of the project would reduce GHG emissions, resulting in a beneficial effect on GHG. Implementation of Mitigation Measures AQ-1, BIO-1, BIO-2, BIO-3, BIO-4, CUL-1, CUL-2, GEO-1, and GEO-2 would minimize potential localized construction impacts on air quality, western spadefoot toad and ground-nesting migratory birds and raptors, cultural resources and paleontological resources.

The project would not result in a considerable contribution to cumulative impacts because its impacts would not combine with those of cumulative development. The project's contribution to cumulative impacts would be less than significant.

***c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?***

The project would have no significant adverse effects on human beings. There would be no significant increase in construction-related or operational air emissions or noise levels, and there would be no significant exposure to geologic or seismic hazards or to hazardous materials as a result of the project. For all other topics, there would be either no impact or a less-than-significant impact. Therefore, the project's impacts on human beings would be less than significant.



## Appendix A

### **Air Quality**

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## Construction Schedule

| Phase                       | Project   |           |               |           |
|-----------------------------|-----------|-----------|---------------|-----------|
|                             | Start     | End       | Calendar Days | Work Days |
| Grubbing/Land Clearing      | 9/1/2021  | 9/13/2021 | 8             | 8         |
| Grading/Excavation          | 9/14/2021 | 4/13/2022 | 151           | 30        |
| Draining/Utilities/Subgrade | 9/1/2021  | 5/13/2022 | 182           | 81        |
| Paving                      | 3/23/2022 | 5/9/2022  | 33            | 11        |
| Overpass construction       | 9/16/2021 | 2/17/2022 | 110           | 110       |

## General RCEM Construction Inputs

| Input                               | Roadway | Overpass |
|-------------------------------------|---------|----------|
| Construction Year                   | 2021    | 2021     |
| Project Length                      | 0.75    | 0.75     |
| Total Project Area                  | 12      | 12       |
| Maximum Area Disturbed/Day          | 2       | 2        |
| Soil Imported/Exported by Phase     |         |          |
| Grubbing/Land Clearing              | 3,000   | 0        |
| Grading/Excavation                  | 2,800   | 0        |
| Draining/Utilities/Subgrade         | 0       | 0        |
| Paving                              | 0       | 0        |
| Asphalt Imported/ Exported by Phase |         |          |
| Grubbing/Land Clearing              | 0       | 0        |
| Grading/Excavation                  | 0       | 0        |
| Draining/Utilities/Subgrade         | 0       | 0        |
| Paving                              | 840     | 0        |
| Average Truck Capacity              | 40      | 0        |

## Construction Vehicles

| Phase                       | Haul Trucks   |                | Employees      |               | Water Trucks   |               |                |
|-----------------------------|---------------|----------------|----------------|---------------|----------------|---------------|----------------|
|                             | Trips per Day | Miles per Trip | Number per Day | Trips per Day | Number per Day | Trips per Day | Miles per Trip |
| Grubbing/Land Clearing      | 72            | 20             | 15             | 30            | 2              | 5             | 8              |
| Grading/Excavation          | 70            | 20             | 15             | 30            | 2              | 5             | 8              |
| Draining/Utilities/Subgrade |               |                | 15             | 30            | 1              | 5             | 8              |
| Paving                      | 21            | 20             | 15             | 30            |                |               |                |
| Overpass construction       |               |                | 15             | 30            |                |               |                |

## Construction Equipment

| General Category         | Number per Day (all at 8 hours per day) |            |       |        |          |
|--------------------------|-----------------------------------------|------------|-------|--------|----------|
|                          | Grub/Clearing                           | Grading/Ex | D/U/S | Paving | Overpass |
| Bore/Drill Rig           | 0                                       | 0          | 1     | 0      | 1        |
| Cement/Mortar Mixer      | 0                                       | 0          | 0     | 0      | 5        |
| Crane                    | 0                                       | 0          | 0     | 0      | 2        |
| Excavator                | 0                                       | 0          | 0     | 0      | 2        |
| Generator                | 0                                       | 0          | 1     | 0      | 1        |
| Graders                  | 2                                       | 2          | 2     | 0      | 0        |
| Off-Highway Truck        | 0                                       | 0          | 0     | 0      | 1        |
| Other Construction Equip | 0                                       | 0          | 1     | 2      | 0        |
| Paver                    | 0                                       | 0          | 0     | 1      | 0        |
| Rollers                  | 5                                       | 5          | 2     | 5      | 0        |
| RT Dozer                 | 2                                       | 2          | 1     | 0      | 0        |
| RT Loader                | 1                                       | 0          | 0     | 0      | 1        |
| Scraper                  | 2                                       | 2          | 0     | 0      | 0        |
| Skid Loader              | 2                                       | 2          | 3     | 2      | 0        |
| Tractor/Loader/Backhoe   | 0                                       | 0          | 1     | 0      | 0        |
| Trencher                 | 0                                       | 0          | 1     | 0      | 0        |

**SACOG Daily Regional VMT**

| Speed Bin<br>(mph) | VMT        |                       |            |                         |
|--------------------|------------|-----------------------|------------|-------------------------|
|                    | Existing   | Existing Plus Project | Cumulative | Cumulative Plus Project |
| 0 - 5              | 60,346     | 58,720                | 137,246    | 139,041                 |
| 6-10               | 210,302    | 211,922               | 496,988    | 485,540                 |
| 11-15              | 553,753    | 554,700               | 876,659    | 855,837                 |
| 16-20              | 6,343,883  | 6,329,167             | 9,235,620  | 9,311,394               |
| 21-25              | 2,624,297  | 2,684,968             | 5,095,415  | 4,959,937               |
| 26 - 30            | 3,217,681  | 3,080,908             | 4,663,045  | 4,626,881               |
| 31 - 35            | 4,745,766  | 4,774,379             | 7,889,099  | 7,989,642               |
| 36 - 40            | 5,039,756  | 5,077,098             | 11,789,195 | 11,811,546              |
| 41 - 45            | 4,987,786  | 5,017,969             | 6,877,824  | 6,771,279               |
| 46 - 50            | 5,356,132  | 5,368,057             | 7,591,704  | 7,584,217               |
| 51 - 55            | 10,259,529 | 10,245,607            | 8,888,074  | 8,997,508               |
| 56 - 60            | 5,299,843  | 5,290,663             | 5,836,391  | 5,741,593               |
| 61 - 65            | 1,518,200  | 1,517,869             | 3,860,390  | 3,942,264               |
| 66+                | 1,872,276  | 1,873,096             | 209,706    | 209,717                 |
| Total              | 52,089,549 | 52,085,122            | 73,447,356 | 73,426,397              |

Source: Weir, Matt (Kimley-Horn)

**CT-EMFAC2017 Output**

| Year/Speed                  | Running (RUNEX, PMTW, PMBW, RD) grams per mile |      |       |      |         |        |      |
|-----------------------------|------------------------------------------------|------|-------|------|---------|--------|------|
|                             | ROG                                            | NOx  | CO2   | CH4  | PM10 Ex | PM10 D | N2O  |
| <b>2011</b>                 |                                                |      |       |      |         |        |      |
| 5                           | 0.84                                           | 1.84 | 1,057 | 0.11 | 0.08    | 1.07   | 0.06 |
| 10                          | 0.59                                           | 1.58 | 872   | 0.08 | 0.06    | 1.07   | 0.05 |
| 15                          | 0.37                                           | 1.25 | 707   | 0.05 | 0.05    | 1.07   | 0.04 |
| 20                          | 0.23                                           | 1.07 | 589   | 0.04 | 0.03    | 1.07   | 0.04 |
| 25                          | 0.18                                           | 1.00 | 507   | 0.03 | 0.03    | 1.07   | 0.03 |
| 30                          | 0.14                                           | 0.96 | 454   | 0.02 | 0.02    | 1.07   | 0.03 |
| 35                          | 0.12                                           | 0.93 | 423   | 0.02 | 0.02    | 1.07   | 0.03 |
| 40                          | 0.11                                           | 0.91 | 408   | 0.02 | 0.02    | 1.07   | 0.03 |
| 45                          | 0.10                                           | 0.91 | 407   | 0.02 | 0.02    | 1.07   | 0.03 |
| 50                          | 0.09                                           | 0.91 | 416   | 0.02 | 0.02    | 1.07   | 0.03 |
| 55                          | 0.10                                           | 0.93 | 430   | 0.02 | 0.02    | 1.07   | 0.03 |
| 60                          | 0.10                                           | 0.95 | 444   | 0.02 | 0.02    | 1.07   | 0.03 |
| 65                          | 0.11                                           | 0.97 | 456   | 0.02 | 0.02    | 1.07   | 0.03 |
| 70                          | 0.12                                           | 0.98 | 459   | 0.02 | 0.02    | 1.07   | 0.03 |
| 75                          | 0.12                                           | 0.98 | 459   | 0.02 | 0.02    | 1.07   | 0.03 |
| <b>2035</b>                 |                                                |      |       |      |         |        |      |
| 5                           | 0.09                                           | 0.66 | 648   | 0.00 | 0.01    | 1.12   | 0.03 |
| 10                          | 0.06                                           | 0.51 | 530   | 0.00 | 0.00    | 1.12   | 0.03 |
| 15                          | 0.04                                           | 0.37 | 427   | 0.00 | 0.00    | 1.12   | 0.02 |
| 20                          | 0.03                                           | 0.29 | 357   | 0.00 | 0.00    | 1.12   | 0.02 |
| 25                          | 0.02                                           | 0.24 | 307   | 0.00 | 0.00    | 1.12   | 0.02 |
| 30                          | 0.02                                           | 0.19 | 272   | 0.00 | 0.00    | 1.12   | 0.02 |
| 35                          | 0.01                                           | 0.14 | 251   | 0.00 | 0.00    | 1.12   | 0.01 |
| 40                          | 0.01                                           | 0.11 | 240   | 0.00 | 0.00    | 1.12   | 0.01 |
| 45                          | 0.01                                           | 0.09 | 237   | 0.00 | 0.00    | 1.12   | 0.01 |
| 50                          | 0.01                                           | 0.08 | 242   | 0.00 | 0.00    | 1.12   | 0.01 |
| 55                          | 0.01                                           | 0.09 | 251   | 0.00 | 0.00    | 1.12   | 0.01 |
| 60                          | 0.01                                           | 0.10 | 263   | 0.00 | 0.00    | 1.12   | 0.01 |
| 65                          | 0.01                                           | 0.12 | 275   | 0.00 | 0.00    | 1.12   | 0.01 |
| 70                          | 0.01                                           | 0.12 | 277   | 0.00 | 0.00    | 1.12   | 0.01 |
| 75                          | 0.01                                           | 0.12 | 277   | 0.00 | 0.00    | 1.12   | 0.01 |
| <b>2035 with SAFE Rule*</b> |                                                |      |       |      |         |        |      |
| 5                           | 0.10                                           | 0.67 |       |      | 0.01    |        |      |
| 10                          | 0.06                                           | 0.51 |       |      | 0.00    |        |      |
| 15                          | 0.04                                           | 0.37 |       |      | 0.00    |        |      |
| 20                          | 0.03                                           | 0.30 |       |      | 0.00    |        |      |
| 25                          | 0.02                                           | 0.24 |       |      | 0.00    |        |      |
| 30                          | 0.02                                           | 0.19 |       |      | 0.00    |        |      |
| 35                          | 0.01                                           | 0.15 |       |      | 0.00    |        |      |
| 40                          | 0.01                                           | 0.12 |       |      | 0.00    |        |      |
| 45                          | 0.01                                           | 0.09 |       |      | 0.00    |        |      |
| 50                          | 0.01                                           | 0.09 |       |      | 0.00    |        |      |
| 55                          | 0.01                                           | 0.09 |       |      | 0.00    |        |      |
| 60                          | 0.01                                           | 0.10 |       |      | 0.00    |        |      |
| 65                          | 0.01                                           | 0.12 |       |      | 0.00    |        |      |
| 70                          | 0.01                                           | 0.12 |       |      | 0.00    |        |      |
| 75                          | 0.01                                           | 0.12 |       |      | 0.00    |        |      |

\* Conservatively applied to all vehicle emissions (not just light-duty gasoline).

# **No Project Emissions Calculations\***

| Year        | No Project |         |           |     |         |         |     |
|-------------|------------|---------|-----------|-----|---------|---------|-----|
|             | ROG        | NOx     | CO2       | CH4 | PM10 Ex | PM10 D  | N2O |
| <b>2011</b> |            |         |           |     |         |         |     |
| 5           | 112        | 245     | 22,140    | 2   | 11      | 143     | 1   |
| 10          | 274        | 734     | 63,611    | 6   | 30      | 498     | 4   |
| 15          | 449        | 1,532   | 135,931   | 10  | 55      | 1,311   | 8   |
| 20          | 3,267      | 14,944  | 1,296,068 | 82  | 454     | 15,025  | 83  |
| 25          | 1,021      | 5,784   | 462,087   | 26  | 154     | 6,215   | 31  |
| 30          | 1,015      | 6,803   | 506,844   | 26  | 165     | 7,621   | 35  |
| 35          | 1,262      | 9,738   | 696,625   | 33  | 220     | 11,240  | 50  |
| 40          | 1,178      | 10,153  | 714,264   | 31  | 220     | 11,936  | 51  |
| 45          | 1,073      | 9,979   | 704,020   | 28  | 214     | 11,813  | 49  |
| 50          | 1,117      | 10,763  | 772,529   | 29  | 238     | 12,685  | 52  |
| 55          | 2,184      | 20,936  | 1,529,436 | 55  | 491     | 24,298  | 101 |
| 60          | 1,204      | 11,054  | 816,854   | 30  | 269     | 12,552  | 53  |
| 65          | 380        | 3,247   | 240,254   | 9   | 78      | 3,596   | 16  |
| 70          | 500        | 4,060   | 298,488   | 12  | 98      | 4,434   | 20  |
| Total       | 15,036     | 109,971 | 8,259,150 | 381 | 2,698   | 123,367 | 554 |
| <b>2035</b> |            |         |           |     |         |         |     |
| 5           | 29         | 203     | 30,863    | 0   | 2       | 338     | 2   |
| 10          | 69         | 563     | 91,322    | 0   | 4       | 1,224   | 5   |
| 15          | 78         | 714     | 129,881   | 0   | 5       | 2,159   | 7   |
| 20          | 553        | 6,051   | 1,145,291 | 1   | 41      | 22,746  | 62  |
| 25          | 228        | 2,680   | 543,408   | 1   | 18      | 12,549  | 30  |
| 30          | 166        | 1,920   | 440,544   | 0   | 14      | 11,485  | 25  |
| 35          | 234        | 2,534   | 686,488   | 1   | 22      | 19,430  | 38  |
| 40          | 307        | 2,991   | 980,865   | 1   | 32      | 29,036  | 53  |
| 45          | 166        | 1,440   | 566,524   | 1   | 20      | 16,939  | 30  |
| 50          | 178        | 1,427   | 638,012   | 1   | 24      | 18,698  | 32  |
| 55          | 214        | 1,684   | 775,524   | 1   | 33      | 21,890  | 39  |
| 60          | 152        | 1,249   | 532,258   | 1   | 25      | 14,374  | 27  |
| 65          | 114        | 1,009   | 367,931   | 1   | 20      | 9,508   | 19  |
| 70          | 7          | 55      | 20,133    | 0   | 1       | 516     | 1   |
| Total       | 2,493      | 24,521  | 6,949,044 | 8   | 259     | 180,893 | 368 |

\*ROG, NOx, and PM10 are pound per day; CO2, CH4, and N2O are metric tons per year (annualized over 347 days per year).

**With Project Emissions Calculations\***

| Year        | With Project |         |           |     |         |         |     |
|-------------|--------------|---------|-----------|-----|---------|---------|-----|
|             | ROG          | NOx     | CO2       | CH4 | PM10 Ex | PM10 D  | N2O |
| <b>2011</b> |              |         |           |     |         |         |     |
| 5           | 109          | 238     | 21,544    | 2   | 10      | 139     | 1   |
| 10          | 276          | 739     | 64,101    | 6   | 30      | 502     | 4   |
| 15          | 450          | 1,534   | 136,164   | 10  | 56      | 1,314   | 8   |
| 20          | 3,259        | 14,909  | 1,293,061 | 82  | 453     | 14,990  | 83  |
| 25          | 1,044        | 5,918   | 472,770   | 27  | 158     | 6,359   | 32  |
| 30          | 972          | 6,514   | 485,299   | 25  | 158     | 7,297   | 34  |
| 35          | 1,270        | 9,796   | 700,826   | 33  | 221     | 11,307  | 50  |
| 40          | 1,187        | 10,228  | 719,556   | 31  | 221     | 12,024  | 51  |
| 45          | 1,080        | 10,040  | 708,280   | 28  | 216     | 11,884  | 49  |
| 50          | 1,119        | 10,787  | 774,249   | 29  | 238     | 12,714  | 52  |
| 55          | 2,181        | 20,908  | 1,527,360 | 55  | 491     | 24,265  | 101 |
| 60          | 1,202        | 11,035  | 815,439   | 30  | 268     | 12,530  | 53  |
| 65          | 380          | 3,246   | 240,202   | 9   | 78      | 3,595   | 16  |
| 70          | 500          | 4,062   | 298,618   | 12  | 98      | 4,436   | 20  |
| Total       | 15,029       | 109,954 | 8,257,469 | 380 | 2,697   | 123,357 | 554 |
| <b>2035</b> |              |         |           |     |         |         |     |
| 5           | 29           | 205     | 31,266    | 0   | 2       | 342     | 2   |
| 10          | 67           | 550     | 89,218    | 0   | 4       | 1,196   | 5   |
| 15          | 76           | 697     | 126,796   | 0   | 5       | 2,108   | 7   |
| 20          | 558          | 6,101   | 1,154,687 | 1   | 41      | 22,933  | 62  |
| 25          | 222          | 2,609   | 528,960   | 1   | 17      | 12,216  | 29  |
| 30          | 164          | 1,906   | 437,128   | 0   | 14      | 11,396  | 24  |
| 35          | 237          | 2,566   | 695,237   | 1   | 22      | 19,678  | 39  |
| 40          | 308          | 2,997   | 982,725   | 1   | 32      | 29,091  | 53  |
| 45          | 163          | 1,418   | 557,748   | 1   | 20      | 16,677  | 29  |
| 50          | 178          | 1,425   | 637,383   | 1   | 24      | 18,679  | 32  |
| 55          | 216          | 1,705   | 785,072   | 1   | 33      | 22,160  | 39  |
| 60          | 149          | 1,229   | 523,613   | 1   | 25      | 14,141  | 26  |
| 65          | 116          | 1,031   | 375,735   | 1   | 20      | 9,709   | 20  |
| 70          | 7            | 55      | 20,134    | 0   | 1       | 517     | 1   |
| Total       | 2,490        | 24,494  | 6,945,702 | 8   | 259     | 180,842 | 368 |

\*ROG, NOx, and PM10 are pound per day; CO2, CH4, and N2O are metric tons per year (annualized over 347 days per year).



## Appendix B

### Noise

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Figure B-1. Noise Prediction Locations



| <b>Source Data</b>                   |                        | Reference<br>Maximum Sound<br>Level at 50 ft.<br>(Lmax, dBA) | Utilization<br>Factor<br>(% of hour) | Equivalent<br>Sound Level<br>(Leq, dBA) |
|--------------------------------------|------------------------|--------------------------------------------------------------|--------------------------------------|-----------------------------------------|
|                                      |                        |                                                              |                                      |                                         |
| Construction Phase                   | Land Clearing/Grubbing |                                                              |                                      |                                         |
| Equipment Type #1                    | Scraper                | 85                                                           | 0.50                                 | 82                                      |
| Equipment Type #2                    | Grader                 | 85                                                           | 0.50                                 | 82                                      |
| Equipment Type #3                    |                        | 0                                                            | 0.50                                 | -3                                      |
| Average Height of Sources, ft.       | 10                     |                                                              |                                      |                                         |
| Average Height of Receiver, ft.      | 5                      |                                                              |                                      |                                         |
| Ground Type                          | soft                   |                                                              |                                      |                                         |
| Allowable Sound Level, daytime Leq   | 50                     |                                                              |                                      |                                         |
| Allowable Sound Level, nighttime Leq | 45                     |                                                              |                                      |                                         |

| <b>Calculated Data</b>                            |                                  |                                      |                                         |
|---------------------------------------------------|----------------------------------|--------------------------------------|-----------------------------------------|
| Combined Equipment Sound Level, Leq dBA at 50 ft. |                                  |                                      | 85                                      |
| Effective Source Height, ft.                      |                                  |                                      | 7.50                                    |
| Ground factor, G                                  |                                  |                                      | 0.62                                    |
| Distance to Allowable Daytime Sound Level, ft.    |                                  |                                      | 1100                                    |
| Distance to Allowable Nighttime Sound Level, ft.  |                                  |                                      | 1750                                    |
| Distance Between<br>Source and Receiver<br>(ft.)  | Geometric<br>Attenuation<br>(dB) | Ground Effect<br>Attenuation<br>(dB) | Equivalent<br>Sound Level<br>(Leq, dBA) |
| 50                                                | 0                                | 0                                    | 85                                      |
| 100                                               | -6                               | -2                                   | 77                                      |
| 200                                               | -12                              | -4                                   | 69                                      |
| 300                                               | -16                              | -5                                   | 65                                      |
| 400                                               | -18                              | -6                                   | 61                                      |
| 500                                               | -20                              | -6                                   | 59                                      |
| 600                                               | -22                              | -7                                   | 57                                      |
| 700                                               | -23                              | -7                                   | 55                                      |
| 800                                               | -24                              | -7                                   | 53                                      |
| 900                                               | -25                              | -8                                   | 52                                      |
| 1000                                              | -26                              | -8                                   | 51                                      |
| 1500                                              | -30                              | -9                                   | 46                                      |
| 2000                                              | -32                              | -10                                  | 43                                      |
| 2500                                              | -34                              | -10                                  | 41                                      |
| 3000                                              | -36                              | -11                                  | 38                                      |
| 4000                                              | -38                              | -12                                  | 35                                      |

Calculations based on FTA 2018.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

| Source Data                          |                    | Reference<br>Maximum Sound<br>Level at 50 ft.<br>(Lmax, dBA) | Utilization<br>Factor<br>(% of hour) | Equivalent<br>Sound Level<br>(Leq, dBA) |
|--------------------------------------|--------------------|--------------------------------------------------------------|--------------------------------------|-----------------------------------------|
|                                      |                    |                                                              |                                      |                                         |
| Construction Phase                   | Grading/Excavation |                                                              |                                      |                                         |
| Equipment Type #1                    | Scraper            | 85                                                           | 0.50                                 | 82                                      |
| Equipment Type #2                    | Grader             | 85                                                           | 0.50                                 | 82                                      |
| Equipment Type #3                    |                    | 0                                                            | 1.00                                 | 0                                       |
| Average Height of Sources, ft.       | 10                 |                                                              |                                      |                                         |
| Average Height of Receiver, ft.      | 5                  |                                                              |                                      |                                         |
| Ground Type                          | soft               |                                                              |                                      |                                         |
| Allowable Sound Level, daytime Leq   | 50                 |                                                              |                                      |                                         |
| Allowable Sound Level, nighttime Leq | 45                 |                                                              |                                      |                                         |

| Calculated Data                                   |                                  |                                      |                                         |
|---------------------------------------------------|----------------------------------|--------------------------------------|-----------------------------------------|
| Combined Equipment Sound Level, Leq dBA at 50 ft. |                                  |                                      | 85                                      |
| Effective Source Height, ft.                      |                                  |                                      | 7.50                                    |
| Ground factor, G                                  |                                  |                                      | 0.62                                    |
| Distance to Allowable Daytime Sound Level, ft.    |                                  |                                      | 1100                                    |
| Distance to Allowable Nighttime Sound Level, ft.  |                                  |                                      | 1750                                    |
| Distance Between<br>Source and Receiver<br>(ft.)  | Geometric<br>Attenuation<br>(dB) | Ground Effect<br>Attenuation<br>(dB) | Equivalent<br>Sound Level<br>(Leq, dBA) |
| 50                                                | 0                                | 0                                    | 85                                      |
| 100                                               | -6                               | -2                                   | 77                                      |
| 200                                               | -12                              | -4                                   | 69                                      |
| 300                                               | -16                              | -5                                   | 65                                      |
| 400                                               | -18                              | -6                                   | 61                                      |
| 500                                               | -20                              | -6                                   | 59                                      |
| 600                                               | -22                              | -7                                   | 57                                      |
| 700                                               | -23                              | -7                                   | 55                                      |
| 800                                               | -24                              | -7                                   | 53                                      |
| 900                                               | -25                              | -8                                   | 52                                      |
| 1000                                              | -26                              | -8                                   | 51                                      |
| 1500                                              | -30                              | -9                                   | 46                                      |
| 2000                                              | -32                              | -10                                  | 43                                      |
| 2500                                              | -34                              | -10                                  | 41                                      |
| 3000                                              | -36                              | -11                                  | 38                                      |
| 4000                                              | -38                              | -12                                  | 35                                      |

Calculations based on FTA 2018.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

| Source Data                          |                             | Reference<br>Maximum Sound<br>Level at 50 ft.<br>(Lmax, dBA) | Utilization<br>Factor<br>(% of hour) | Equivalent<br>Sound Level<br>(Leq, dBA) |
|--------------------------------------|-----------------------------|--------------------------------------------------------------|--------------------------------------|-----------------------------------------|
|                                      |                             |                                                              |                                      |                                         |
| Construction Phase                   | Draining/Utilities/Subgrade |                                                              |                                      |                                         |
| Equipment Type #1                    | Hoe Ram                     | 90                                                           | 0.20                                 | 83                                      |
| Equipment Type #2                    | Dozer                       | 85                                                           | 0.50                                 | 82                                      |
| Equipment Type #3                    |                             | 0                                                            | 0.50                                 | -3                                      |
| Average Height of Sources, ft.       | 10                          |                                                              |                                      |                                         |
| Average Height of Receiver, ft.      | 5                           |                                                              |                                      |                                         |
| Ground Type                          | soft                        |                                                              |                                      |                                         |
| Allowable Sound Level, daytime Leq   | 50                          |                                                              |                                      |                                         |
| Allowable Sound Level, nighttime Leq | 45                          |                                                              |                                      |                                         |

| Calculated Data                                   |                                  |                                      |                                         |
|---------------------------------------------------|----------------------------------|--------------------------------------|-----------------------------------------|
| Combined Equipment Sound Level, Leq dBA at 50 ft. |                                  |                                      | 86                                      |
| Effective Source Height, ft.                      |                                  |                                      | 7.50                                    |
| Ground factor, G                                  |                                  |                                      | 0.62                                    |
| Distance to Allowable Daytime Sound Level, ft.    |                                  |                                      | 1150                                    |
| Distance to Allowable Nighttime Sound Level, ft.  |                                  |                                      | 1850                                    |
| Distance Between<br>Source and Receiver<br>(ft.)  | Geometric<br>Attenuation<br>(dB) | Ground Effect<br>Attenuation<br>(dB) | Equivalent<br>Sound Level<br>(Leq, dBA) |
| 50                                                | 0                                | 0                                    | 86                                      |
| 100                                               | -6                               | -2                                   | 78                                      |
| 200                                               | -12                              | -4                                   | 70                                      |
| 300                                               | -16                              | -5                                   | 65                                      |
| 400                                               | -18                              | -6                                   | 62                                      |
| 500                                               | -20                              | -6                                   | 59                                      |
| 600                                               | -22                              | -7                                   | 57                                      |
| 700                                               | -23                              | -7                                   | 56                                      |
| 800                                               | -24                              | -7                                   | 54                                      |
| 900                                               | -25                              | -8                                   | 53                                      |
| 1000                                              | -26                              | -8                                   | 52                                      |
| 1500                                              | -30                              | -9                                   | 47                                      |
| 2000                                              | -32                              | -10                                  | 44                                      |
| 2500                                              | -34                              | -10                                  | 41                                      |
| 3000                                              | -36                              | -11                                  | 39                                      |
| 4000                                              | -38                              | -12                                  | 36                                      |

Calculations based on FTA 2018.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

| <b>Source Data</b>                   |        | Reference<br>Maximum Sound<br>Level at 50 ft.<br>(Lmax, dBA) | Utilization<br>Factor<br>(% of hour) | Equivalent<br>Sound Level<br>(Leq, dBA) |
|--------------------------------------|--------|--------------------------------------------------------------|--------------------------------------|-----------------------------------------|
|                                      |        |                                                              |                                      |                                         |
| Construction Phase                   | Paving |                                                              |                                      |                                         |
| Equipment Type #1                    | Paver  | 85                                                           | 0.50                                 | 82                                      |
| Equipment Type #2                    | Roller | 85                                                           | 0.50                                 | 82                                      |
| Equipment Type #3                    |        | 0                                                            | 0.50                                 | -3                                      |
| Average Height of Sources, ft.       | 10     |                                                              |                                      |                                         |
| Average Height of Receiver, ft.      | 5      |                                                              |                                      |                                         |
| Ground Type                          | soft   |                                                              |                                      |                                         |
| Allowable Sound Level, daytime Leq   | 50     |                                                              |                                      |                                         |
| Allowable Sound Level, nighttime Leq | 45     |                                                              |                                      |                                         |

| <b>Calculated Data</b>                            |                                  |                                      |                                         |
|---------------------------------------------------|----------------------------------|--------------------------------------|-----------------------------------------|
| Combined Equipment Sound Level, Leq dBA at 50 ft. |                                  |                                      | 85                                      |
| Effective Source Height, ft.                      |                                  |                                      | 7.50                                    |
| Ground factor, G                                  |                                  |                                      | 0.62                                    |
| Distance to Allowable Daytime Sound Level, ft.    |                                  |                                      | 1100                                    |
| Distance to Allowable Nighttime Sound Level, ft.  |                                  |                                      | 1700                                    |
| Distance Between<br>Source and Receiver<br>(ft.)  | Geometric<br>Attenuation<br>(dB) | Ground Effect<br>Attenuation<br>(dB) | Equivalent<br>Sound Level<br>(Leq, dBA) |
| 50                                                | 0                                | 0                                    | 85                                      |
| 100                                               | -6                               | -2                                   | 77                                      |
| 200                                               | -12                              | -4                                   | 69                                      |
| 300                                               | -16                              | -5                                   | 65                                      |
| 400                                               | -18                              | -6                                   | 61                                      |
| 500                                               | -20                              | -6                                   | 59                                      |
| 600                                               | -22                              | -7                                   | 57                                      |
| 700                                               | -23                              | -7                                   | 55                                      |
| 800                                               | -24                              | -7                                   | 53                                      |
| 900                                               | -25                              | -8                                   | 52                                      |
| 1000                                              | -26                              | -8                                   | 51                                      |
| 1500                                              | -30                              | -9                                   | 46                                      |
| 2000                                              | -32                              | -10                                  | 43                                      |
| 2500                                              | -34                              | -10                                  | 41                                      |
| 3000                                              | -36                              | -11                                  | 38                                      |
| 4000                                              | -38                              | -12                                  | 35                                      |

Calculations based on FTA 2018.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.

| Source Data                          |                       | Reference<br>Maximum Sound<br>Level at 50 ft.<br>(Lmax, dBA) | Utilization<br>Factor<br>(% of hour) | Equivalent<br>Sound Level<br>(Leq, dBA) |
|--------------------------------------|-----------------------|--------------------------------------------------------------|--------------------------------------|-----------------------------------------|
|                                      |                       |                                                              |                                      |                                         |
| Construction Phase                   | Overpass Construction |                                                              |                                      |                                         |
| Equipment Type #1                    | Rock Drill            | 95                                                           | 0.50                                 | 92                                      |
| Equipment Type #2                    | Excavator             | 85                                                           | 0.50                                 | 82                                      |
| Equipment Type #3                    |                       | 0                                                            | 0.50                                 | -3                                      |
| Average Height of Sources, ft.       | 20                    |                                                              |                                      |                                         |
| Average Height of Receiver, ft.      | 5                     |                                                              |                                      |                                         |
| Ground Type                          | soft                  |                                                              |                                      |                                         |
| Allowable Sound Level, daytime Leq   | 50                    |                                                              |                                      |                                         |
| Allowable Sound Level, nighttime Leq | 45                    |                                                              |                                      |                                         |

| Calculated Data                                   |                                  |                                      |                                         |
|---------------------------------------------------|----------------------------------|--------------------------------------|-----------------------------------------|
| Combined Equipment Sound Level, Leq dBA at 50 ft. |                                  |                                      | 92                                      |
| Effective Source Height, ft.                      |                                  |                                      | 12.50                                   |
| Ground factor, G                                  |                                  |                                      | 0.53                                    |
| Distance to Allowable Daytime Sound Level, ft.    |                                  |                                      | 2450                                    |
| Distance to Allowable Nighttime Sound Level, ft.  |                                  |                                      | 3900                                    |
| Distance Between<br>Source and Receiver<br>(ft.)  | Geometric<br>Attenuation<br>(dB) | Ground Effect<br>Attenuation<br>(dB) | Equivalent<br>Sound Level<br>(Leq, dBA) |
| 50                                                | 0                                | 0                                    | 92                                      |
| 100                                               | -6                               | -2                                   | 85                                      |
| 200                                               | -12                              | -3                                   | 77                                      |
| 300                                               | -16                              | -4                                   | 73                                      |
| 400                                               | -18                              | -5                                   | 70                                      |
| 500                                               | -20                              | -5                                   | 67                                      |
| 600                                               | -22                              | -6                                   | 65                                      |
| 700                                               | -23                              | -6                                   | 63                                      |
| 800                                               | -24                              | -6                                   | 62                                      |
| 900                                               | -25                              | -7                                   | 61                                      |
| 1000                                              | -26                              | -7                                   | 60                                      |
| 1500                                              | -30                              | -8                                   | 55                                      |
| 2000                                              | -32                              | -8                                   | 52                                      |
| 2500                                              | -34                              | -9                                   | 49                                      |
| 3000                                              | -36                              | -9                                   | 47                                      |
| 4000                                              | -38                              | -10                                  | 44                                      |

Calculations based on FTA 2018.

Note: This calculation does not include the effects, if any, of local shielding from walls, topography or other barriers which may reduce sound levels further.



**INPUT: TRAFFIC FOR LAeq1h Volumes**
**Mark Thomas**

|                                   |                                       |     |         |     |         |     |         |     |        |     |             |     |
|-----------------------------------|---------------------------------------|-----|---------|-----|---------|-----|---------|-----|--------|-----|-------------|-----|
| ICF                               |                                       |     |         |     |         |     |         |     |        |     |             |     |
| ICF                               |                                       |     |         |     |         |     |         |     |        |     |             |     |
|                                   |                                       |     |         |     |         |     |         |     |        |     |             |     |
| INPUT: TRAFFIC FOR LAeq1h Volumes |                                       |     |         |     |         |     |         |     |        |     |             |     |
| PROJECT/CONTRACT:                 | Mark Thomas                           |     |         |     |         |     |         |     |        |     |             |     |
| RUN:                              | Roseville Parkway Extension, Existing |     |         |     |         |     |         |     |        |     |             |     |
| Roadway                           | Points                                |     |         |     |         |     |         |     |        |     |             |     |
| Name                              | Name                                  | No. | Segment |     |         |     |         |     |        |     |             |     |
|                                   |                                       |     | Autos   |     | MTrucks |     | HTrucks |     | Buses  |     | Motorcycles |     |
|                                   |                                       |     | V       | S   | V       | S   | V       | S   | V      | S   | V           | S   |
|                                   |                                       |     | veh/hr  | mph | veh/hr  | mph | veh/hr  | mph | veh/hr | mph | veh/hr      | mph |
| Foothills Boulevard SB            | point1                                | 1   | 912     | 45  | 19      | 45  | 19      | 45  | 0      | 0   | 0           | 0   |
|                                   | point2                                | 2   | 912     | 45  | 19      | 45  | 19      | 45  | 0      | 0   | 0           | 0   |
|                                   | point3                                | 3   | 912     | 45  | 19      | 45  | 19      | 45  | 0      | 0   | 0           | 0   |
|                                   | point4                                | 4   |         |     |         |     |         |     |        |     |             |     |
| Driveway (future extension) EB    | point16                               | 16  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point15                               | 15  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point14                               | 14  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point13                               | 13  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point12                               | 12  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point11                               | 11  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point10                               | 10  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point9                                | 9   | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point8                                | 8   | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point7                                | 7   | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point6                                | 6   | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point5                                | 5   |         |     |         |     |         |     |        |     |             |     |
| Driveway (future extension) WB    | point30                               | 30  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point29                               | 29  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point28                               | 28  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point27                               | 27  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point26                               | 26  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point25                               | 25  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |
|                                   | point24                               | 24  | 29      | 45  | 1       | 45  | 1       | 45  | 0      | 0   | 0           | 0   |

**INPUT: TRAFFIC FOR LAeq1h Volumes**
**Mark Thomas**

|                         |         |    |     |    |    |    |    |    |   |   |   |   |
|-------------------------|---------|----|-----|----|----|----|----|----|---|---|---|---|
|                         | point23 | 23 | 29  | 45 | 1  | 45 | 1  | 45 | 0 | 0 | 0 | 0 |
|                         | point22 | 22 | 29  | 45 | 1  | 45 | 1  | 45 | 0 | 0 | 0 | 0 |
|                         | point21 | 21 | 29  | 45 | 1  | 45 | 1  | 45 | 0 | 0 | 0 | 0 |
|                         | point20 | 20 | 29  | 45 | 1  | 45 | 1  | 45 | 0 | 0 | 0 | 0 |
|                         | point19 | 19 | 29  | 45 | 1  | 45 | 1  | 45 | 0 | 0 | 0 | 0 |
|                         | point18 | 18 | 29  | 45 | 1  | 45 | 1  | 45 | 0 | 0 | 0 | 0 |
|                         | point17 | 17 |     |    |    |    |    |    |   |   |   |   |
| Washington Boulevard SB | point34 | 34 | 998 | 45 | 21 | 45 | 21 | 45 | 0 | 0 | 0 | 0 |
|                         | point33 | 33 | 998 | 45 | 21 | 45 | 21 | 45 | 0 | 0 | 0 | 0 |
|                         | point32 | 32 | 998 | 45 | 21 | 45 | 21 | 45 | 0 | 0 | 0 | 0 |
|                         | point31 | 31 |     |    |    |    |    |    |   |   |   |   |
| Washington Boulevard NB | point35 | 35 | 989 | 45 | 21 | 45 | 21 | 45 | 0 | 0 | 0 | 0 |
|                         | point36 | 36 | 989 | 45 | 21 | 45 | 21 | 45 | 0 | 0 | 0 | 0 |
|                         | point37 | 37 | 989 | 45 | 21 | 45 | 21 | 45 | 0 | 0 | 0 | 0 |
|                         | point38 | 38 | 989 | 45 | 21 | 45 | 21 | 45 | 0 | 0 | 0 | 0 |
|                         | point39 | 39 |     |    |    |    |    |    |   |   |   |   |
| Roseville Parkway WB    | point46 | 46 | 480 | 45 | 10 | 45 | 10 | 45 | 0 | 0 | 0 | 0 |
|                         | point45 | 45 | 480 | 45 | 10 | 45 | 10 | 45 | 0 | 0 | 0 | 0 |
|                         | point44 | 44 | 480 | 45 | 10 | 45 | 10 | 45 | 0 | 0 | 0 | 0 |
|                         | point43 | 43 | 480 | 45 | 10 | 45 | 10 | 45 | 0 | 0 | 0 | 0 |
|                         | point42 | 42 | 480 | 45 | 10 | 45 | 10 | 45 | 0 | 0 | 0 | 0 |
|                         | point41 | 41 | 480 | 45 | 10 | 45 | 10 | 45 | 0 | 0 | 0 | 0 |
|                         | point40 | 40 |     |    |    |    |    |    |   |   |   |   |
| Turn lane               | point47 | 47 | 0   | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 |
|                         | point48 | 48 |     |    |    |    |    |    |   |   |   |   |
| Roseville Parkway EB    | point53 | 53 | 624 | 45 | 13 | 45 | 13 | 45 | 0 | 0 | 0 | 0 |
|                         | point52 | 52 | 624 | 45 | 13 | 45 | 13 | 45 | 0 | 0 | 0 | 0 |
|                         | point51 | 51 | 624 | 45 | 13 | 45 | 13 | 45 | 0 | 0 | 0 | 0 |
|                         | point50 | 50 | 624 | 45 | 13 | 45 | 13 | 45 | 0 | 0 | 0 | 0 |
|                         | point49 | 49 |     |    |    |    |    |    |   |   |   |   |
| Foothills Boulevard NB  | point55 | 55 | 662 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point56 | 56 | 662 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point57 | 57 | 662 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point58 | 58 |     |    |    |    |    |    |   |   |   |   |

**INPUT: TRAFFIC FOR LAeq1h Volumes**
**Mark Thomas**

|                                   |                                          |     |         |     |         |     |         |     |        |     |             |     |
|-----------------------------------|------------------------------------------|-----|---------|-----|---------|-----|---------|-----|--------|-----|-------------|-----|
| ICF                               |                                          |     |         |     |         |     |         |     |        |     |             |     |
| ICF                               |                                          |     |         |     |         |     |         |     |        |     |             |     |
|                                   |                                          |     |         |     |         |     |         |     |        |     |             |     |
| INPUT: TRAFFIC FOR LAeq1h Volumes |                                          |     |         |     |         |     |         |     |        |     |             |     |
| PROJECT/CONTRACT:                 | Mark Thomas                              |     |         |     |         |     |         |     |        |     |             |     |
| RUN:                              | Roseville Parkway Extension, Existing PP |     |         |     |         |     |         |     |        |     |             |     |
| Roadway                           | Points                                   |     |         |     |         |     |         |     |        |     |             |     |
| Name                              | Name                                     | No. | Segment |     |         |     |         |     |        |     |             |     |
|                                   |                                          |     | Autos   |     | MTrucks |     | HTrucks |     | Buses  |     | Motorcycles |     |
|                                   |                                          |     | V       | S   | V       | S   | V       | S   | V      | S   | V           | S   |
|                                   |                                          |     | veh/hr  | mph | veh/hr  | mph | veh/hr  | mph | veh/hr | mph | veh/hr      | mph |
| Foothills Boulevard SB            | point1                                   | 1   | 998     | 45  | 21      | 45  | 21      | 45  | 0      | 0   | 0           | 0   |
|                                   | point2                                   | 2   | 998     | 45  | 21      | 45  | 21      | 45  | 0      | 0   | 0           | 0   |
|                                   | point3                                   | 3   | 998     | 45  | 21      | 45  | 21      | 45  | 0      | 0   | 0           | 0   |
|                                   | point4                                   | 4   |         |     |         |     |         |     |        |     |             |     |
| Roseville Parkway Extension EB    | point16                                  | 16  | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point15                                  | 15  | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point14                                  | 14  | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point13                                  | 13  | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point12                                  | 12  | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point11                                  | 11  | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point10                                  | 10  | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point9                                   | 9   | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point8                                   | 8   | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point7                                   | 7   | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point6                                   | 6   | 509     | 45  | 11      | 45  | 11      | 45  | 0      | 0   | 0           | 0   |
|                                   | point5                                   | 5   |         |     |         |     |         |     |        |     |             |     |
| Roseville Parkway Extension WB    | point30                                  | 30  | 317     | 45  | 7       | 45  | 7       | 45  | 0      | 0   | 0           | 0   |
|                                   | point29                                  | 29  | 317     | 45  | 7       | 45  | 7       | 45  | 0      | 0   | 0           | 0   |
|                                   | point28                                  | 28  | 317     | 45  | 7       | 45  | 7       | 45  | 0      | 0   | 0           | 0   |
|                                   | point27                                  | 27  | 317     | 45  | 7       | 45  | 7       | 45  | 0      | 0   | 0           | 0   |
|                                   | point26                                  | 26  | 317     | 45  | 7       | 45  | 7       | 45  | 0      | 0   | 0           | 0   |
|                                   | point25                                  | 25  | 317     | 45  | 7       | 45  | 7       | 45  | 0      | 0   | 0           | 0   |
|                                   | point24                                  | 24  | 317     | 45  | 7       | 45  | 7       | 45  | 0      | 0   | 0           | 0   |

**INPUT: TRAFFIC FOR LAeq1h Volumes**
**Mark Thomas**

|                         |         |    |     |    |    |    |    |    |   |   |   |   |
|-------------------------|---------|----|-----|----|----|----|----|----|---|---|---|---|
|                         | point23 | 23 | 317 | 45 | 7  | 45 | 7  | 45 | 0 | 0 | 0 | 0 |
|                         | point22 | 22 | 317 | 45 | 7  | 45 | 7  | 45 | 0 | 0 | 0 | 0 |
|                         | point21 | 21 | 317 | 45 | 7  | 45 | 7  | 45 | 0 | 0 | 0 | 0 |
|                         | point20 | 20 | 317 | 45 | 7  | 45 | 7  | 45 | 0 | 0 | 0 | 0 |
|                         | point19 | 19 | 317 | 45 | 7  | 45 | 7  | 45 | 0 | 0 | 0 | 0 |
|                         | point18 | 18 | 317 | 45 | 7  | 45 | 7  | 45 | 0 | 0 | 0 | 0 |
|                         | point17 | 17 |     |    |    |    |    |    |   |   |   |   |
| Washington Boulevard SB | point34 | 34 | 614 | 45 | 13 | 45 | 13 | 45 | 0 | 0 | 0 | 0 |
|                         | point33 | 33 | 614 | 45 | 13 | 45 | 13 | 45 | 0 | 0 | 0 | 0 |
|                         | point32 | 32 | 614 | 45 | 13 | 45 | 13 | 45 | 0 | 0 | 0 | 0 |
|                         | point31 | 31 |     |    |    |    |    |    |   |   |   |   |
| Washington Boulevard NB | point35 | 35 | 893 | 45 | 19 | 45 | 19 | 45 | 0 | 0 | 0 | 0 |
|                         | point36 | 36 | 893 | 45 | 19 | 45 | 19 | 45 | 0 | 0 | 0 | 0 |
|                         | point37 | 37 | 893 | 45 | 19 | 45 | 19 | 45 | 0 | 0 | 0 | 0 |
|                         | point38 | 38 | 893 | 45 | 19 | 45 | 19 | 45 | 0 | 0 | 0 | 0 |
|                         | point39 | 39 |     |    |    |    |    |    |   |   |   |   |
| Roseville Parkway WB    | point46 | 46 | 662 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point45 | 45 | 662 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point44 | 44 | 662 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point43 | 43 | 662 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point42 | 42 | 662 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point41 | 41 | 662 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point40 | 40 |     |    |    |    |    |    |   |   |   |   |
| Turn lane               | point47 | 47 | 0   | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 |
|                         | point48 | 48 |     |    |    |    |    |    |   |   |   |   |
| Roseville Parkway EB    | point53 | 53 | 557 | 45 | 12 | 45 | 12 | 45 | 0 | 0 | 0 | 0 |
|                         | point52 | 52 | 557 | 45 | 12 | 45 | 12 | 45 | 0 | 0 | 0 | 0 |
|                         | point51 | 51 | 557 | 45 | 12 | 45 | 12 | 45 | 0 | 0 | 0 | 0 |
|                         | point50 | 50 | 557 | 45 | 12 | 45 | 12 | 45 | 0 | 0 | 0 | 0 |
|                         | point49 | 49 |     |    |    |    |    |    |   |   |   |   |
| Foothills Boulevard NB  | point54 | 54 | 672 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point55 | 55 | 672 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point56 | 56 | 672 | 45 | 14 | 45 | 14 | 45 | 0 | 0 | 0 | 0 |
|                         | point57 | 57 |     |    |    |    |    |    |   |   |   |   |

**INPUT: TRAFFIC FOR LAeq1h Volumes**
**Mark Thomas**

|                                   |                                         |     |         |     |         |     |         |     |        |     |             |     |
|-----------------------------------|-----------------------------------------|-----|---------|-----|---------|-----|---------|-----|--------|-----|-------------|-----|
| ICF                               |                                         |     |         |     |         |     |         |     |        |     |             |     |
| ICF                               |                                         |     |         |     |         |     |         |     |        |     |             |     |
|                                   |                                         |     |         |     |         |     |         |     |        |     |             |     |
| INPUT: TRAFFIC FOR LAeq1h Volumes |                                         |     |         |     |         |     |         |     |        |     |             |     |
| PROJECT/CONTRACT:                 | Mark Thomas                             |     |         |     |         |     |         |     |        |     |             |     |
| RUN:                              | Roseville Parkway Extension, Cumulative |     |         |     |         |     |         |     |        |     |             |     |
| Roadway                           | Points                                  |     |         |     |         |     |         |     |        |     |             |     |
| Name                              | Name                                    | No. | Segment |     |         |     |         |     |        |     |             |     |
|                                   |                                         |     | Autos   |     | MTrucks |     | HTrucks |     | Buses  |     | Motorcycles |     |
|                                   |                                         |     | V       | S   | V       | S   | V       | S   | V      | S   | V           | S   |
|                                   |                                         |     | veh/hr  | mph | veh/hr  | mph | veh/hr  | mph | veh/hr | mph | veh/hr      | mph |
| Foothills Boulevard SB            | point1                                  | 1   | 1776    | 45  | 37      | 45  | 37      | 45  | 0      | 0   | 0           | 0   |
|                                   | point2                                  | 2   | 1776    | 45  | 37      | 45  | 37      | 45  | 0      | 0   | 0           | 0   |
|                                   | point3                                  | 3   | 1776    | 45  | 37      | 45  | 37      | 45  | 0      | 0   | 0           | 0   |
|                                   | point4                                  | 4   |         |     |         |     |         |     |        |     |             |     |
| Roseville Parkway Extension EB    | point16                                 | 16  | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point15                                 | 15  | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point14                                 | 14  | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point13                                 | 13  | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point12                                 | 12  | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point11                                 | 11  | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point10                                 | 10  | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point9                                  | 9   | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point8                                  | 8   | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point7                                  | 7   | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point6                                  | 6   | 1193    | 45  | 25      | 45  | 25      | 45  | 0      | 0   | 0           | 0   |
|                                   | point5                                  | 5   |         |     |         |     |         |     |        |     |             |     |
| Roseville Parkway Extension WB    | point30                                 | 30  | 1454    | 45  | 30      | 45  | 30      | 45  | 0      | 0   | 0           | 0   |
|                                   | point29                                 | 29  | 1454    | 45  | 30      | 45  | 30      | 45  | 0      | 0   | 0           | 0   |
|                                   | point28                                 | 28  | 1454    | 45  | 30      | 45  | 30      | 45  | 0      | 0   | 0           | 0   |
|                                   | point27                                 | 27  | 1454    | 45  | 30      | 45  | 30      | 45  | 0      | 0   | 0           | 0   |
|                                   | point26                                 | 26  | 1454    | 45  | 30      | 45  | 30      | 45  | 0      | 0   | 0           | 0   |
|                                   | point25                                 | 25  | 1454    | 45  | 30      | 45  | 30      | 45  | 0      | 0   | 0           | 0   |
|                                   | point24                                 | 24  | 1454    | 45  | 30      | 45  | 30      | 45  | 0      | 0   | 0           | 0   |

**INPUT: TRAFFIC FOR LAeq1h Volumes**
**Mark Thomas**

|                         |         |    |      |    |    |    |    |    |   |   |   |   |
|-------------------------|---------|----|------|----|----|----|----|----|---|---|---|---|
|                         | point23 | 23 | 1454 | 45 | 30 | 45 | 30 | 45 | 0 | 0 | 0 | 0 |
|                         | point22 | 22 | 1454 | 45 | 30 | 45 | 30 | 45 | 0 | 0 | 0 | 0 |
|                         | point21 | 21 | 1454 | 45 | 30 | 45 | 30 | 45 | 0 | 0 | 0 | 0 |
|                         | point20 | 20 | 1454 | 45 | 30 | 45 | 30 | 45 | 0 | 0 | 0 | 0 |
|                         | point19 | 19 | 1454 | 45 | 30 | 45 | 30 | 45 | 0 | 0 | 0 | 0 |
|                         | point18 | 18 | 1454 | 45 | 30 | 45 | 30 | 45 | 0 | 0 | 0 | 0 |
|                         | point17 | 17 |      |    |    |    |    |    |   |   |   |   |
| Washington Boulevard SB | point34 | 34 | 1229 | 45 | 26 | 45 | 26 | 45 | 0 | 0 | 0 | 0 |
|                         | point33 | 33 | 1229 | 45 | 26 | 45 | 26 | 45 | 0 | 0 | 0 | 0 |
|                         | point32 | 32 | 1229 | 45 | 26 | 45 | 26 | 45 | 0 | 0 | 0 | 0 |
|                         | point31 | 31 |      |    |    |    |    |    |   |   |   |   |
| Washington Boulevard NB | point35 | 35 | 1595 | 45 | 33 | 45 | 33 | 45 | 0 | 0 | 0 | 0 |
|                         | point36 | 36 | 1595 | 45 | 33 | 45 | 33 | 45 | 0 | 0 | 0 | 0 |
|                         | point37 | 37 | 1595 | 45 | 33 | 45 | 33 | 45 | 0 | 0 | 0 | 0 |
|                         | point38 | 38 | 1595 | 45 | 33 | 45 | 33 | 45 | 0 | 0 | 0 | 0 |
|                         | point39 | 39 |      |    |    |    |    |    |   |   |   |   |
| Roseville Parkway WB    | point46 | 46 | 1524 | 45 | 32 | 45 | 32 | 45 | 0 | 0 | 0 | 0 |
|                         | point45 | 45 | 1524 | 45 | 32 | 45 | 32 | 45 | 0 | 0 | 0 | 0 |
|                         | point44 | 44 | 1524 | 45 | 32 | 45 | 32 | 45 | 0 | 0 | 0 | 0 |
|                         | point43 | 43 | 1524 | 45 | 32 | 45 | 32 | 45 | 0 | 0 | 0 | 0 |
|                         | point42 | 42 | 1524 | 45 | 32 | 45 | 32 | 45 | 0 | 0 | 0 | 0 |
|                         | point41 | 41 | 1524 | 45 | 32 | 45 | 32 | 45 | 0 | 0 | 0 | 0 |
|                         | point40 | 40 |      |    |    |    |    |    |   |   |   |   |
| Turn lane               | point47 | 47 | 0    | 0  | 0  | 0  | 0  | 0  | 0 | 0 | 0 | 0 |
|                         | point48 | 48 |      |    |    |    |    |    |   |   |   |   |
| Roseville Parkway EB    | point53 | 53 | 1323 | 45 | 28 | 45 | 28 | 45 | 0 | 0 | 0 | 0 |
|                         | point52 | 52 | 1323 | 45 | 28 | 45 | 28 | 45 | 0 | 0 | 0 | 0 |
|                         | point51 | 51 | 1323 | 45 | 28 | 45 | 28 | 45 | 0 | 0 | 0 | 0 |
|                         | point50 | 50 | 1323 | 45 | 28 | 45 | 28 | 45 | 0 | 0 | 0 | 0 |
|                         | point49 | 49 |      |    |    |    |    |    |   |   |   |   |
| Foothills Boulevard NB  | point54 | 54 | 1306 | 45 | 27 | 45 | 27 | 45 | 0 | 0 | 0 | 0 |
|                         | point55 | 55 | 1306 | 45 | 27 | 45 | 27 | 45 | 0 | 0 | 0 | 0 |
|                         | point56 | 56 | 1306 | 45 | 27 | 45 | 27 | 45 | 0 | 0 | 0 | 0 |
|                         | point57 | 57 |      |    |    |    |    |    |   |   |   |   |

**Table B-3A. Predicted Exterior Noise Levels, Existing Year (2020)**

| <b>Receiver I.D.</b> | <b>Land Use</b>         | <b>Address</b>              | <b>Existing Noise Level, Ldn</b> | <b>Existing-year plus project Noise Level, Ldn</b> | <b>Existing-year with-project minus Existing no-project, dB</b> | <b>Exterior Threshold, Ldn</b> | <b>Impact Type</b> |
|----------------------|-------------------------|-----------------------------|----------------------------------|----------------------------------------------------|-----------------------------------------------------------------|--------------------------------|--------------------|
| R-01                 | Single family residence | Highland Reserve            | 57                               | 56                                                 | - 1                                                             | 60                             | None               |
| R-02                 | Single family residence | Highland Reserve            | 57                               | 57                                                 | 0                                                               | 60                             | None               |
| R-03                 | Single family residence | Highland Reserve            | 56                               | 57                                                 | + 1                                                             | 60                             | None               |
| R-04                 | Single family residence | Highland Reserve            | 57                               | 56                                                 | - 1                                                             | 60                             | None               |
| R-05                 | Single family residence | Highland Reserve            | 58                               | 57                                                 | - 1                                                             | 60                             | None               |
| R-06                 | Single family residence | Highland Reserve            | 57                               | 57                                                 | 0                                                               | 60                             | None               |
| R-07                 | Commercial/Industrial   | Roseville Parkway Extension | 51                               | 55                                                 | + 4                                                             | N/A                            | None               |
| R-08                 | Commercial/Industrial   | Roseville Parkway Extension | 50                               | 58                                                 | + 8                                                             | N/A                            | None               |
| R-09                 | Commercial/Industrial   | Roseville Parkway Extension | 47                               | 57                                                 | + 10                                                            | N/A                            | None               |
| R-10                 | Commercial/Industrial   | Roseville Parkway Extension | 52                               | 62                                                 | + 10                                                            | N/A                            | None               |
| R-11                 | Undeveloped             | Roseville Parkway Extension | 51                               | 60                                                 | + 9                                                             | N/A                            | None               |

**Table B-3B. Impact Assessment and Predicted Exterior Noise Levels, Existing Year (2020) and Cumulative (2035)**

| Receiver I.D. | Land Use                | Address                     | Existing year plus project noise level, Ldn | Cumulative plus project noise level, Ldn | Cumulative with-project minus Existing plus project, dB | Cumulative with-project minus Existing Year no-project, dB | Exterior Threshold, Ldn | Impact Type |
|---------------|-------------------------|-----------------------------|---------------------------------------------|------------------------------------------|---------------------------------------------------------|------------------------------------------------------------|-------------------------|-------------|
| R-01          | Single family residence | Highland Reserve            | 56                                          | 59                                       | + 3                                                     | + 2                                                        | 60                      | None        |
| R-02          | Single family residence | Highland Reserve            | 57                                          | 60                                       | + 3                                                     | + 3                                                        | 60                      | None        |
| R-03          | Single family residence | Highland Reserve            | 57                                          | 60                                       | + 3                                                     | + 4                                                        | 60                      | None        |
| R-04          | Single family residence | Highland Reserve            | 56                                          | 60                                       | + 4                                                     | + 3                                                        | 60                      | None        |
| R-05          | Single family residence | Highland Reserve            | 57                                          | 60                                       | + 3                                                     | + 2                                                        | 60                      | None        |
| R-06          | Single family residence | Highland Reserve            | 57                                          | 59                                       | + 2                                                     | + 2                                                        | 60                      | None        |
| R-07          | Commercial/Industrial   | Roseville Parkway Extension | 55                                          | 60                                       | + 5                                                     | + 9                                                        | N/A                     | None        |
| R-08          | Commercial/Industrial   | Roseville Parkway Extension | 58                                          | 63                                       | + 5                                                     | + 13                                                       | N/A                     | None        |
| R-09          | Commercial/Industrial   | Roseville Parkway Extension | 57                                          | 62                                       | + 5                                                     | + 15                                                       | N/A                     | None        |
| R-10          | Commercial/Industrial   | Roseville Parkway Extension | 62                                          | 67                                       | + 5                                                     | + 15                                                       | N/A                     | None        |
| R-11          | Undeveloped             | Roseville Parkway Extension | 60                                          | 66                                       | + 6                                                     | + 15                                                       | N/A                     | None        |



**Table B-3C. Estimated Interior Noise Levels, Existing Year (2020) and Cumulative (2035)**

| Receiver I.D. | Land Use                | Address                     | Existing year plus project noise level, Exterior Ldn | Cumulative plus project noise level, Exterior Ldn | Existing year plus project noise level, Interior Ldn | Design-year plus project noise level, Interior Ldn | Interior Threshold, Ldn | Required Outdoor-to-Indoor Noise Reduction, dB (1) (2) | Estimated Outdoor-to-Indoor Noise Reduction, dB (3) | Potential Exceedence of Maximum Allowable Interior Level? |
|---------------|-------------------------|-----------------------------|------------------------------------------------------|---------------------------------------------------|------------------------------------------------------|----------------------------------------------------|-------------------------|--------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------|
| R-01          | Single family residence | Highland Reserve            | 56                                                   | 59                                                | 26                                                   | 29                                                 | 45                      | 14                                                     | 30                                                  | No                                                        |
| R-02          | Single family residence | Highland Reserve            | 57                                                   | 60                                                | 27                                                   | 30                                                 | 45                      | 15                                                     | 30                                                  | No                                                        |
| R-03          | Single family residence | Highland Reserve            | 57                                                   | 60                                                | 27                                                   | 30                                                 | 45                      | 15                                                     | 30                                                  | No                                                        |
| R-04          | Single family residence | Highland Reserve            | 56                                                   | 60                                                | 26                                                   | 30                                                 | 45                      | 15                                                     | 30                                                  | No                                                        |
| R-05          | Single family residence | Highland Reserve            | 57                                                   | 60                                                | 27                                                   | 30                                                 | 45                      | 15                                                     | 30                                                  | No                                                        |
| R-06          | Single family residence | Highland Reserve            | 57                                                   | 59                                                | 27                                                   | 29                                                 | 45                      | 14                                                     | 30                                                  | No                                                        |
| R-07          | Commercial/Industrial   | Roseville Parkway Extension | 55                                                   | 60                                                | N/A                                                  | N/A                                                | N/A                     | N/A                                                    | N/A                                                 | No                                                        |
| R-08          | Commercial/Industrial   | Roseville Parkway Extension | 58                                                   | 63                                                | N/A                                                  | N/A                                                | N/A                     | N/A                                                    | N/A                                                 | No                                                        |
| R-09          | Commercial/Industrial   | Roseville Parkway Extension | 57                                                   | 62                                                | N/A                                                  | N/A                                                | N/A                     | N/A                                                    | N/A                                                 | No                                                        |
| R-10          | Commercial/Industrial   | Roseville Parkway Extension | 62                                                   | 67                                                | N/A                                                  | N/A                                                | N/A                     | N/A                                                    | N/A                                                 | No                                                        |
| R-11          | Undeveloped             | Roseville Parkway Extension | 60                                                   | 66                                                | N/A                                                  | N/A                                                | N/A                     | N/A                                                    | N/A                                                 | No                                                        |

**Notes:**

(1) As indicated in the General Plan Noise Element, when it is not practical to mitigate exterior noise levels at the patios or balconies of multi-family dwellings, a common area or onsite park may be designated as the outdoor activity area. For noise-sensitive land uses that do not include outdoor activity areas, only the interior noise standard shall apply.

(2) Calculated value: Exterior Ldn at location minus Maximum Allowable Interior Ldn

(3) Assumes a building noise reduction factor of 30 dB, based on HUD values for standard framing and double hung windows (HUD 2009)



## Appendix C

### Traffic

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**To:** Raul Cervantes, Mark Thomas  
Mark Morse, ICF

**From:** Matt Weir, P.E., T.E., PTOE  
Curtis Yee, E.I.T.

**Re:** **Roseville Parkway Extension**  
***DRAFT Traffic Evaluation***

**Date:** June 5, 2020

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We have prepared this memorandum to document our evaluation of focused traffic operations associated with the proposed Roseville Parkway Extension project in the City of Roseville. This traffic evaluation was limited to the two primary project intersections, one at each end of the extension facility, for the purposes of documenting project consistency with prior, more comprehensive environmental studies, and to inform the intersections' lane geometries to achieve acceptable operations. This evaluation was performed in a manner consistent with the Project Development Team's (PDT) direction<sup>1</sup> and is understood to be provided in support of the Initial Study/Mitigated Negative Declaration (IS/MND) being prepared by others.

### **Project Description & Study Overview**

The City of Roseville proposes to construct the Roseville Parkway Extension Project (Proposed Project) in the North Industrial Planning Area of the City. The Project would extend Roseville Parkway by approximately 0.75-mile from its current terminus at Washington Boulevard westerly to Foothills Boulevard. The project includes construction of an overpass of the Union Pacific Railroad (UPRR) tracks and Industrial Avenue.

The study facilities for this focused evaluation included the following intersections (see **Exhibit 1**):

1. Roseville Parkway @ Foothills Boulevard
2. Roseville Parkway @ Washington Boulevard

The primary focus of this study was to document project consistency with a prior environmental study related to the two primary project intersections, and to inform these intersections' lane geometries to achieve acceptable operations. Accordingly, this traffic evaluation considered the following analysis scenarios:

- A. Existing (2020) Conditions  
Conditions representative of on-the-ground conditions established using traffic count data provided by the City's Intelligent Transportation System (ITS) from February 2020.
- B. Existing (2020) plus Proposed Project Conditions  
Conditions representative of year 2020 conditions resulting from the addition of and network connectivity achieve from the Roseville Parkway Extension. Traffic volumes were approximated using the City's Travel Demand Model (TDM) to establish these "plus project" conditions.
- C. Cumulative (2035) plus Proposed Project Conditions  
Conditions obtained directly from the *Amoruso Ranch Specific Plan*<sup>2</sup> in which the Roseville Parkway Extension is included.

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<sup>1</sup> Project Development Team Meetings, February 3, March 16, and April 20, 2020.

<sup>2</sup> *Final Traffic Study for the Amoruso Ranch Specific Plan*, Fehr & Peers, February 16, 2016.

## Analysis Methodology

This traffic evaluation was performed in accordance with the City's preferred methodologies and general guidelines for the preparation of traffic studies<sup>3</sup>.

Analysis of transportation facility operations is based on the concept of Level of Service (LOS). The LOS of a facility is a qualitative measure used to describe operational conditions. LOS ranges from A (best), which represents minimal delay, to F (worst), which represents heavy delay and a facility that is operating at or near its functional capacity. Levels of Service for this study were determined using methods defined in the *Highway Capacity Manual (HCM) 6<sup>th</sup> Edition*. The HCM includes procedures for analyzing a variety of intersection traffic control, including traffic signals. The signalized intersection procedures define LOS as a function of average control delay for the intersection as a whole. **Table 1** presents intersection LOS definitions as defined in the HCM. LOS was determined using the Synchro® traffic analysis software.

**Table 1 – Intersection Level of Service Criteria**

| Level of Service (LOS) | Signalized                      |
|------------------------|---------------------------------|
|                        | Average Control Delay (sec/veh) |
| A                      | ≤ 10                            |
| B                      | > 10 – 20                       |
| C                      | > 20 – 35                       |
| D                      | > 35 – 55                       |
| E                      | > 55 – 80                       |
| F                      | > 80                            |

Source: *Highway Capacity Manual, 6<sup>th</sup> Edition*

## Technical Results

The following is a summary of the technical analyses completed for the study intersections. As outlined above, these facilities were analyzed under Existing (2020) Conditions with and without the Proposed Project, and Cumulative (2035) Conditions with the Proposed Project. **Exhibit 2** depicts the study intersections' lane geometries, while **Exhibit 3** and **Exhibit 4** present the analysis scenarios' peak-hour intersection turning movement volumes. The traffic count data sheets are provided in **Appendix A**.

**Appendices B-E** include the scenarios' analysis worksheets. The results of the intersection LOS analyses are presented in **Table 2**. Vehicle queuing results are provided in **Table 3**.

As shown in **Table 2**, the study intersections operate at acceptable LOS D or better during both peak-hours, for all analysis scenarios. In addition, the queuing results summarized in **Table 3** confirms the required storage needed at the intersections' various exclusive turning pockets.

**Table 2 – Intersection Levels of Service**

| ID | Intersection                             | Peak Hour | Existing (2020) |     | Existing (2020) plus Project |     | Cumulative (2035) plus Project |     |
|----|------------------------------------------|-----------|-----------------|-----|------------------------------|-----|--------------------------------|-----|
|    |                                          |           | Delay (sec)     | LOS | Delay (sec)                  | LOS | Delay (sec)                    | LOS |
| 1  | Roseville Parkway @ Foothills Boulevard  | AM        | 13.8            | B   | 17.2                         | B   | 37.5                           | D   |
|    |                                          | PM        | 16.0            | B   | 18.3                         | B   | 42.2                           | D   |
| 2  | Roseville Parkway @ Washington Boulevard | AM        | 15.4            | B   | 19.0                         | B   | 25.5                           | C   |
|    |                                          | PM        | 15.2            | B   | 20.0                         | C   | 37.3                           | D   |

<sup>3</sup> Section 4 Traffic Impact Studies, City of Roseville Design Standards, January 2020.

**Table 3 – Intersection Queuing**

| Intersection / Analysis Scenario             | Movement | AM Peak-Hour           |                               | PM Peak-Hour           |                               |
|----------------------------------------------|----------|------------------------|-------------------------------|------------------------|-------------------------------|
|                                              |          | Available Storage (ft) | 95 <sup>th</sup> % Queue (ft) | Available Storage (ft) | 95 <sup>th</sup> % Queue (ft) |
| #1, Roseville Parkway @ Foothills Boulevard  | EBL      |                        |                               |                        |                               |
| Existing (2020)                              | 220      | 19                     | 220                           | 30                     |                               |
| Existing (2020) plus Project                 |          | 17                     |                               | 17                     |                               |
| Cumulative (2035) plus Project               |          | 37                     |                               | 42                     |                               |
|                                              | EBT      |                        |                               |                        |                               |
| Existing (2020)                              | 345      | 10                     | 345                           | 10                     |                               |
| Existing (2020) plus Project                 |          | 56                     |                               | 63                     |                               |
| Cumulative (2035) plus Project               |          | 117                    |                               | 206                    |                               |
|                                              | EBR      |                        |                               |                        |                               |
| Existing (2020)                              | 230      | 3                      | 230                           | 47                     |                               |
| Existing (2020) plus Project                 |          | 18                     |                               | 36                     |                               |
| Cumulative (2035) plus Project               |          | 51                     |                               | 96                     |                               |
|                                              | WBL      |                        |                               |                        |                               |
| Existing (2020)                              | 220      | 9                      | 220                           | 10                     |                               |
| Existing (2020) plus Project                 |          | 17                     |                               | 37                     |                               |
| Cumulative (2035) plus Project               |          | 204                    |                               | 201                    |                               |
|                                              | WBR      |                        |                               |                        |                               |
| Existing (2020)                              | 230      | 0                      | 230                           | 0                      |                               |
| Existing (2020) plus Project                 |          | 7                      |                               | 15                     |                               |
| Cumulative (2035) plus Project               |          | 176                    |                               | 411                    |                               |
|                                              | NBL      |                        |                               |                        |                               |
| Existing (2020)                              | 265      | 35                     | 265                           | 30                     |                               |
| Existing (2020) plus Project                 |          | 36                     |                               | 37                     |                               |
| Cumulative (2035) plus Project               |          | 113                    |                               | 132                    |                               |
|                                              | NBR      |                        |                               |                        |                               |
| Existing (2020)                              | 265      | 0                      | 265                           | 0                      |                               |
| Existing (2020) plus Project                 |          | 11                     |                               | 0                      |                               |
| Cumulative (2035) plus Project               |          | 147                    |                               | 147                    |                               |
|                                              | SBL      |                        |                               |                        |                               |
| Existing (2020)                              | 255      | 19                     | 255                           | 20                     |                               |
| Existing (2020) plus Project                 |          | 103                    |                               | 111                    |                               |
| Cumulative (2035) plus Project               |          | 294                    |                               | 204                    |                               |
|                                              | SBR      |                        |                               |                        |                               |
| Existing (2020)                              | 160      | 18                     | 160                           | 0                      |                               |
| Existing (2020) plus Project                 |          | 0                      |                               | 0                      |                               |
| Cumulative (2035) plus Project               |          | 0                      |                               | 0                      |                               |
| #2, Roseville Parkway @ Washington Boulevard | EBL      |                        |                               |                        |                               |
| Existing (2020)                              | 200      | -                      | 200                           | -                      |                               |
| Existing (2020) plus Project                 |          | 18                     |                               | 9                      |                               |
| Cumulative (2035) plus Project               |          | 26                     |                               | 37                     |                               |
|                                              | WBL      |                        |                               |                        |                               |
| Existing (2020)                              | 235      | 34                     | 235                           | 36                     |                               |
| Existing (2020) plus Project                 |          | 25                     |                               | 29                     |                               |
| Cumulative (2035) plus Project               |          | 18                     |                               | 31                     |                               |
|                                              | NBL      |                        |                               |                        |                               |
| Existing (2020)                              | 260      | 21                     | 260                           | 22                     |                               |
| Existing (2020) plus Project                 |          | 27                     |                               | 44                     |                               |
| Cumulative (2035) plus Project               |          | 40                     |                               | 6                      |                               |
|                                              | SBL      |                        |                               |                        |                               |
| Existing (2020)                              | 245      | 171                    | 245                           | 180                    |                               |
| Existing (2020) plus Project                 |          | 99                     |                               | 100                    |                               |
| Cumulative (2035) plus Project               |          | 139                    |                               | 287                    |                               |

As shown in **Table 3**, the Cumulative (2035) plus Project Conditions exhibit three movements with 95<sup>th</sup> percentile queues that exceed their respective storage lengths. At Intersection #1 (Roseville Parkway @ Foothills Boulevard), both the westbound right-turn and southbound left-turn exceed the assumed storage by 8 and 2 vehicles, respectively. Should these conditions persist in 2035, consideration should be given to extending both turn pockets to contain the documented queuing within their respective lanes. At Intersection #2 (Roseville Parkway @ Washington Boulevard), the southbound left-turn exceeds the assumed storage by 2 vehicles. Similarly, the City should monitor these conditions and, if they persist in 2035, extend the subject turn pocket.

## **CEQA Compliance**

The following is an assessment of the Proposed Project using the current CEQA Guidelines' "checklist" as pertains to Transportation (XVII. TRANSPORTATION).

### **a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? No Impact**

The Proposed Project, through its extension of Roseville Parkway between Foothills Boulevard and Washington Boulevard, does not conflict with the City of Roseville's applicable planning documents including the *General Plan 2035*, *Bicycle Master Plan*, *Pedestrian Master Plan*, and *Short Range Transit Plan*. The following is an overview of the project's consistency with these guiding documents:

- Circulation System
  - Consistent with the Proposed Project, the facility is indicated to have 4 future lanes (Figure III-3, *General Plan 2035 Circulation Element*, Page III-17)
  - Additionally, consistent with the Proposed Project, the facility is designated as a 4-lane facility in the Year 2035 mitigated network (Table III-4, *General Plan 2035 Circulation Element*, Page III-31)
- Transit Facilities
  - Although not a designated transit route, the Proposed Project connects to Roseville Transit Route R that operates weekdays in both directions along Foothills Boulevard. There is currently a southbound bus stop located south of the Proposed Project intersection with Foothills Boulevard.
- Bicycle Facilities
  - Consistent with the Proposed Project, the facility is indicated to have Class II Bike Lanes along the entire stretch of Roseville Parkway, as well as along both Foothills Boulevard and Washington Boulevard (Figure III-6, *General Plan 2035 Circulation Element*, Page III-53, and Figure 5, *City of Roseville Bicycle Master Plan*, Page 45).
  - Additionally, the Proposed Project includes a separated 10-foot multi-use path that further supports the City's *General Plan* and *Bicycle Master Plan* goals.
- Pedestrian Facilities
  - The Proposed Project includes both an attached 8-foot sidewalk and a separated 10-foot multi-use path. Through its inclusion of these facilities, the Proposed Project supports the City's *General Plan* and *Pedestrian Master Plan* goals.

### **b) Would the project conflict or be inconsistent with CEQA Guidelines section 15064.3, subdivision (b)? No Impact**

Senate Bill 743 (SB 743) was enacted by the California legislature in 2013 and required the Office of Planning and Research (OPR) to adopt new guidelines for assessing CEQA-related transportation impacts. The City has determined<sup>4</sup> that the Proposed Project does not require additional VMT analyses in response to SB 743 for the following reasons:

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<sup>4</sup> Email from Mark Johnson, City of Roseville, April 22, 2020.



- The Proposed Project is included in the MTP/SCS recently adopted by SACOG.
- The Proposed Project is included in the Amoruso Ranch Specific Plan EIR which is also incorporated into the current General Plan and the pending General Plan Update.
- The General Plan Update, scheduled to be adopted in Fall 2020, includes “grandfathering” of all previously adopted specific plans and will also include a VMT Policy that will only apply to new project proposals.

As a result, the Proposed Project is considered to be consistent with CEQA Guidelines.

**c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? *No Impact***

The Proposed Project has been designed in a manner consistent with all applicable, published design standards at the onset of this project including the City of Roseville’s *Design and Construction Standards*, Caltrans’ *Highway Design Manual*, and the American Association of State Highway and Transportation Officials’ (AASHTO) *A Policy on Geometric Design of Highways and Streets*. Consistent with the City’s expansive transportation system, the Proposed Project will support all compatible uses and the surrounding land uses that are reasonably anticipated to contribute traffic to and rely on this facility are compatible with the design considerations. Accordingly, through its consistency with these standards, as well as resulting from its improved network connectivity, the Proposed Project does not increase hazards and supports all compatible uses.

**d) Result in inadequate emergency access? *No Impact***

The City previously analyzed the Proposed Project’s effect on the emergency response times and access during the project development phase<sup>5</sup>. Through a comprehensive sensitivity analysis, the City documented the Proposed Project’s, as well as other significance projects’, effects on peak-hour travel times and general vehicular access to emergency and medical service facilities, with a focus on travel times between the northwest portion of the City and two emergency hospital providers (Sutter Roseville and Kaiser Roseville). These previous efforts concluded the following as relates to the Proposed Projects’ improvements to emergency access:

“The Roseville Parkway extension project provides congestion reductions on the Blue Oaks Boulevard/Industrial Avenue overcrossing by reducing the 10-year peak-hour traffic volumes on the Blue Oaks Boulevard bridge. Furthermore, Roseville Parkway serves as another means to get from the west side of the City to the east side without having to access State Route 65. This parallel capacity would be helpful in emergency situations and as an alternate route during construction of the Blue Oaks Boulevard bridge widening.”

## Conclusions

The Proposed Project provides a vital network connection by linking Washington Boulevard and Foothills Boulevard in the North Industrial Planning Area. This connectivity is currently only provided by Blue Oaks Boulevard to the north. This traffic evaluation considered the effects of the addition of the Proposed Project on both Existing (2020) and Cumulative (2035) Conditions. The City’s travel demand model was used to approximate the effect of the project on existing conditions, while the effect of the project under Cumulative (2035) Conditions was previously documented in the *Amoruso Ranch Specific Plan*<sup>2</sup>. As documented herein, the study intersections operate at LOS D or better with three movements exceeding their assumed storages under Cumulative (2035) Conditions. The intersections’ lane configurations, including the required storage lengths, are depicted in **Exhibit 5**.

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<sup>5</sup> *Roadway System Capital Improvements Project Sensitivity Analysis Update*, City of Roseville City Council Meeting, April 17, 2019.

## Attachments:

**Exhibit 1** – Project Vicinity Map

**Exhibit 2** – Study Intersections, Traffic Control, and Lane Geometries

**Exhibit 3** – Existing (2020) Conditions Peak-Hour Volumes

**Exhibit 4** – Cumulative (2035) plus Proposed Project Conditions Peak-Hour Volumes

**Exhibit 5** – Recommended Intersection Lane Configurations

**Appendix A** – Traffic Count Data Sheets

**Appendix B** – Analysis Worksheets for Existing (2020) Conditions

**Appendix C** – Analysis Worksheets for Existing (2020) plus Proposed Project Conditions

**Appendix D** – Analysis Worksheets for Cumulative (2035) plus Proposed Project Conditions

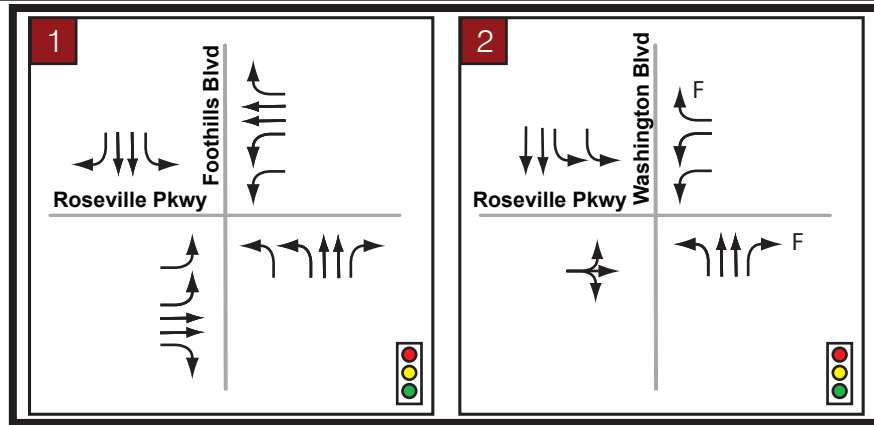


Roseville Parkway Extension and Bridge, Roseville, CA

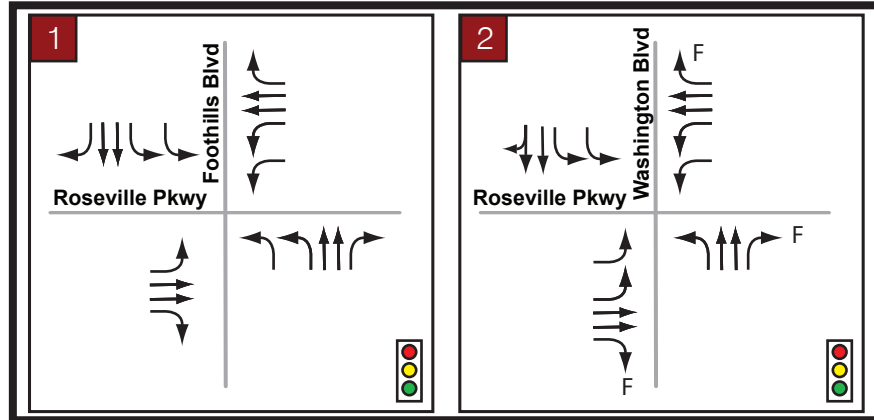




No Project



Plus Project



Blue Oaks Blvd

Foothills Blvd

UPRR Tracks

Industrial Ave

Washington Blvd



Roseville Pkwy

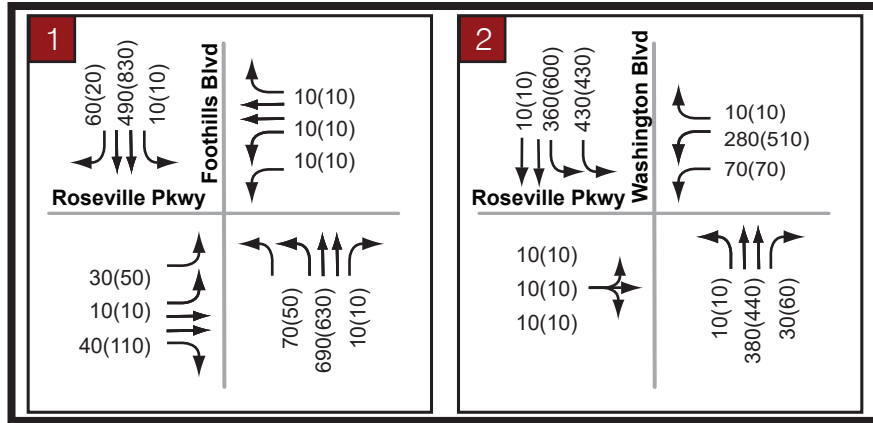


NOT TO SCALE

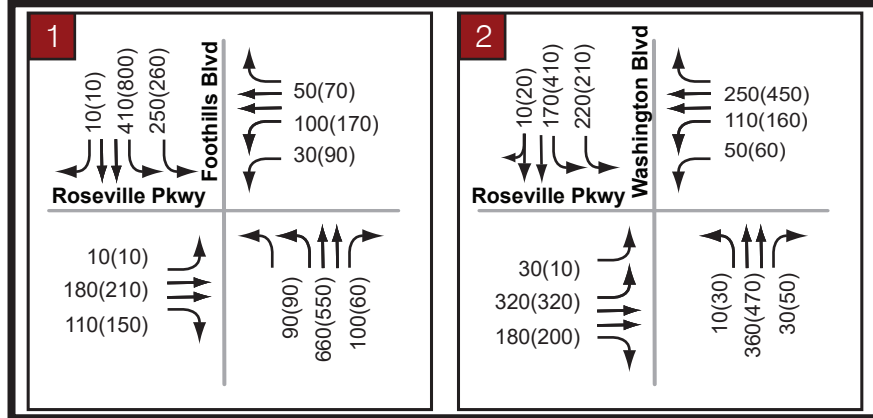
## LEGEND

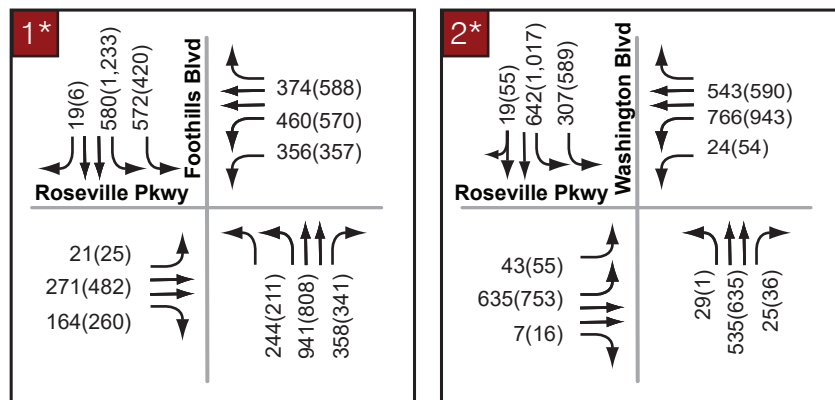
- Proposed Project
- Study Intersection
- Signalized Intersection
- F Free Movement

Existing (2020)



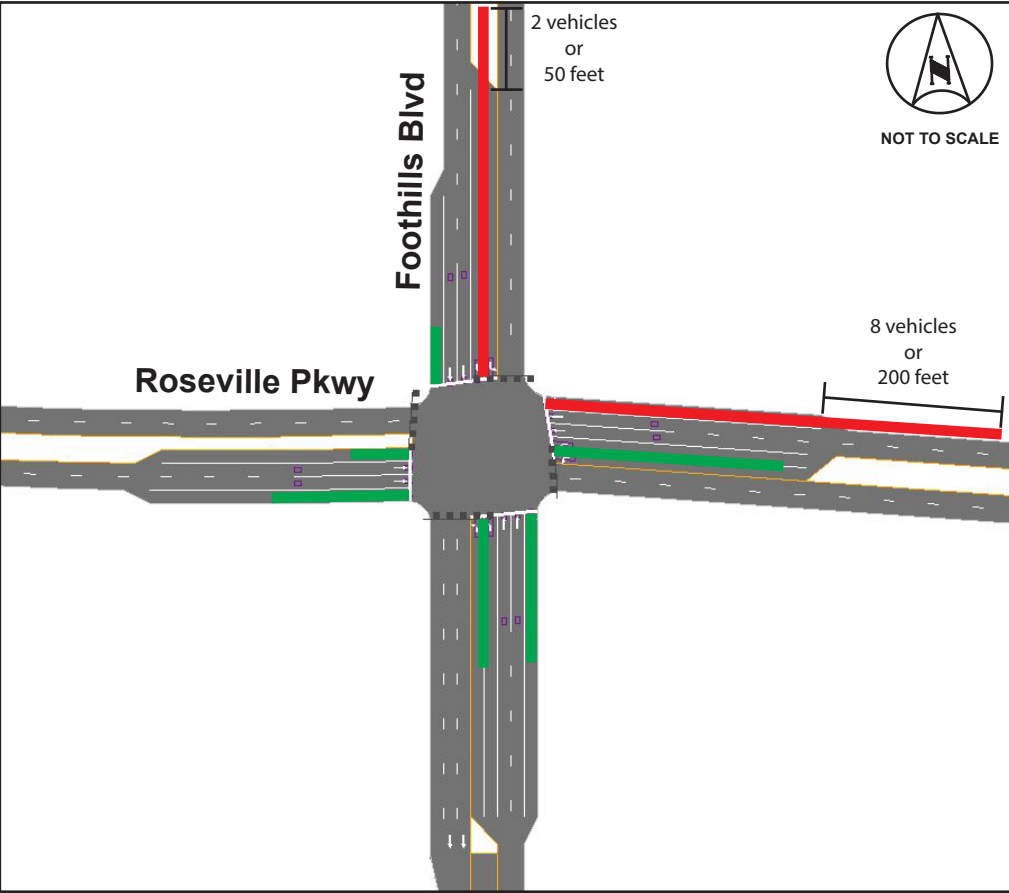
Existing (2020) Plus Proposed Project



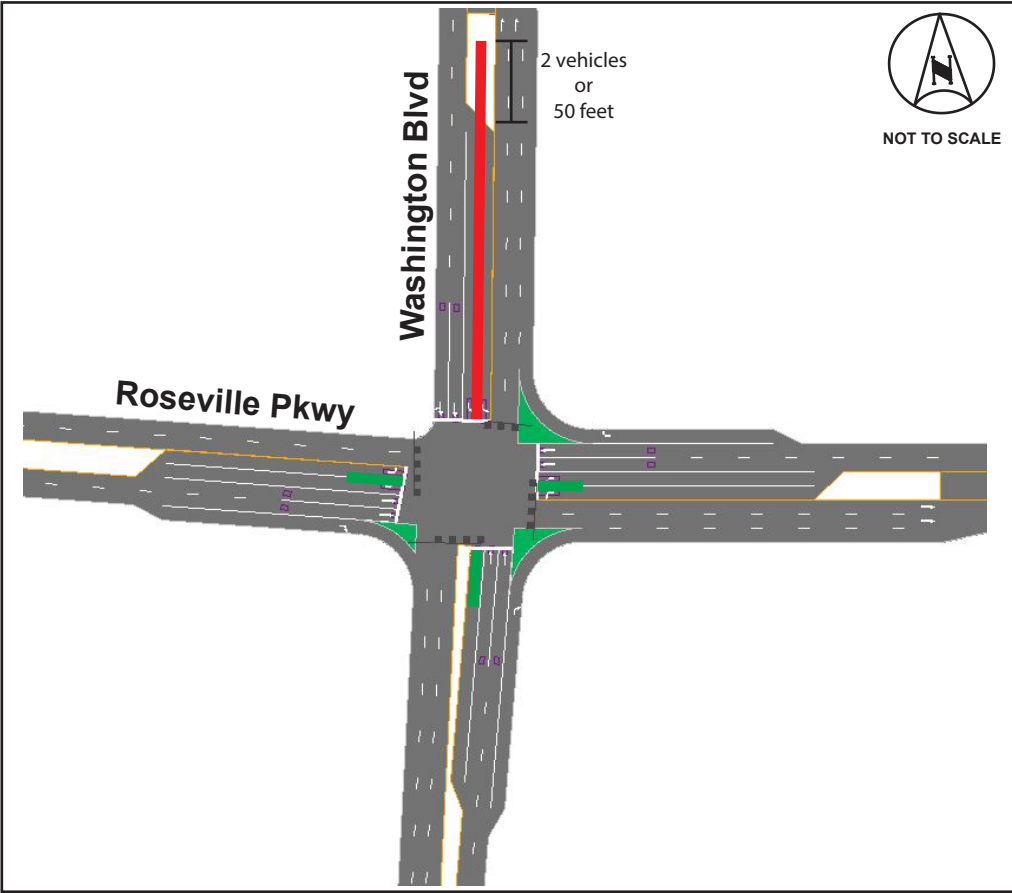


\*Peak-Hour Volumes were obtained directly from the Amoruso Ranch Traffic Study's 2035 Cumulative Plus Project Conditions





**Intersection #1**  
Roseville Parkway @ Foothills Boulevard



**Intersection #2**  
Roseville Parkway @ Washington Blvd

**LEGEND**

Max 95th Percentile Queue Contained

Max 95th Percentile Queue Exceeds Storage

*Note: All reported queues are representative of Cumulative (2035) plus Proposed Project Conditions. See Table 3.*

## Appendix A

### *Traffic Count Data Sheets*



# Turning Movement Volume Report

Report Date: 5/26/2020 12:49:09 PM

From 2/19/2020 to 2/19/2020

Intersection: 10

| Time                 | N    |      |       |       | S    |      |       |       | E    |      |       |       | W    |      |       |       | Int Total |
|----------------------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|-----------|
|                      | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total |           |
| 19/02/20 00:00-01:00 | 4    | 29   | 1     | 34    | 2    | 29   | 0     | 31    | 1    | 1    | 10    | 12    | 0    | 0    | 1     | 1     | 78        |
| 19/02/20 01:00-02:00 | 2    | 19   | 1     | 22    | 0    | 22   | 0     | 22    | 1    | 0    | 1     | 2     | 0    | 0    | 0     | 0     | 46        |
| 19/02/20 02:00-03:00 | 0    | 19   | 0     | 19    | 3    | 39   | 2     | 44    | 0    | 0    | 1     | 1     | 0    | 1    | 0     | 1     | 65        |
| 19/02/20 03:00-04:00 | 1    | 16   | 0     | 17    | 1    | 21   | 2     | 24    | 1    | 0    | 3     | 4     | 0    | 0    | 0     | 0     | 45        |
| 19/02/20 04:00-05:00 | 1    | 36   | 0     | 37    | 1    | 34   | 2     | 37    | 3    | 0    | 5     | 8     | 0    | 0    | 0     | 0     | 82        |
| 19/02/20 05:00-06:00 | 32   | 100  | 0     | 132   | 2    | 111  | 17    | 130   | 5    | 0    | 4     | 9     | 0    | 0    | 0     | 0     | 271       |
| 19/02/20 06:00-07:00 | 59   | 275  | 1     | 335   | 5    | 229  | 25    | 259   | 5    | 0    | 15    | 20    | 0    | 0    | 1     | 1     | 615       |
| 19/02/20 07:00-08:00 | 45   | 497  | 0     | 542   | 8    | 524  | 36    | 568   | 12   | 6    | 48    | 66    | 0    | 1    | 0     | 1     | 1177      |
| 19/02/20 08:00-09:00 | 71   | 694  | 1     | 766   | 5    | 487  | 55    | 547   | 26   | 10   | 43    | 79    | 2    | 1    | 0     | 3     | 1395      |
| 19/02/20 09:00-10:00 | 40   | 411  | 2     | 453   | 4    | 355  | 49    | 408   | 21   | 1    | 55    | 77    | 2    | 0    | 0     | 2     | 940       |
| 19/02/20 10:00-11:00 | 16   | 302  | 1     | 319   | 6    | 280  | 21    | 307   | 8    | 1    | 26    | 35    | 0    | 0    | 2     | 2     | 663       |
| 19/02/20 11:00-12:00 | 26   | 340  | 2     | 368   | 6    | 347  | 20    | 373   | 31   | 2    | 39    | 72    | 0    | 1    | 2     | 3     | 816       |
| 19/02/20 12:00-13:00 | 43   | 426  | 0     | 469   | 12   | 390  | 28    | 430   | 42   | 1    | 42    | 85    | 1    | 0    | 3     | 4     | 988       |
| 19/02/20 13:00-14:00 | 44   | 394  | 3     | 441   | 8    | 402  | 29    | 439   | 22   | 3    | 35    | 60    | 5    | 0    | 2     | 7     | 947       |
| 19/02/20 14:00-15:00 | 21   | 341  | 0     | 362   | 9    | 461  | 17    | 487   | 38   | 4    | 86    | 128   | 2    | 0    | 4     | 6     | 983       |
| 19/02/20 15:00-16:00 | 48   | 485  | 1     | 534   | 14   | 635  | 12    | 661   | 23   | 1    | 92    | 116   | 0    | 0    | 1     | 1     | 1312      |
| 19/02/20 16:00-17:00 | 44   | 537  | 4     | 585   | 28   | 809  | 14    | 851   | 41   | 0    | 107   | 148   | 1    | 0    | 4     | 5     | 1589      |
| 19/02/20 17:00-18:00 | 48   | 627  | 0     | 675   | 11   | 830  | 21    | 862   | 54   | 0    | 109   | 163   | 0    | 0    | 0     | 0     | 1700      |
| 19/02/20 18:00-19:00 | 61   | 489  | 2     | 552   | 12   | 494  | 15    | 521   | 30   | 1    | 57    | 88    | 1    | 0    | 2     | 3     | 1164      |
| 19/02/20 19:00-20:00 | 44   | 289  | 2     | 335   | 5    | 264  | 3     | 272   | 25   | 0    | 35    | 60    | 2    | 0    | 2     | 4     | 671       |
| 19/02/20 20:00-21:00 | 31   | 227  | 0     | 258   | 5    | 178  | 3     | 186   | 7    | 0    | 16    | 23    | 0    | 4    | 0     | 4     | 471       |
| 19/02/20 21:00-22:00 | 18   | 151  | 0     | 169   | 3    | 165  | 7     | 175   | 5    | 0    | 22    | 27    | 0    | 0    | 0     | 0     | 371       |
| 19/02/20 22:00-23:00 | 3    | 90   | 0     | 93    | 1    | 76   | 2     | 79    | 3    | 0    | 3     | 6     | 0    | 0    | 0     | 0     | 178       |
| 19/02/20 23:00-00:00 | 5    | 55   | 1     | 61    | 2    | 49   | 0     | 51    | 1    | 0    | 4     | 5     | 0    | 0    | 0     | 0     | 117       |
| Summary              | 707  | 6849 | 22    | 7578  | 153  | 7231 | 380   | 7764  | 405  | 31   | 858   | 1294  | 16   | 8    | 24    | 48    | 16684     |

# Turning Movement Volume Report

Report Date: 5/26/2020 12:50:07 PM

From 2/19/2020 to 2/19/2020

Intersection: 83

| Time                 | N    |      |       |       | S    |      |       |       | E    |      |       |       | W    |      |       |       | Int Total |
|----------------------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|------|------|-------|-------|-----------|
|                      | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total | Left | Thru | Right | Total |           |
| 19/02/20 00:00-01:00 | 0    | 19   | 1     | 20    | 3    | 30   |       | 33    | 0    | 0    | 0     | 0     | 1    |      | 14    | 15    | 68        |
| 19/02/20 01:00-02:00 | 0    | 6    | 1     | 7     | 5    | 21   |       | 26    | 0    | 0    | 0     | 0     | 1    |      | 6     | 7     | 40        |
| 19/02/20 02:00-03:00 | 0    | 10   | 0     | 10    | 2    | 7    |       | 9     | 0    | 0    | 0     | 0     | 0    |      | 5     | 5     | 24        |
| 19/02/20 03:00-04:00 | 0    | 6    | 0     | 6     | 4    | 3    |       | 7     | 0    | 0    | 0     | 0     | 1    |      | 3     | 4     | 17        |
| 19/02/20 04:00-05:00 | 1    | 35   | 1     | 37    | 11   | 20   |       | 31    | 0    | 0    | 0     | 0     | 2    |      | 9     | 11    | 79        |
| 19/02/20 05:00-06:00 | 10   | 73   | 0     | 83    | 34   | 106  |       | 140   | 0    | 0    | 0     | 0     | 14   |      | 37    | 51    | 274       |
| 19/02/20 06:00-07:00 | 15   | 165  | 7     | 187   | 85   | 226  |       | 311   | 0    | 0    | 0     | 0     | 29   |      | 95    | 124   | 622       |
| 19/02/20 07:00-08:00 | 12   | 267  | 19    | 298   | 540  | 391  |       | 931   | 0    | 0    | 0     | 0     | 42   |      | 191   | 233   | 1462      |
| 19/02/20 08:00-09:00 | 6    | 375  | 29    | 410   | 433  | 361  |       | 794   | 0    | 0    | 0     | 0     | 65   |      | 275   | 340   | 1544      |
| 19/02/20 09:00-10:00 | 13   | 258  | 40    | 311   | 339  | 323  |       | 662   | 0    | 0    | 0     | 0     | 48   |      | 167   | 215   | 1188      |
| 19/02/20 10:00-11:00 | 5    | 198  | 24    | 227   | 265  | 257  |       | 522   | 0    | 0    | 0     | 0     | 38   |      | 198   | 236   | 985       |
| 19/02/20 11:00-12:00 | 13   | 272  | 43    | 328   | 320  | 327  |       | 647   | 0    | 0    | 0     | 0     | 53   |      | 258   | 311   | 1286      |
| 19/02/20 12:00-13:00 | 9    | 230  | 54    | 293   | 314  | 304  |       | 618   | 0    | 0    | 0     | 0     | 54   |      | 326   | 380   | 1291      |
| 19/02/20 13:00-14:00 | 3    | 277  | 42    | 322   | 267  | 332  |       | 599   | 0    | 0    | 0     | 0     | 49   |      | 321   | 370   | 1291      |
| 19/02/20 14:00-15:00 | 6    | 261  | 34    | 301   | 307  | 404  |       | 711   | 0    | 0    | 0     | 0     | 46   |      | 283   | 329   | 1341      |
| 19/02/20 15:00-16:00 | 6    | 386  | 64    | 456   | 418  | 478  |       | 896   | 0    | 0    | 0     | 0     | 55   |      | 373   | 428   | 1780      |
| 19/02/20 16:00-17:00 | 2    | 409  | 49    | 460   | 466  | 526  |       | 992   | 0    | 0    | 0     | 0     | 51   |      | 437   | 488   | 1940      |
| 19/02/20 17:00-18:00 | 2    | 438  | 55    | 495   | 432  | 602  |       | 1034  | 0    | 0    | 0     | 0     | 68   |      | 507   | 575   | 2104      |
| 19/02/20 18:00-19:00 | 2    | 337  | 44    | 383   | 263  | 434  |       | 697   | 0    | 0    | 0     | 0     | 27   |      | 402   | 429   | 1509      |
| 19/02/20 19:00-20:00 | 3    | 240  | 21    | 264   | 152  | 232  |       | 384   | 0    | 0    | 0     | 0     | 35   |      | 287   | 322   | 970       |
| 19/02/20 20:00-21:00 | 1    | 191  | 18    | 210   | 92   | 182  |       | 274   | 0    | 0    | 0     | 0     | 16   |      | 196   | 212   | 696       |
| 19/02/20 21:00-22:00 | 0    | 162  | 24    | 186   | 63   | 125  |       | 188   | 0    | 0    | 0     | 0     | 13   |      | 136   | 149   | 523       |
| 19/02/20 22:00-23:00 | 1    | 72   | 9     | 82    | 36   | 82   |       | 118   | 0    | 0    | 0     | 0     | 5    |      | 66    | 71    | 271       |
| 19/02/20 23:00-00:00 | 0    | 36   | 5     | 41    | 20   | 64   |       | 84    | 0    | 0    | 0     | 0     | 3    |      | 24    | 27    | 152       |
| Summary              | 110  | 4723 | 584   | 5417  | 4871 | 5837 | 0     | 10708 | 0    | 0    | 0     | 0     | 716  | 0    | 4616  | 5332  | 21457     |

## Appendix B

*Analysis Worksheets for  
Existing (2020) Conditions*

Roseville Parkway Extension and Bridge  
1: Foothills Blvd

Existing (2020)  
Timing Plan: AM Peak-Hour

|                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                           | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h)                                             | 30                                                                                | 10                                                                                | 40                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 70                                                                                  | 690                                                                                 | 10                                                                                  | 10                                                                                  | 490                                                                                 | 60                                                                                  |
| Future Volume (veh/h)                                              | 30                                                                                | 10                                                                                | 40                                                                                | 10                                                                                | 10                                                                                | 10                                                                                | 70                                                                                  | 690                                                                                 | 10                                                                                  | 10                                                                                  | 490                                                                                 | 60                                                                                  |
| Initial Q (Qb), veh                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Work Zone On Approach                                              | No                                                                                |                                                                                   |                                                                                   | No                                                                                |                                                                                   |                                                                                   | No                                                                                  |                                                                                     |                                                                                     | No                                                                                  |                                                                                     |                                                                                     |
| Adj Sat Flow, veh/h/ln                                             | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                |
| Adj Flow Rate, veh/h                                               | 33                                                                                | 11                                                                                | 43                                                                                | 11                                                                                | 11                                                                                | 11                                                                                | 76                                                                                  | 750                                                                                 | 11                                                                                  | 11                                                                                  | 533                                                                                 | 65                                                                                  |
| Peak Hour Factor                                                   | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %                                               | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Cap, veh/h                                                         | 253                                                                               | 623                                                                               | 278                                                                               | 87                                                                                | 452                                                                               | 202                                                                               | 453                                                                                 | 1360                                                                                | 606                                                                                 | 50                                                                                  | 993                                                                                 | 443                                                                                 |
| Arrive On Green                                                    | 0.07                                                                              | 0.18                                                                              | 0.18                                                                              | 0.03                                                                              | 0.13                                                                              | 0.13                                                                              | 0.13                                                                                | 0.39                                                                                | 0.39                                                                                | 0.03                                                                                | 0.28                                                                                | 0.28                                                                                |
| Sat Flow, veh/h                                                    | 3401                                                                              | 3497                                                                              | 1560                                                                              | 3401                                                                              | 3497                                                                              | 1560                                                                              | 3401                                                                                | 3497                                                                                | 1560                                                                                | 1753                                                                                | 3497                                                                                | 1560                                                                                |
| Grp Volume(v), veh/h                                               | 33                                                                                | 11                                                                                | 43                                                                                | 11                                                                                | 11                                                                                | 11                                                                                | 76                                                                                  | 750                                                                                 | 11                                                                                  | 11                                                                                  | 533                                                                                 | 65                                                                                  |
| Grp Sat Flow(s),veh/h/ln                                           | 1700                                                                              | 1749                                                                              | 1560                                                                              | 1700                                                                              | 1749                                                                              | 1560                                                                              | 1700                                                                                | 1749                                                                                | 1560                                                                                | 1753                                                                                | 1749                                                                                | 1560                                                                                |
| Q Serve(g_s), s                                                    | 0.4                                                                               | 0.1                                                                               | 1.1                                                                               | 0.2                                                                               | 0.1                                                                               | 0.3                                                                               | 0.9                                                                                 | 7.9                                                                                 | 0.2                                                                                 | 0.3                                                                                 | 6.1                                                                                 | 1.5                                                                                 |
| Cycle Q Clear(g_c), s                                              | 0.4                                                                               | 0.1                                                                               | 1.1                                                                               | 0.2                                                                               | 0.1                                                                               | 0.3                                                                               | 0.9                                                                                 | 7.9                                                                                 | 0.2                                                                                 | 0.3                                                                                 | 6.1                                                                                 | 1.5                                                                                 |
| Prop In Lane                                                       | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h                                             | 253                                                                               | 623                                                                               | 278                                                                               | 87                                                                                | 452                                                                               | 202                                                                               | 453                                                                                 | 1360                                                                                | 606                                                                                 | 50                                                                                  | 993                                                                                 | 443                                                                                 |
| V/C Ratio(X)                                                       | 0.13                                                                              | 0.02                                                                              | 0.15                                                                              | 0.13                                                                              | 0.02                                                                              | 0.05                                                                              | 0.17                                                                                | 0.55                                                                                | 0.02                                                                                | 0.22                                                                                | 0.54                                                                                | 0.15                                                                                |
| Avail Cap(c_a), veh/h                                              | 1433                                                                              | 1473                                                                              | 657                                                                               | 1433                                                                              | 1473                                                                              | 657                                                                               | 1433                                                                                | 3315                                                                                | 1479                                                                                | 738                                                                                 | 3315                                                                                | 1479                                                                                |
| HCM Platoon Ratio                                                  | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh                                           | 20.5                                                                              | 16.1                                                                              | 16.5                                                                              | 22.6                                                                              | 18.1                                                                              | 18.1                                                                              | 18.2                                                                                | 11.3                                                                                | 8.9                                                                                 | 22.5                                                                                | 14.4                                                                                | 12.7                                                                                |
| Incr Delay (d2), s/veh                                             | 0.1                                                                               | 0.0                                                                               | 0.1                                                                               | 0.2                                                                               | 0.0                                                                               | 0.0                                                                               | 0.1                                                                                 | 0.5                                                                                 | 0.0                                                                                 | 0.8                                                                                 | 0.6                                                                                 | 0.2                                                                                 |
| Initial Q Delay(d3),s/veh                                          | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                           | 0.2                                                                               | 0.0                                                                               | 0.4                                                                               | 0.1                                                                               | 0.0                                                                               | 0.1                                                                               | 0.3                                                                                 | 2.2                                                                                 | 0.1                                                                                 | 0.1                                                                                 | 1.9                                                                                 | 0.5                                                                                 |
| Unsig. Movement Delay, s/veh                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| LnGrp Delay(d),s/veh                                               | 20.6                                                                              | 16.1                                                                              | 16.6                                                                              | 22.9                                                                              | 18.1                                                                              | 18.2                                                                              | 18.3                                                                                | 11.8                                                                                | 8.9                                                                                 | 23.4                                                                                | 15.0                                                                                | 12.9                                                                                |
| LnGrp LOS                                                          | C                                                                                 | B                                                                                 | B                                                                                 | C                                                                                 | B                                                                                 | B                                                                                 | B                                                                                   | B                                                                                   | A                                                                                   | C                                                                                   | B                                                                                   | B                                                                                   |
| Approach Vol, veh/h                                                | 87                                                                                |                                                                                   |                                                                                   | 33                                                                                |                                                                                   |                                                                                   | 837                                                                                 |                                                                                     |                                                                                     | 609                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh                                              | 18.1                                                                              |                                                                                   |                                                                                   | 19.7                                                                              |                                                                                   |                                                                                   | 12.3                                                                                |                                                                                     |                                                                                     | 14.9                                                                                |                                                                                     |                                                                                     |
| Approach LOS                                                       | B                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |
| Timer - Assigned Phs                                               | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                           | 5.4                                                                               | 24.5                                                                              | 5.2                                                                               | 12.5                                                                              | 10.3                                                                              | 19.5                                                                              | 7.5                                                                                 | 10.1                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                            | 4.0                                                                               | 6.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 6.0                                                                               | 4.0                                                                                 | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                        | 20.0                                                                              | 45.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 45.0                                                                              | 20.0                                                                                | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s                                       | 2.3                                                                               | 9.9                                                                               | 2.2                                                                               | 3.1                                                                               | 2.9                                                                               | 8.1                                                                               | 2.4                                                                                 | 2.3                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                            | 0.0                                                                               | 7.6                                                                               | 0.0                                                                               | 0.1                                                                               | 0.1                                                                               | 5.4                                                                               | 0.0                                                                                 | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 6th Ctrl Delay                                                 | 13.8                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 6th LOS                                                        | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Notes                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved pedestrian interval to be less than phase max green. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Roseville Parkway Extension and Bridge  
2: Washington Blvd

Existing (2020)  
Timing Plan: AM Peak-Hour

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |                                                                                   |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (veh/h)       | 10                                                                                | 10                                                                                | 10                                                                                | 70                                                                                | 10                                                                                | 280                                                                               | 10                                                                                  | 380                                                                                 | 30                                                                                  | 430                                                                                 | 360                                                                                 | 10                                                                                  |
| Future Volume (veh/h)        | 10                                                                                | 10                                                                                | 10                                                                                | 70                                                                                | 10                                                                                | 280                                                                               | 10                                                                                  | 380                                                                                 | 30                                                                                  | 430                                                                                 | 360                                                                                 | 10                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Work Zone On Approach        | No                                                                                |                                                                                   |                                                                                   | No                                                                                |                                                                                   |                                                                                   | No                                                                                  |                                                                                     |                                                                                     | No                                                                                  |                                                                                     |                                                                                     |
| Adj Sat Flow, veh/h/ln       | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                |
| Adj Flow Rate, veh/h         | 11                                                                                | 11                                                                                | 11                                                                                | 76                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                  | 413                                                                                 | 0                                                                                   | 467                                                                                 | 391                                                                                 | 11                                                                                  |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Cap, veh/h                   | 34                                                                                | 34                                                                                | 34                                                                                | 384                                                                               | 0                                                                                 |                                                                                   | 55                                                                                  | 848                                                                                 |                                                                                     | 755                                                                                 | 1505                                                                                | 42                                                                                  |
| Arrive On Green              | 0.06                                                                              | 0.06                                                                              | 0.06                                                                              | 0.11                                                                              | 0.11                                                                              | 0.00                                                                              | 0.03                                                                                | 0.24                                                                                | 0.00                                                                                | 0.22                                                                                | 0.43                                                                                | 0.43                                                                                |
| Sat Flow, veh/h              | 570                                                                               | 570                                                                               | 570                                                                               | 3401                                                                              | 0                                                                                 | 1560                                                                              | 1753                                                                                | 3497                                                                                | 1560                                                                                | 3401                                                                                | 3474                                                                                | 98                                                                                  |
| Grp Volume(v), veh/h         | 33                                                                                | 0                                                                                 | 0                                                                                 | 76                                                                                | 0                                                                                 | 0                                                                                 | 11                                                                                  | 413                                                                                 | 0                                                                                   | 467                                                                                 | 196                                                                                 | 206                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1710                                                                              | 0                                                                                 | 0                                                                                 | 1700                                                                              | 0                                                                                 | 1560                                                                              | 1753                                                                                | 1749                                                                                | 1560                                                                                | 1700                                                                                | 1749                                                                                | 1823                                                                                |
| Q Serve(g_s), s              | 0.9                                                                               | 0.0                                                                               | 0.0                                                                               | 1.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.3                                                                                 | 5.0                                                                                 | 0.0                                                                                 | 6.1                                                                                 | 3.5                                                                                 | 3.6                                                                                 |
| Cycle Q Clear(g_c), s        | 0.9                                                                               | 0.0                                                                               | 0.0                                                                               | 1.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.3                                                                                 | 5.0                                                                                 | 0.0                                                                                 | 6.1                                                                                 | 3.5                                                                                 | 3.6                                                                                 |
| Prop In Lane                 | 0.33                                                                              |                                                                                   | 0.33                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.05                                                                                |
| Lane Grp Cap(c), veh/h       | 101                                                                               | 0                                                                                 | 0                                                                                 | 384                                                                               | 0                                                                                 |                                                                                   | 55                                                                                  | 848                                                                                 |                                                                                     | 755                                                                                 | 758                                                                                 | 790                                                                                 |
| V/C Ratio(X)                 | 0.33                                                                              | 0.00                                                                              | 0.00                                                                              | 0.20                                                                              | 0.00                                                                              |                                                                                   | 0.20                                                                                | 0.49                                                                                |                                                                                     | 0.62                                                                                | 0.26                                                                                | 0.26                                                                                |
| Avail Cap(c_a), veh/h        | 691                                                                               | 0                                                                                 | 0                                                                                 | 1375                                                                              | 0                                                                                 |                                                                                   | 673                                                                                 | 3181                                                                                |                                                                                     | 1306                                                                                | 1590                                                                                | 1658                                                                                |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 22.3                                                                              | 0.0                                                                               | 0.0                                                                               | 19.9                                                                              | 0.0                                                                               | 0.0                                                                               | 23.4                                                                                | 16.1                                                                                | 0.0                                                                                 | 17.4                                                                                | 9.0                                                                                 | 9.0                                                                                 |
| Incr Delay (d2), s/veh       | 0.7                                                                               | 0.0                                                                               | 0.0                                                                               | 0.1                                                                               | 0.0                                                                               | 0.0                                                                               | 0.7                                                                                 | 0.8                                                                                 | 0.0                                                                                 | 0.3                                                                                 | 0.4                                                                                 | 0.3                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.4                                                                               | 0.0                                                                               | 0.0                                                                               | 0.3                                                                               | 0.0                                                                               | 0.0                                                                               | 0.1                                                                                 | 1.7                                                                                 | 0.0                                                                                 | 2.0                                                                                 | 1.0                                                                                 | 1.1                                                                                 |
| Unsig. Movement Delay, s/veh |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| LnGrp Delay(d),s/veh         | 23.0                                                                              | 0.0                                                                               | 0.0                                                                               | 20.0                                                                              | 0.0                                                                               | 0.0                                                                               | 24.0                                                                                | 16.9                                                                                | 0.0                                                                                 | 17.7                                                                                | 9.3                                                                                 | 9.3                                                                                 |
| LnGrp LOS                    | C                                                                                 | A                                                                                 | A                                                                                 | C                                                                                 | A                                                                                 |                                                                                   | C                                                                                   | B                                                                                   |                                                                                     | B                                                                                   | A                                                                                   | A                                                                                   |
| Approach Vol, veh/h          | 33                                                                                |                                                                                   |                                                                                   | 76                                                                                |                                                                                   |                                                                                   | A                                                                                   |                                                                                     |                                                                                     | 424                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh        | 23.0                                                                              |                                                                                   |                                                                                   | 20.0                                                                              |                                                                                   |                                                                                   | 17.1                                                                                |                                                                                     |                                                                                     | 13.8                                                                                |                                                                                     |                                                                                     |
| Approach LOS                 | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |
| Timer - Assigned Phs         | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 15.0                                                                              | 18.0                                                                              |                                                                                   | 6.9                                                                               | 5.5                                                                               | 27.4                                                                              |                                                                                     | 9.6                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 6.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 6.0                                                                               |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 19.0                                                                              | 45.0                                                                              |                                                                                   | 20.0                                                                              | 19.0                                                                              | 45.0                                                                              |                                                                                     | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 8.1                                                                               | 7.0                                                                               |                                                                                   | 2.9                                                                               | 2.3                                                                               | 5.6                                                                               |                                                                                     | 3.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.7                                                                               | 5.0                                                                               |                                                                                   | 0.1                                                                               | 0.0                                                                               | 4.4                                                                               |                                                                                     | 0.1                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Intersection Summary

|                    |      |
|--------------------|------|
| HCM 6th Ctrl Delay | 15.4 |
| HCM 6th LOS        | B    |

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Roseville Parkway Extension and Bridge  
1: Foothills Blvd

Existing (2020)  
Timing Plan: AM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Group Flow (vph)   | 33                                                                                | 11                                                                                | 43                                                                                | 11                                                                                | 11                                                                                | 11                                                                                | 76                                                                                 | 750                                                                                 | 11                                                                                  | 11                                                                                  | 533                                                                                 | 65                                                                                  |
| v/c Ratio               | 0.04                                                                              | 0.01                                                                              | 0.09                                                                              | 0.02                                                                              | 0.02                                                                              | 0.03                                                                              | 0.10                                                                               | 0.31                                                                                | 0.01                                                                                | 0.03                                                                                | 0.26                                                                                | 0.07                                                                                |
| Control Delay           | 24.6                                                                              | 22.1                                                                              | 0.8                                                                               | 26.1                                                                              | 26.0                                                                              | 0.1                                                                               | 23.6                                                                               | 9.6                                                                                 | 0.0                                                                                 | 25.6                                                                                | 13.6                                                                                | 3.6                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 24.6                                                                              | 22.1                                                                              | 0.8                                                                               | 26.1                                                                              | 26.0                                                                              | 0.1                                                                               | 23.6                                                                               | 9.6                                                                                 | 0.0                                                                                 | 25.6                                                                                | 13.6                                                                                | 3.6                                                                                 |
| Queue Length 50th (ft)  | 3                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 8                                                                                  | 49                                                                                  | 0                                                                                   | 2                                                                                   | 64                                                                                  | 0                                                                                   |
| Queue Length 95th (ft)  | 19                                                                                | 10                                                                                | 3                                                                                 | 9                                                                                 | 10                                                                                | 0                                                                                 | 35                                                                                 | 197                                                                                 | 0                                                                                   | 19                                                                                  | 135                                                                                 | 18                                                                                  |
| Internal Link Dist (ft) | 1797                                                                              |                                                                                   |                                                                                   | 980                                                                               |                                                                                   |                                                                                   | 312                                                                                |                                                                                     |                                                                                     | 2459                                                                                |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    | 220                                                                               |                                                                                   | 230                                                                               | 220                                                                               |                                                                                   | 230                                                                               | 265                                                                                |                                                                                     | 265                                                                                 | 255                                                                                 |                                                                                     | 160                                                                                 |
| Base Capacity (vph)     | 1497                                                                              | 1575                                                                              | 758                                                                               | 1497                                                                              | 1543                                                                              | 745                                                                               | 1497                                                                               | 2927                                                                                | 1322                                                                                | 772                                                                                 | 2927                                                                                | 1322                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.02                                                                              | 0.01                                                                              | 0.06                                                                              | 0.01                                                                              | 0.01                                                                              | 0.01                                                                              | 0.05                                                                               | 0.26                                                                                | 0.01                                                                                | 0.01                                                                                | 0.18                                                                                | 0.05                                                                                |
| Intersection Summary    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Roseville Parkway Extension and Bridge  
2: Washington Blvd

Existing (2020)  
Timing Plan: AM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBT                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                               | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Group Flow (vph)   | 33                                                                                | 76                                                                                | 11                                                                                | 304                                                                               | 11                                                                                | 413                                                                               | 33                                                                                  | 467                                                                                 | 402                                                                                 |
| v/c Ratio               | 0.15                                                                              | 0.09                                                                              | no cap                                                                            | 0.50                                                                              | 0.04                                                                              | 0.51                                                                              | 0.08                                                                                | 0.62                                                                                | 0.24                                                                                |
| Control Delay           | 28.6                                                                              | 24.3                                                                              |                                                                                   | 6.8                                                                               | 32.9                                                                              | 28.1                                                                              | 0.4                                                                                 | 31.5                                                                                | 14.1                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 28.6                                                                              | 24.3                                                                              | Error                                                                             | 6.8                                                                               | 32.9                                                                              | 28.1                                                                              | 0.4                                                                                 | 31.5                                                                                | 14.1                                                                                |
| Queue Length 50th (ft)  | 10                                                                                | 14                                                                                | 0                                                                                 | 0                                                                                 | 5                                                                                 | 97                                                                                | 0                                                                                   | 111                                                                                 | 59                                                                                  |
| Queue Length 95th (ft)  | 39                                                                                | 34                                                                                | 0                                                                                 | 63                                                                                | 21                                                                                | 145                                                                               | 2                                                                                   | 171                                                                                 | 122                                                                                 |
| Internal Link Dist (ft) | 602                                                                               |                                                                                   | 342                                                                               |                                                                                   |                                                                                   | 3613                                                                              |                                                                                     |                                                                                     | 349                                                                                 |
| Turn Bay Length (ft)    |                                                                                   | 235                                                                               |                                                                                   |                                                                                   | 200                                                                               |                                                                                   | 220                                                                                 | 245                                                                                 |                                                                                     |
| Base Capacity (vph)     | 524                                                                               | 1013                                                                              | 1                                                                                 | 679                                                                               | 496                                                                               | 2334                                                                              | 1070                                                                                | 962                                                                                 | 2325                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.06                                                                              | 0.08                                                                              | 11.00                                                                             | 0.45                                                                              | 0.02                                                                              | 0.18                                                                              | 0.03                                                                                | 0.49                                                                                | 0.17                                                                                |
| Intersection Summary    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |

Roseville Parkway Extension and Bridge  
1: Foothills Blvd

Existing (2020)  
Timing Plan: PM Peak-Hour

|                                                                    |  |  |  |  |  |  |  |  |  |  |  |  |
|--------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                                                           | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations                                                |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h)                                             | 50                                                                                | 10                                                                                | 110                                                                               | 10                                                                                | 10                                                                                | 10                                                                                | 50                                                                                 | 630                                                                                 | 10                                                                                  | 10                                                                                  | 830                                                                                 | 20                                                                                  |
| Future Volume (veh/h)                                              | 50                                                                                | 10                                                                                | 110                                                                               | 10                                                                                | 10                                                                                | 10                                                                                | 50                                                                                 | 630                                                                                 | 10                                                                                  | 10                                                                                  | 830                                                                                 | 20                                                                                  |
| Initial Q (Qb), veh                                                | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)                                                | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj                                                   | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Work Zone On Approach                                              | No                                                                                |                                                                                   |                                                                                   | No                                                                                |                                                                                   |                                                                                   | No                                                                                 |                                                                                     |                                                                                     | No                                                                                  |                                                                                     |                                                                                     |
| Adj Sat Flow, veh/h/ln                                             | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                               | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                |
| Adj Flow Rate, veh/h                                               | 54                                                                                | 11                                                                                | 120                                                                               | 11                                                                                | 11                                                                                | 11                                                                                | 54                                                                                 | 685                                                                                 | 11                                                                                  | 11                                                                                  | 902                                                                                 | 22                                                                                  |
| Peak Hour Factor                                                   | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %                                               | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                  | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Cap, veh/h                                                         | 329                                                                               | 720                                                                               | 321                                                                               | 85                                                                                | 469                                                                               | 252                                                                               | 329                                                                                | 1600                                                                                | 714                                                                                 | 49                                                                                  | 1359                                                                                | 606                                                                                 |
| Arrive On Green                                                    | 0.10                                                                              | 0.21                                                                              | 0.21                                                                              | 0.02                                                                              | 0.13                                                                              | 0.13                                                                              | 0.10                                                                               | 0.46                                                                                | 0.46                                                                                | 0.03                                                                                | 0.39                                                                                | 0.39                                                                                |
| Sat Flow, veh/h                                                    | 3401                                                                              | 3497                                                                              | 1560                                                                              | 3401                                                                              | 3497                                                                              | 1560                                                                              | 3401                                                                               | 3497                                                                                | 1560                                                                                | 1753                                                                                | 3497                                                                                | 1560                                                                                |
| Grp Volume(v), veh/h                                               | 54                                                                                | 11                                                                                | 120                                                                               | 11                                                                                | 11                                                                                | 11                                                                                | 54                                                                                 | 685                                                                                 | 11                                                                                  | 11                                                                                  | 902                                                                                 | 22                                                                                  |
| Grp Sat Flow(s),veh/h/ln                                           | 1700                                                                              | 1749                                                                              | 1560                                                                              | 1700                                                                              | 1749                                                                              | 1560                                                                              | 1700                                                                               | 1749                                                                                | 1560                                                                                | 1753                                                                                | 1749                                                                                | 1560                                                                                |
| Q Serve(g_s), s                                                    | 0.9                                                                               | 0.2                                                                               | 4.2                                                                               | 0.2                                                                               | 0.2                                                                               | 0.4                                                                               | 0.9                                                                                | 8.4                                                                                 | 0.2                                                                                 | 0.4                                                                                 | 13.5                                                                                | 0.6                                                                                 |
| Cycle Q Clear(g_c), s                                              | 0.9                                                                               | 0.2                                                                               | 4.2                                                                               | 0.2                                                                               | 0.2                                                                               | 0.4                                                                               | 0.9                                                                                | 8.4                                                                                 | 0.2                                                                                 | 0.4                                                                                 | 13.5                                                                                | 0.6                                                                                 |
| Prop In Lane                                                       | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h                                             | 329                                                                               | 720                                                                               | 321                                                                               | 85                                                                                | 469                                                                               | 252                                                                               | 329                                                                                | 1600                                                                                | 714                                                                                 | 49                                                                                  | 1359                                                                                | 606                                                                                 |
| V/C Ratio(X)                                                       | 0.16                                                                              | 0.02                                                                              | 0.37                                                                              | 0.13                                                                              | 0.02                                                                              | 0.04                                                                              | 0.16                                                                               | 0.43                                                                                | 0.02                                                                                | 0.23                                                                                | 0.66                                                                                | 0.04                                                                                |
| Avail Cap(c_a), veh/h                                              | 1073                                                                              | 1103                                                                              | 492                                                                               | 1073                                                                              | 1103                                                                              | 535                                                                               | 1073                                                                               | 2482                                                                                | 1107                                                                                | 553                                                                                 | 2482                                                                                | 1107                                                                                |
| HCM Platoon Ratio                                                  | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)                                                 | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh                                           | 26.3                                                                              | 20.1                                                                              | 21.7                                                                              | 30.2                                                                              | 23.9                                                                              | 22.4                                                                              | 26.3                                                                               | 11.6                                                                                | 9.4                                                                                 | 30.2                                                                                | 16.0                                                                                | 12.0                                                                                |
| Incr Delay (d2), s/veh                                             | 0.1                                                                               | 0.0                                                                               | 0.3                                                                               | 0.3                                                                               | 0.0                                                                               | 0.0                                                                               | 0.1                                                                                | 0.3                                                                                 | 0.0                                                                                 | 0.9                                                                                 | 0.8                                                                                 | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh                                          | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln                                           | 0.4                                                                               | 0.1                                                                               | 1.5                                                                               | 0.1                                                                               | 0.1                                                                               | 0.1                                                                               | 0.3                                                                                | 2.6                                                                                 | 0.1                                                                                 | 0.2                                                                                 | 4.5                                                                                 | 0.2                                                                                 |
| Unsig. Movement Delay, s/veh                                       |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| LnGrp Delay(d),s/veh                                               | 26.4                                                                              | 20.1                                                                              | 21.9                                                                              | 30.5                                                                              | 23.9                                                                              | 22.5                                                                              | 26.4                                                                               | 11.9                                                                                | 9.4                                                                                 | 31.0                                                                                | 16.7                                                                                | 12.1                                                                                |
| LnGrp LOS                                                          | C                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | C                                                                                  | B                                                                                   | A                                                                                   | C                                                                                   | B                                                                                   | B                                                                                   |
| Approach Vol, veh/h                                                | 185                                                                               |                                                                                   |                                                                                   | 33                                                                                |                                                                                   |                                                                                   | 750                                                                                |                                                                                     |                                                                                     | 935                                                                                 |                                                                                     |                                                                                     |
| Approach Delay, s/veh                                              | 23.1                                                                              |                                                                                   |                                                                                   | 25.6                                                                              |                                                                                   |                                                                                   | 12.9                                                                               |                                                                                     |                                                                                     | 16.8                                                                                |                                                                                     |                                                                                     |
| Approach LOS                                                       | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                  |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     |
| Timer - Assigned Phs                                               | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s                                           | 5.8                                                                               | 35.0                                                                              | 5.6                                                                               | 17.1                                                                              | 10.1                                                                              | 30.6                                                                              | 10.1                                                                               | 12.5                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s                                            | 4.0                                                                               | 6.0                                                                               | 4.0                                                                               | 4.0                                                                               | 4.0                                                                               | 6.0                                                                               | 4.0                                                                                | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s                                        | 20.0                                                                              | 45.0                                                                              | 20.0                                                                              | 20.0                                                                              | 20.0                                                                              | 45.0                                                                              | 20.0                                                                               | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s                                       | 2.4                                                                               | 10.4                                                                              | 2.2                                                                               | 6.2                                                                               | 2.9                                                                               | 15.5                                                                              | 2.9                                                                                | 2.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s                                            | 0.0                                                                               | 6.7                                                                               | 0.0                                                                               | 0.2                                                                               | 0.1                                                                               | 9.2                                                                               | 0.1                                                                                | 0.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Intersection Summary                                               |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 6th Ctrl Delay                                                 | 16.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 6th LOS                                                        | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Notes                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| User approved pedestrian interval to be less than phase max green. |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |



Roseville Parkway Extension and Bridge  
2: Washington Blvd

Existing (2020)  
Timing Plan: PM Peak-Hour

|                              |  |  |  |  |  |  |   |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |                                                                                   |  |                                                                                   |  |                                                                                   |  |  |  |  |  |  |  |
| Traffic Volume (veh/h)       | 10                                                                                | 10                                                                                | 10                                                                                | 70                                                                                | 10                                                                                | 510                                                                               | 10                                                                                  | 440                                                                                 | 60                                                                                  | 430                                                                                 | 600                                                                                 | 10                                                                                  |
| Future Volume (veh/h)        | 10                                                                                | 10                                                                                | 10                                                                                | 70                                                                                | 10                                                                                | 510                                                                               | 10                                                                                  | 440                                                                                 | 60                                                                                  | 430                                                                                 | 600                                                                                 | 10                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Work Zone On Approach        |                                                                                   | No                                                                                |                                                                                   |                                                                                   | No                                                                                |                                                                                   |                                                                                     | No                                                                                  |                                                                                     |                                                                                     | No                                                                                  |                                                                                     |
| Adj Sat Flow, veh/h/ln       | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                |
| Adj Flow Rate, veh/h         | 11                                                                                | 11                                                                                | 11                                                                                | 76                                                                                | 11                                                                                | 0                                                                                 | 11                                                                                  | 478                                                                                 | 0                                                                                   | 467                                                                                 | 652                                                                                 | 11                                                                                  |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Cap, veh/h                   | 33                                                                                | 33                                                                                | 33                                                                                | 376                                                                               | 0                                                                                 |                                                                                   | 55                                                                                  | 939                                                                                 |                                                                                     | 725                                                                                 | 1586                                                                                | 27                                                                                  |
| Arrive On Green              | 0.06                                                                              | 0.06                                                                              | 0.06                                                                              | 0.11                                                                              | 0.11                                                                              | 0.00                                                                              | 0.03                                                                                | 0.27                                                                                | 0.00                                                                                | 0.21                                                                                | 0.45                                                                                | 0.45                                                                                |
| Sat Flow, veh/h              | 570                                                                               | 570                                                                               | 570                                                                               | 3401                                                                              | 0                                                                                 | 1560                                                                              | 1753                                                                                | 3497                                                                                | 1560                                                                                | 3401                                                                                | 3519                                                                                | 59                                                                                  |
| Grp Volume(v), veh/h         | 33                                                                                | 0                                                                                 | 0                                                                                 | 76                                                                                | 0                                                                                 | 0                                                                                 | 11                                                                                  | 478                                                                                 | 0                                                                                   | 467                                                                                 | 324                                                                                 | 339                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1710                                                                              | 0                                                                                 | 0                                                                                 | 1700                                                                              | 0                                                                                 | 1560                                                                              | 1753                                                                                | 1749                                                                                | 1560                                                                                | 1700                                                                                | 1749                                                                                | 1830                                                                                |
| Q Serve(g_s), s              | 1.0                                                                               | 0.0                                                                               | 0.0                                                                               | 1.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.3                                                                                 | 6.0                                                                                 | 0.0                                                                                 | 6.5                                                                                 | 6.4                                                                                 | 6.4                                                                                 |
| Cycle Q Clear(g_c), s        | 1.0                                                                               | 0.0                                                                               | 0.0                                                                               | 1.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.3                                                                                 | 6.0                                                                                 | 0.0                                                                                 | 6.5                                                                                 | 6.4                                                                                 | 6.4                                                                                 |
| Prop In Lane                 | 0.33                                                                              |                                                                                   | 0.33                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.03                                                                                |
| Lane Grp Cap(c), veh/h       | 100                                                                               | 0                                                                                 | 0                                                                                 | 376                                                                               | 0                                                                                 |                                                                                   | 55                                                                                  | 939                                                                                 |                                                                                     | 725                                                                                 | 788                                                                                 | 825                                                                                 |
| V/C Ratio(X)                 | 0.33                                                                              | 0.00                                                                              | 0.00                                                                              | 0.20                                                                              | 0.00                                                                              |                                                                                   | 0.20                                                                                | 0.51                                                                                |                                                                                     | 0.64                                                                                | 0.41                                                                                | 0.41                                                                                |
| Avail Cap(c_a), veh/h        | 664                                                                               | 0                                                                                 | 0                                                                                 | 1320                                                                              | 0                                                                                 |                                                                                   | 646                                                                                 | 3054                                                                                |                                                                                     | 1254                                                                                | 1527                                                                                | 1598                                                                                |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(l)           | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                              | 0.00                                                                              | 0.00                                                                              | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 23.3                                                                              | 0.0                                                                               | 0.0                                                                               | 20.8                                                                              | 0.0                                                                               | 0.0                                                                               | 24.3                                                                                | 16.0                                                                                | 0.0                                                                                 | 18.5                                                                                | 9.5                                                                                 | 9.5                                                                                 |
| Incr Delay (d2), s/veh       | 0.7                                                                               | 0.0                                                                               | 0.0                                                                               | 0.1                                                                               | 0.0                                                                               | 0.0                                                                               | 0.7                                                                                 | 0.8                                                                                 | 0.0                                                                                 | 0.4                                                                                 | 0.7                                                                                 | 0.6                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.4                                                                               | 0.0                                                                               | 0.0                                                                               | 0.4                                                                               | 0.0                                                                               | 0.0                                                                               | 0.1                                                                                 | 2.0                                                                                 | 0.0                                                                                 | 2.1                                                                                 | 1.9                                                                                 | 1.9                                                                                 |
| Unsig. Movement Delay, s/veh |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| LnGrp Delay(d),s/veh         | 24.0                                                                              | 0.0                                                                               | 0.0                                                                               | 20.9                                                                              | 0.0                                                                               | 0.0                                                                               | 25.0                                                                                | 16.8                                                                                | 0.0                                                                                 | 18.8                                                                                | 10.2                                                                                | 10.2                                                                                |
| LnGrp LOS                    | C                                                                                 | A                                                                                 | A                                                                                 | C                                                                                 | A                                                                                 |                                                                                   | C                                                                                   | B                                                                                   |                                                                                     | B                                                                                   | B                                                                                   | B                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 33                                                                                |                                                                                   |                                                                                   | 76                                                                                | A                                                                                 |                                                                                     | 489                                                                                 | A                                                                                   |                                                                                     | 1130                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 24.0                                                                              |                                                                                   |                                                                                   | 20.9                                                                              |                                                                                   |                                                                                     | 17.0                                                                                |                                                                                     |                                                                                     | 13.8                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                     | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Timer - Assigned Phs         | 1                                                                                 | 2                                                                                 |                                                                                   | 4                                                                                 | 5                                                                                 | 6                                                                                 |                                                                                     | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 15.0                                                                              | 19.8                                                                              |                                                                                   | 7.0                                                                               | 5.6                                                                               | 29.2                                                                              |                                                                                     | 9.7                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.0                                                                               | 6.0                                                                               |                                                                                   | 4.0                                                                               | 4.0                                                                               | 6.0                                                                               |                                                                                     | 4.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 19.0                                                                              | 45.0                                                                              |                                                                                   | 20.0                                                                              | 19.0                                                                              | 45.0                                                                              |                                                                                     | 20.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 8.5                                                                               | 8.0                                                                               |                                                                                   | 3.0                                                                               | 2.3                                                                               | 8.4                                                                               |                                                                                     | 3.0                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.7                                                                               | 5.9                                                                               |                                                                                   | 0.1                                                                               | 0.0                                                                               | 7.9                                                                               |                                                                                     | 0.1                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Intersection Summary

|                    |      |
|--------------------|------|
| HCM 6th Ctrl Delay | 15.2 |
| HCM 6th LOS        | B    |

Notes

User approved pedestrian interval to be less than phase max green.

Unsignalized Delay for [NBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Roseville Parkway Extension and Bridge  
1: Foothills Blvd

Existing (2020)  
Timing Plan: PM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Group Flow (vph)   | 54                                                                                | 11                                                                                | 120                                                                               | 11                                                                                | 11                                                                                | 11                                                                                | 54                                                                                 | 685                                                                                 | 11                                                                                  | 11                                                                                  | 902                                                                                 | 22                                                                                  |
| v/c Ratio               | 0.08                                                                              | 0.02                                                                              | 0.30                                                                              | 0.02                                                                              | 0.02                                                                              | 0.02                                                                              | 0.08                                                                               | 0.33                                                                                | 0.01                                                                                | 0.03                                                                                | 0.47                                                                                | 0.02                                                                                |
| Control Delay           | 25.8                                                                              | 27.0                                                                              | 9.3                                                                               | 27.9                                                                              | 27.9                                                                              | 0.1                                                                               | 25.8                                                                               | 10.2                                                                                | 0.0                                                                                 | 27.4                                                                                | 13.1                                                                                | 0.1                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 25.8                                                                              | 27.0                                                                              | 9.3                                                                               | 27.9                                                                              | 27.9                                                                              | 0.1                                                                               | 25.8                                                                               | 10.2                                                                                | 0.0                                                                                 | 27.4                                                                                | 13.1                                                                                | 0.1                                                                                 |
| Queue Length 50th (ft)  | 8                                                                                 | 1                                                                                 | 0                                                                                 | 1                                                                                 | 1                                                                                 | 0                                                                                 | 8                                                                                  | 43                                                                                  | 0                                                                                   | 3                                                                                   | 124                                                                                 | 0                                                                                   |
| Queue Length 95th (ft)  | 30                                                                                | 10                                                                                | 47                                                                                | 10                                                                                | 10                                                                                | 0                                                                                 | 30                                                                                 | 174                                                                                 | 0                                                                                   | 20                                                                                  | 242                                                                                 | 0                                                                                   |
| Internal Link Dist (ft) | 1797                                                                              |                                                                                   |                                                                                   | 980                                                                               |                                                                                   |                                                                                   | 312                                                                                |                                                                                     |                                                                                     | 2459                                                                                |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    | 220                                                                               |                                                                                   | 230                                                                               | 220                                                                               |                                                                                   | 230                                                                               | 265                                                                                |                                                                                     | 265                                                                                 | 255                                                                                 |                                                                                     | 160                                                                                 |
| Base Capacity (vph)     | 1337                                                                              | 1378                                                                              | 689                                                                               | 1337                                                                              | 1378                                                                              | 803                                                                               | 1337                                                                               | 2828                                                                                | 1280                                                                                | 689                                                                                 | 2828                                                                                | 1280                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.04                                                                              | 0.01                                                                              | 0.17                                                                              | 0.01                                                                              | 0.01                                                                              | 0.01                                                                              | 0.04                                                                               | 0.24                                                                                | 0.01                                                                                | 0.02                                                                                | 0.32                                                                                | 0.02                                                                                |
| Intersection Summary    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Roseville Parkway Extension and Bridge  
2: Washington Blvd

Existing (2020)  
Timing Plan: PM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBT                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                               | NBT                                                                               | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Group Flow (vph)   | 33                                                                                | 76                                                                                | 11                                                                                | 554                                                                               | 11                                                                                | 478                                                                               | 65                                                                                  | 467                                                                                 | 663                                                                                 |
| v/c Ratio               | 0.16                                                                              | 0.10                                                                              | no cap                                                                            | 0.70                                                                              | 0.04                                                                              | 0.54                                                                              | 0.14                                                                                | 0.64                                                                                | 0.38                                                                                |
| Control Delay           | 30.0                                                                              | 26.0                                                                              |                                                                                   | 8.4                                                                               | 34.8                                                                              | 27.8                                                                              | 5.3                                                                                 | 33.2                                                                                | 14.7                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               |                                                                                   | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 30.0                                                                              | 26.0                                                                              | Error                                                                             | 8.4                                                                               | 34.8                                                                              | 27.8                                                                              | 5.3                                                                                 | 33.2                                                                                | 14.7                                                                                |
| Queue Length 50th (ft)  | 11                                                                                | 15                                                                                | 0                                                                                 | 0                                                                                 | 5                                                                                 | 115                                                                               | 0                                                                                   | 116                                                                                 | 107                                                                                 |
| Queue Length 95th (ft)  | 40                                                                                | 36                                                                                | 0                                                                                 | 95                                                                                | 22                                                                                | 167                                                                               | 23                                                                                  | 180                                                                                 | 204                                                                                 |
| Internal Link Dist (ft) | 602                                                                               |                                                                                   | 342                                                                               |                                                                                   |                                                                                   | 3613                                                                              |                                                                                     |                                                                                     | 349                                                                                 |
| Turn Bay Length (ft)    |                                                                                   | 235                                                                               |                                                                                   |                                                                                   | 200                                                                               |                                                                                   | 220                                                                                 | 245                                                                                 |                                                                                     |
| Base Capacity (vph)     | 507                                                                               | 980                                                                               | 1                                                                                 | 844                                                                               | 480                                                                               | 2266                                                                              | 1042                                                                                | 931                                                                                 | 2263                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.07                                                                              | 0.08                                                                              | 11.00                                                                             | 0.66                                                                              | 0.02                                                                              | 0.21                                                                              | 0.06                                                                                | 0.50                                                                                | 0.29                                                                                |
| Intersection Summary    |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |

## Appendix C

*Analysis Worksheets for  
Existing (2020) plus Proposed Project Conditions*

Roseville Parkway Extension and Bridge  
1: Roseville Pkwy Extension & Foothills Blvd

Existing (2020) plus Project  
Timing Plan: AM Peak-Hour

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h)       | 10                                                                                | 180                                                                               | 110                                                                               | 30                                                                                | 100                                                                               | 50                                                                                | 90                                                                                  | 660                                                                                 | 100                                                                                 | 250                                                                                 | 410                                                                                 | 10                                                                                  |
| Future Volume (veh/h)        | 10                                                                                | 180                                                                               | 110                                                                               | 30                                                                                | 100                                                                               | 50                                                                                | 90                                                                                  | 660                                                                                 | 100                                                                                 | 250                                                                                 | 410                                                                                 | 10                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Work Zone On Approach        |                                                                                   | No                                                                                |                                                                                   |                                                                                   | No                                                                                |                                                                                   |                                                                                     | No                                                                                  |                                                                                     |                                                                                     | No                                                                                  |                                                                                     |
| Adj Sat Flow, veh/h/ln       | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                |
| Adj Flow Rate, veh/h         | 11                                                                                | 196                                                                               | 120                                                                               | 33                                                                                | 109                                                                               | 54                                                                                | 98                                                                                  | 717                                                                                 | 109                                                                                 | 272                                                                                 | 446                                                                                 | 11                                                                                  |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Cap, veh/h                   | 25                                                                                | 474                                                                               | 211                                                                               | 125                                                                               | 553                                                                               | 425                                                                               | 252                                                                                 | 1248                                                                                | 556                                                                                 | 389                                                                                 | 1388                                                                                | 619                                                                                 |
| Arrive On Green              | 0.01                                                                              | 0.14                                                                              | 0.14                                                                              | 0.04                                                                              | 0.16                                                                              | 0.16                                                                              | 0.07                                                                                | 0.36                                                                                | 0.36                                                                                | 0.11                                                                                | 0.40                                                                                | 0.40                                                                                |
| Sat Flow, veh/h              | 1753                                                                              | 3497                                                                              | 1560                                                                              | 3401                                                                              | 3497                                                                              | 1560                                                                              | 3401                                                                                | 3497                                                                                | 1560                                                                                | 3401                                                                                | 3497                                                                                | 1560                                                                                |
| Grp Volume(v), veh/h         | 11                                                                                | 196                                                                               | 120                                                                               | 33                                                                                | 109                                                                               | 54                                                                                | 98                                                                                  | 717                                                                                 | 109                                                                                 | 272                                                                                 | 446                                                                                 | 11                                                                                  |
| Grp Sat Flow(s),veh/h/ln     | 1753                                                                              | 1749                                                                              | 1560                                                                              | 1700                                                                              | 1749                                                                              | 1560                                                                              | 1700                                                                                | 1749                                                                                | 1560                                                                                | 1700                                                                                | 1749                                                                                | 1560                                                                                |
| Q Serve(g_s), s              | 0.3                                                                               | 2.6                                                                               | 3.6                                                                               | 0.5                                                                               | 1.4                                                                               | 1.3                                                                               | 1.4                                                                                 | 8.4                                                                                 | 2.4                                                                                 | 3.9                                                                                 | 4.4                                                                                 | 0.2                                                                                 |
| Cycle Q Clear(g_c), s        | 0.3                                                                               | 2.6                                                                               | 3.6                                                                               | 0.5                                                                               | 1.4                                                                               | 1.3                                                                               | 1.4                                                                                 | 8.4                                                                                 | 2.4                                                                                 | 3.9                                                                                 | 4.4                                                                                 | 0.2                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 25                                                                                | 474                                                                               | 211                                                                               | 125                                                                               | 553                                                                               | 425                                                                               | 252                                                                                 | 1248                                                                                | 556                                                                                 | 389                                                                                 | 1388                                                                                | 619                                                                                 |
| V/C Ratio(X)                 | 0.44                                                                              | 0.41                                                                              | 0.57                                                                              | 0.26                                                                              | 0.20                                                                              | 0.13                                                                              | 0.39                                                                                | 0.57                                                                                | 0.20                                                                                | 0.70                                                                                | 0.32                                                                                | 0.02                                                                                |
| Avail Cap(c_a), veh/h        | 174                                                                               | 1248                                                                              | 556                                                                               | 337                                                                               | 1248                                                                              | 735                                                                               | 357                                                                                 | 1248                                                                                | 556                                                                                 | 404                                                                                 | 1388                                                                                | 619                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 24.7                                                                              | 20.0                                                                              | 20.4                                                                              | 23.6                                                                              | 18.5                                                                              | 13.8                                                                              | 22.3                                                                                | 13.1                                                                                | 11.2                                                                                | 21.5                                                                                | 10.5                                                                                | 9.2                                                                                 |
| Incr Delay (d2), s/veh       | 11.9                                                                              | 0.6                                                                               | 2.4                                                                               | 1.1                                                                               | 0.2                                                                               | 0.1                                                                               | 1.0                                                                                 | 1.9                                                                                 | 0.8                                                                                 | 5.1                                                                                 | 0.6                                                                                 | 0.1                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.2                                                                               | 1.0                                                                               | 1.3                                                                               | 0.2                                                                               | 0.5                                                                               | 0.4                                                                               | 0.5                                                                                 | 2.8                                                                                 | 0.8                                                                                 | 1.6                                                                                 | 1.4                                                                                 | 0.1                                                                                 |
| Unsig. Movement Delay, s/veh |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| LnGrp Delay(d),s/veh         | 36.6                                                                              | 20.5                                                                              | 22.8                                                                              | 24.8                                                                              | 18.6                                                                              | 14.0                                                                              | 23.3                                                                                | 15.1                                                                                | 12.0                                                                                | 26.6                                                                                | 11.1                                                                                | 9.3                                                                                 |
| LnGrp LOS                    | D                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | B                                                                                 | B                                                                                 | C                                                                                   | B                                                                                   | B                                                                                   | C                                                                                   | B                                                                                   | A                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 327                                                                               |                                                                                   |                                                                                   | 196                                                                               |                                                                                   |                                                                                     | 924                                                                                 |                                                                                     |                                                                                     | 729                                                                                 |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 21.9                                                                              |                                                                                   |                                                                                   | 18.4                                                                              |                                                                                   |                                                                                     | 15.6                                                                                |                                                                                     |                                                                                     | 16.9                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                     | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |
| Timer - Assigned Phs         | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 10.3                                                                              | 22.5                                                                              | 6.4                                                                               | 11.3                                                                              | 8.2                                                                               | 24.5                                                                              | 5.2                                                                                 | 12.5                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                                 | 4.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 6.0                                                                               | 18.0                                                                              | 5.0                                                                               | 18.0                                                                              | 5.3                                                                               | 18.7                                                                              | 5.0                                                                                 | 18.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 5.9                                                                               | 10.4                                                                              | 2.5                                                                               | 5.6                                                                               | 3.4                                                                               | 6.4                                                                               | 2.3                                                                                 | 3.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 2.9                                                                               | 0.0                                                                               | 1.2                                                                               | 0.0                                                                               | 2.1                                                                               | 0.0                                                                                 | 0.6                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 6th Ctrl Delay           |                                                                                   |                                                                                   | 17.2                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 6th LOS                  |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Roseville Parkway Extension and Bridge  
2: Washington Blvd & Roseville Pkwy Extension

Existing (2020) plus Project  
Timing Plan: AM Peak-Hour

|                              |                                                                                    |                                                                                    |  |                                                                                    |                                                                                    |  |  |                                                                                      |  |                                                                                      |                                                                                      |  |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                                                                                                                 | EBT                                                                                                                                                                 | EBR                                                                               | WBL                                                                                                                                                                 | WBT                                                                                                                                                                 | WBR                                                                               | NBL                                                                                | NBT                                                                                                                                                                     | NBR                                                                                 | SBL                                                                                                                                                                     | SBT                                                                                                                                                                     | SBR                                                                                 |
| Lane Configurations          |   |   |  |   |   |  |  |   |  |   |   |  |
| Traffic Volume (veh/h)       | 30                                                                                                                                                                  | 320                                                                                                                                                                 | 180                                                                               | 50                                                                                                                                                                  | 140                                                                                                                                                                 | 250                                                                               | 20                                                                                 | 360                                                                                                                                                                     | 30                                                                                  | 220                                                                                                                                                                     | 170                                                                                                                                                                     | 20                                                                                  |
| Future Volume (veh/h)        | 30                                                                                                                                                                  | 320                                                                                                                                                                 | 180                                                                               | 50                                                                                                                                                                  | 140                                                                                                                                                                 | 250                                                                               | 20                                                                                 | 360                                                                                                                                                                     | 30                                                                                  | 220                                                                                                                                                                     | 170                                                                                                                                                                     | 20                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                                                                                                   | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                                                                                                       | 0                                                                                   | 0                                                                                                                                                                       | 0                                                                                                                                                                       | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                               |                                                                                                                                                                         | 1.00                                                                                | 1.00                                                                                                                                                                    |                                                                                                                                                                         | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Work Zone On Approach        |                                                                                                                                                                     | No                                                                                                                                                                  |                                                                                   |                                                                                                                                                                     | No                                                                                                                                                                  |                                                                                   |                                                                                    | No                                                                                                                                                                      |                                                                                     |                                                                                                                                                                         | No                                                                                                                                                                      |                                                                                     |
| Adj Sat Flow, veh/h/ln       | 1841                                                                                                                                                                | 1841                                                                                                                                                                | 1841                                                                              | 1841                                                                                                                                                                | 1841                                                                                                                                                                | 1841                                                                              | 1841                                                                               | 1841                                                                                                                                                                    | 1841                                                                                | 1841                                                                                                                                                                    | 1841                                                                                                                                                                    | 1841                                                                                |
| Adj Flow Rate, veh/h         | 33                                                                                                                                                                  | 348                                                                                                                                                                 | 0                                                                                 | 54                                                                                                                                                                  | 152                                                                                                                                                                 | 0                                                                                 | 22                                                                                 | 391                                                                                                                                                                     | 0                                                                                   | 239                                                                                                                                                                     | 185                                                                                                                                                                     | 22                                                                                  |
| Peak Hour Factor             | 0.92                                                                                                                                                                | 0.92                                                                                                                                                                | 0.92                                                                              | 0.92                                                                                                                                                                | 0.92                                                                                                                                                                | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                                                                                                    | 0.92                                                                                | 0.92                                                                                                                                                                    | 0.92                                                                                                                                                                    | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                                                                                                   | 4                                                                                                                                                                   | 4                                                                                 | 4                                                                                                                                                                   | 4                                                                                                                                                                   | 4                                                                                 | 4                                                                                  | 4                                                                                                                                                                       | 4                                                                                   | 4                                                                                                                                                                       | 4                                                                                                                                                                       | 4                                                                                   |
| Cap, veh/h                   | 123                                                                                                                                                                 | 564                                                                                                                                                                 |                                                                                   | 176                                                                                                                                                                 | 617                                                                                                                                                                 |                                                                                   | 46                                                                                 | 1211                                                                                                                                                                    |                                                                                     | 348                                                                                                                                                                     | 1332                                                                                                                                                                    | 156                                                                                 |
| Arrive On Green              | 0.04                                                                                                                                                                | 0.16                                                                                                                                                                | 0.00                                                                              | 0.05                                                                                                                                                                | 0.18                                                                                                                                                                | 0.00                                                                              | 0.03                                                                               | 0.35                                                                                                                                                                    | 0.00                                                                                | 0.10                                                                                                                                                                    | 0.42                                                                                                                                                                    | 0.42                                                                                |
| Sat Flow, veh/h              | 3401                                                                                                                                                                | 3497                                                                                                                                                                | 1560                                                                              | 3401                                                                                                                                                                | 3497                                                                                                                                                                | 1560                                                                              | 1753                                                                               | 3497                                                                                                                                                                    | 1560                                                                                | 3401                                                                                                                                                                    | 3153                                                                                                                                                                    | 370                                                                                 |
| Grp Volume(v), veh/h         | 33                                                                                                                                                                  | 348                                                                                                                                                                 | 0                                                                                 | 54                                                                                                                                                                  | 152                                                                                                                                                                 | 0                                                                                 | 22                                                                                 | 391                                                                                                                                                                     | 0                                                                                   | 239                                                                                                                                                                     | 102                                                                                                                                                                     | 105                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1700                                                                                                                                                                | 1749                                                                                                                                                                | 1560                                                                              | 1700                                                                                                                                                                | 1749                                                                                                                                                                | 1560                                                                              | 1753                                                                               | 1749                                                                                                                                                                    | 1560                                                                                | 1700                                                                                                                                                                    | 1749                                                                                                                                                                    | 1774                                                                                |
| Q Serve(g_s), s              | 0.5                                                                                                                                                                 | 4.9                                                                                                                                                                 | 0.0                                                                               | 0.8                                                                                                                                                                 | 2.0                                                                                                                                                                 | 0.0                                                                               | 0.7                                                                                | 4.4                                                                                                                                                                     | 0.0                                                                                 | 3.6                                                                                                                                                                     | 1.9                                                                                                                                                                     | 1.9                                                                                 |
| Cycle Q Clear(g_c), s        | 0.5                                                                                                                                                                 | 4.9                                                                                                                                                                 | 0.0                                                                               | 0.8                                                                                                                                                                 | 2.0                                                                                                                                                                 | 0.0                                                                               | 0.7                                                                                | 4.4                                                                                                                                                                     | 0.0                                                                                 | 3.6                                                                                                                                                                     | 1.9                                                                                                                                                                     | 1.9                                                                                 |
| Prop In Lane                 | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                               |                                                                                                                                                                         | 1.00                                                                                | 1.00                                                                                                                                                                    |                                                                                                                                                                         | 0.21                                                                                |
| Lane Grp Cap(c), veh/h       | 123                                                                                                                                                                 | 564                                                                                                                                                                 |                                                                                   | 176                                                                                                                                                                 | 617                                                                                                                                                                 |                                                                                   | 46                                                                                 | 1211                                                                                                                                                                    |                                                                                     | 348                                                                                                                                                                     | 739                                                                                                                                                                     | 749                                                                                 |
| V/C Ratio(X)                 | 0.27                                                                                                                                                                | 0.62                                                                                                                                                                |                                                                                   | 0.31                                                                                                                                                                | 0.25                                                                                                                                                                |                                                                                   | 0.48                                                                               | 0.32                                                                                                                                                                    |                                                                                     | 0.69                                                                                                                                                                    | 0.14                                                                                                                                                                    | 0.14                                                                                |
| Avail Cap(c_a), veh/h        | 320                                                                                                                                                                 | 1184                                                                                                                                                                |                                                                                   | 320                                                                                                                                                                 | 1184                                                                                                                                                                |                                                                                   | 165                                                                                | 1211                                                                                                                                                                    |                                                                                     | 358                                                                                                                                                                     | 739                                                                                                                                                                     | 749                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Upstream Filter(l)           | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 0.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 0.00                                                                              | 1.00                                                                               | 1.00                                                                                                                                                                    | 0.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 24.9                                                                                                                                                                | 20.8                                                                                                                                                                | 0.0                                                                               | 24.3                                                                                                                                                                | 18.8                                                                                                                                                                | 0.0                                                                               | 25.5                                                                               | 12.8                                                                                                                                                                    | 0.0                                                                                 | 23.0                                                                                                                                                                    | 9.4                                                                                                                                                                     | 9.4                                                                                 |
| Incr Delay (d2), s/veh       | 1.1                                                                                                                                                                 | 1.1                                                                                                                                                                 | 0.0                                                                               | 1.0                                                                                                                                                                 | 0.2                                                                                                                                                                 | 0.0                                                                               | 7.6                                                                                | 0.7                                                                                                                                                                     | 0.0                                                                                 | 5.2                                                                                                                                                                     | 0.4                                                                                                                                                                     | 0.4                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 | 0.0                                                                                                                                                                     | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.2                                                                                                                                                                 | 1.9                                                                                                                                                                 | 0.0                                                                               | 0.3                                                                                                                                                                 | 0.7                                                                                                                                                                 | 0.0                                                                               | 0.3                                                                                | 1.5                                                                                                                                                                     | 0.0                                                                                 | 1.5                                                                                                                                                                     | 0.6                                                                                                                                                                     | 0.6                                                                                 |
| Unsig. Movement Delay, s/veh |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                    |                                                                                                                                                                         |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| LnGrp Delay(d),s/veh         | 26.1                                                                                                                                                                | 21.9                                                                                                                                                                | 0.0                                                                               | 25.3                                                                                                                                                                | 19.0                                                                                                                                                                | 0.0                                                                               | 33.2                                                                               | 13.5                                                                                                                                                                    | 0.0                                                                                 | 28.2                                                                                                                                                                    | 9.8                                                                                                                                                                     | 9.8                                                                                 |
| LnGrp LOS                    | C                                                                                                                                                                   | C                                                                                                                                                                   |                                                                                   | C                                                                                                                                                                   | B                                                                                                                                                                   |                                                                                   | C                                                                                  | B                                                                                                                                                                       |                                                                                     | C                                                                                                                                                                       | A                                                                                                                                                                       | A                                                                                   |
| Approach Vol, veh/h          |                                                                                                                                                                     | 381                                                                                                                                                                 | A                                                                                 |                                                                                                                                                                     | 206                                                                                                                                                                 | A                                                                                 |                                                                                    | 413                                                                                                                                                                     | A                                                                                   |                                                                                                                                                                         | 446                                                                                                                                                                     |                                                                                     |
| Approach Delay, s/veh        |                                                                                                                                                                     | 22.2                                                                                                                                                                |                                                                                   |                                                                                                                                                                     | 20.7                                                                                                                                                                |                                                                                   |                                                                                    | 14.5                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         | 19.7                                                                                                                                                                    |                                                                                     |
| Approach LOS                 |                                                                                                                                                                     | C                                                                                                                                                                   |                                                                                   |                                                                                                                                                                     | C                                                                                                                                                                   |                                                                                   |                                                                                    | B                                                                                                                                                                       |                                                                                     |                                                                                                                                                                         | B                                                                                                                                                                       |                                                                                     |
| Timer - Assigned Phs         | 1                                                                                                                                                                   | 2                                                                                                                                                                   | 3                                                                                 | 4                                                                                                                                                                   | 5                                                                                                                                                                   | 6                                                                                 | 7                                                                                  | 8                                                                                                                                                                       |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.9                                                                                                                                                                 | 22.9                                                                                                                                                                | 7.2                                                                               | 13.1                                                                                                                                                                | 5.9                                                                                                                                                                 | 27.0                                                                              | 6.4                                                                                | 13.9                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Change Period (Y+Rc), s      | 4.5                                                                                                                                                                 | 4.5                                                                                                                                                                 | 4.5                                                                               | 4.5                                                                                                                                                                 | 4.5                                                                                                                                                                 | 4.5                                                                               | 4.5                                                                                | 4.5                                                                                                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Max Green Setting (Gmax), s  | 5.6                                                                                                                                                                 | 18.4                                                                                                                                                                | 5.0                                                                               | 18.0                                                                                                                                                                | 5.0                                                                                                                                                                 | 19.0                                                                              | 5.0                                                                                | 18.0                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 5.6                                                                                                                                                                 | 6.4                                                                                                                                                                 | 2.8                                                                               | 6.9                                                                                                                                                                 | 2.7                                                                                                                                                                 | 3.9                                                                               | 2.5                                                                                | 4.0                                                                                                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                                                                                                                 | 1.8                                                                                                                                                                 | 0.0                                                                               | 1.6                                                                                                                                                                 | 0.0                                                                                                                                                                 | 0.8                                                                               | 0.0                                                                                | 0.6                                                                                                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |

Intersection Summary

|                    |      |
|--------------------|------|
| HCM 6th Ctrl Delay | 19.0 |
| HCM 6th LOS        | B    |

Notes

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Roseville Parkway Extension and Bridge  
1: Roseville Pkwy Extension & Foothills Blvd

Existing (2020) plus Project  
Timing Plan: AM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Group Flow (vph)   | 11                                                                                | 196                                                                               | 120                                                                               | 33                                                                                | 109                                                                               | 54                                                                                | 98                                                                                 | 717                                                                                 | 109                                                                                 | 272                                                                                 | 446                                                                                 | 11                                                                                  |
| v/c Ratio               | 0.06                                                                              | 0.34                                                                              | 0.30                                                                              | 0.10                                                                              | 0.16                                                                              | 0.08                                                                              | 0.27                                                                               | 0.56                                                                                | 0.16                                                                                | 0.66                                                                                | 0.27                                                                                | 0.01                                                                                |
| Control Delay           | 24.4                                                                              | 20.8                                                                              | 3.7                                                                               | 23.8                                                                              | 17.2                                                                              | 1.3                                                                               | 24.7                                                                               | 16.0                                                                                | 1.5                                                                                 | 33.0                                                                                | 11.7                                                                                | 0.0                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 24.4                                                                              | 20.8                                                                              | 3.7                                                                               | 23.8                                                                              | 17.2                                                                              | 1.3                                                                               | 24.7                                                                               | 16.0                                                                                | 1.5                                                                                 | 33.0                                                                                | 11.7                                                                                | 0.0                                                                                 |
| Queue Length 50th (ft)  | 3                                                                                 | 24                                                                                | 0                                                                                 | 4                                                                                 | 13                                                                                | 0                                                                                 | 12                                                                                 | 70                                                                                  | 0                                                                                   | 35                                                                                  | 38                                                                                  | 0                                                                                   |
| Queue Length 95th (ft)  | 17                                                                                | 56                                                                                | 18                                                                                | 17                                                                                | 35                                                                                | 7                                                                                 | 36                                                                                 | 167                                                                                 | 11                                                                                  | #103                                                                                | 98                                                                                  | 0                                                                                   |
| Internal Link Dist (ft) | 1797                                                                              |                                                                                   |                                                                                   | 3594                                                                              |                                                                                   |                                                                                   | 312                                                                                |                                                                                     |                                                                                     | 2459                                                                                |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    | 220                                                                               |                                                                                   | 230                                                                               | 220                                                                               |                                                                                   | 230                                                                               | 265                                                                                |                                                                                     | 265                                                                                 | 255                                                                                 |                                                                                     | 160                                                                                 |
| Base Capacity (vph)     | 177                                                                               | 1276                                                                              | 682                                                                               | 344                                                                               | 1286                                                                              | 704                                                                               | 364                                                                                | 1276                                                                                | 682                                                                                 | 412                                                                                 | 1634                                                                                | 824                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.06                                                                              | 0.15                                                                              | 0.18                                                                              | 0.10                                                                              | 0.08                                                                              | 0.08                                                                              | 0.27                                                                               | 0.56                                                                                | 0.16                                                                                | 0.66                                                                                | 0.27                                                                                | 0.01                                                                                |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Roseville Parkway Extension and Bridge  
2: Washington Blvd & Roseville Pkwy Extension

Existing (2020) plus Project  
Timing Plan: AM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Group Flow (vph)   | 33                                                                                | 348                                                                               | 196                                                                               | 54                                                                                | 152                                                                               | 272                                                                               | 22                                                                                 | 391                                                                                 | 33                                                                                  | 239                                                                                 | 207                                                                                 |
| v/c Ratio               | 0.10                                                                              | 0.50                                                                              | 0.13                                                                              | 0.17                                                                              | 0.19                                                                              | 0.18                                                                              | 0.13                                                                               | 0.33                                                                                | 0.02                                                                                | 0.68                                                                                | 0.12                                                                                |
| Control Delay           | 26.4                                                                              | 22.5                                                                              | 0.2                                                                               | 26.8                                                                              | 18.0                                                                              | 0.2                                                                               | 28.1                                                                               | 15.7                                                                                | 0.0                                                                                 | 37.7                                                                                | 9.7                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 26.4                                                                              | 22.5                                                                              | 0.2                                                                               | 26.8                                                                              | 18.0                                                                              | 0.2                                                                               | 28.1                                                                               | 15.7                                                                                | 0.0                                                                                 | 37.7                                                                                | 9.7                                                                                 |
| Queue Length 50th (ft)  | 5                                                                                 | 57                                                                                | 0                                                                                 | 9                                                                                 | 18                                                                                | 0                                                                                 | 7                                                                                  | 54                                                                                  | 0                                                                                   | 42                                                                                  | 16                                                                                  |
| Queue Length 95th (ft)  | 18                                                                                | 92                                                                                | 0                                                                                 | 25                                                                                | 44                                                                                | 0                                                                                 | 27                                                                                 | 95                                                                                  | 0                                                                                   | #99                                                                                 | 49                                                                                  |
| Internal Link Dist (ft) | 3594                                                                              |                                                                                   |                                                                                   | 342                                                                               |                                                                                   |                                                                                   | 340                                                                                |                                                                                     |                                                                                     | 349                                                                                 |                                                                                     |
| Turn Bay Length (ft)    | 260                                                                               |                                                                                   | 260                                                                               | 235                                                                               |                                                                                   | 200                                                                               | 200                                                                                |                                                                                     | 220                                                                                 | 245                                                                                 |                                                                                     |
| Base Capacity (vph)     | 316                                                                               | 1173                                                                              | 1553                                                                              | 316                                                                               | 1203                                                                              | 1553                                                                              | 163                                                                                | 1200                                                                                | 1553                                                                                | 354                                                                                 | 1734                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.10                                                                              | 0.30                                                                              | 0.13                                                                              | 0.17                                                                              | 0.13                                                                              | 0.18                                                                              | 0.13                                                                               | 0.33                                                                                | 0.02                                                                                | 0.68                                                                                | 0.12                                                                                |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



Roseville Parkway Extension and Bridge  
1: Roseville Pkwy Extension & Foothills Blvd

Existing (2020) plus Project  
Timing Plan: PM Peak-Hour

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h)       | 10                                                                                | 210                                                                               | 150                                                                               | 90                                                                                | 170                                                                               | 70                                                                                | 90                                                                                  | 550                                                                                 | 60                                                                                  | 260                                                                                 | 800                                                                                 | 10                                                                                  |
| Future Volume (veh/h)        | 10                                                                                | 210                                                                               | 150                                                                               | 90                                                                                | 170                                                                               | 70                                                                                | 90                                                                                  | 550                                                                                 | 60                                                                                  | 260                                                                                 | 800                                                                                 | 10                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Work Zone On Approach        |                                                                                   | No                                                                                |                                                                                   |                                                                                   | No                                                                                |                                                                                   |                                                                                     | No                                                                                  |                                                                                     |                                                                                     | No                                                                                  |                                                                                     |
| Adj Sat Flow, veh/h/ln       | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                |
| Adj Flow Rate, veh/h         | 11                                                                                | 228                                                                               | 163                                                                               | 98                                                                                | 185                                                                               | 76                                                                                | 98                                                                                  | 598                                                                                 | 65                                                                                  | 283                                                                                 | 870                                                                                 | 11                                                                                  |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Cap, veh/h                   | 25                                                                                | 561                                                                               | 250                                                                               | 241                                                                               | 760                                                                               | 507                                                                               | 241                                                                                 | 1159                                                                                | 517                                                                                 | 367                                                                                 | 1289                                                                                | 575                                                                                 |
| Arrive On Green              | 0.01                                                                              | 0.16                                                                              | 0.16                                                                              | 0.07                                                                              | 0.22                                                                              | 0.22                                                                              | 0.07                                                                                | 0.33                                                                                | 0.33                                                                                | 0.11                                                                                | 0.37                                                                                | 0.37                                                                                |
| Sat Flow, veh/h              | 1753                                                                              | 3497                                                                              | 1560                                                                              | 3401                                                                              | 3497                                                                              | 1560                                                                              | 3401                                                                                | 3497                                                                                | 1560                                                                                | 3401                                                                                | 3497                                                                                | 1560                                                                                |
| Grp Volume(v), veh/h         | 11                                                                                | 228                                                                               | 163                                                                               | 98                                                                                | 185                                                                               | 76                                                                                | 98                                                                                  | 598                                                                                 | 65                                                                                  | 283                                                                                 | 870                                                                                 | 11                                                                                  |
| Grp Sat Flow(s),veh/h/ln     | 1753                                                                              | 1749                                                                              | 1560                                                                              | 1700                                                                              | 1749                                                                              | 1560                                                                              | 1700                                                                                | 1749                                                                                | 1560                                                                                | 1700                                                                                | 1749                                                                                | 1560                                                                                |
| Q Serve(g_s), s              | 0.3                                                                               | 3.2                                                                               | 5.4                                                                               | 1.5                                                                               | 2.4                                                                               | 1.9                                                                               | 1.5                                                                                 | 7.5                                                                                 | 1.6                                                                                 | 4.4                                                                                 | 11.4                                                                                | 0.2                                                                                 |
| Cycle Q Clear(g_c), s        | 0.3                                                                               | 3.2                                                                               | 5.4                                                                               | 1.5                                                                               | 2.4                                                                               | 1.9                                                                               | 1.5                                                                                 | 7.5                                                                                 | 1.6                                                                                 | 4.4                                                                                 | 11.4                                                                                | 0.2                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 25                                                                                | 561                                                                               | 250                                                                               | 241                                                                               | 760                                                                               | 507                                                                               | 241                                                                                 | 1159                                                                                | 517                                                                                 | 367                                                                                 | 1289                                                                                | 575                                                                                 |
| V/C Ratio(X)                 | 0.45                                                                              | 0.41                                                                              | 0.65                                                                              | 0.41                                                                              | 0.24                                                                              | 0.15                                                                              | 0.41                                                                                | 0.52                                                                                | 0.13                                                                                | 0.77                                                                                | 0.68                                                                                | 0.02                                                                                |
| Avail Cap(c_a), veh/h        | 160                                                                               | 1152                                                                              | 514                                                                               | 311                                                                               | 1152                                                                              | 682                                                                               | 311                                                                                 | 1159                                                                                | 517                                                                                 | 367                                                                                 | 1289                                                                                | 575                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 26.7                                                                              | 20.6                                                                              | 21.5                                                                              | 24.3                                                                              | 17.7                                                                              | 13.1                                                                              | 24.3                                                                                | 14.7                                                                                | 12.7                                                                                | 23.7                                                                                | 14.5                                                                                | 11.0                                                                                |
| Incr Delay (d2), s/veh       | 12.1                                                                              | 0.5                                                                               | 2.9                                                                               | 1.1                                                                               | 0.2                                                                               | 0.1                                                                               | 1.1                                                                                 | 1.6                                                                                 | 0.5                                                                                 | 9.6                                                                                 | 2.8                                                                                 | 0.1                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.2                                                                               | 1.2                                                                               | 2.0                                                                               | 0.6                                                                               | 0.9                                                                               | 0.6                                                                               | 0.6                                                                                 | 2.6                                                                                 | 0.6                                                                                 | 2.0                                                                                 | 4.0                                                                                 | 0.1                                                                                 |
| Unsig. Movement Delay, s/veh |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| LnGrp Delay(d),s/veh         | 38.8                                                                              | 21.1                                                                              | 24.4                                                                              | 25.4                                                                              | 17.8                                                                              | 13.2                                                                              | 25.4                                                                                | 16.4                                                                                | 13.2                                                                                | 33.3                                                                                | 17.4                                                                                | 11.0                                                                                |
| LnGrp LOS                    | D                                                                                 | C                                                                                 | C                                                                                 | C                                                                                 | B                                                                                 | B                                                                                 | C                                                                                   | B                                                                                   | B                                                                                   | C                                                                                   | B                                                                                   | B                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 402                                                                               |                                                                                   |                                                                                   | 359                                                                               |                                                                                   |                                                                                     | 761                                                                                 |                                                                                     |                                                                                     | 1164                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 22.9                                                                              |                                                                                   |                                                                                   | 18.9                                                                              |                                                                                   |                                                                                     | 17.3                                                                                |                                                                                     |                                                                                     | 21.2                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                   |                                                                                     | B                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer - Assigned Phs         | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 10.4                                                                              | 22.6                                                                              | 8.4                                                                               | 13.3                                                                              | 8.4                                                                               | 24.6                                                                              | 5.3                                                                                 | 16.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                                 | 4.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 5.9                                                                               | 18.1                                                                              | 5.0                                                                               | 18.0                                                                              | 5.0                                                                               | 19.0                                                                              | 5.0                                                                                 | 18.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 6.4                                                                               | 9.5                                                                               | 3.5                                                                               | 7.4                                                                               | 3.5                                                                               | 13.4                                                                              | 2.3                                                                                 | 4.4                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 2.5                                                                               | 0.0                                                                               | 1.4                                                                               | 0.0                                                                               | 2.6                                                                               | 0.0                                                                                 | 1.1                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 6th Ctrl Delay           |                                                                                   |                                                                                   | 20.0                                                                              |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| HCM 6th LOS                  |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Roseville Parkway Extension and Bridge  
2: Washington Blvd & Roseville Pkwy Extension

Existing (2020) plus Project  
Timing Plan: PM Peak-Hour

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                 | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |  |  |  |  |  |  |  |  |  |                                                                                     |
| Traffic Volume (veh/h)       | 10                                                                                | 320                                                                               | 200                                                                               | 60                                                                                | 260                                                                               | 450                                                                               | 40                                                                                  | 470                                                                                 | 50                                                                                  | 210                                                                                 | 410                                                                                 | 30                                                                                  |
| Future Volume (veh/h)        | 10                                                                                | 320                                                                               | 200                                                                               | 60                                                                                | 260                                                                               | 450                                                                               | 40                                                                                  | 470                                                                                 | 50                                                                                  | 210                                                                                 | 410                                                                                 | 30                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Work Zone On Approach        | No                                                                                |                                                                                   |                                                                                   | No                                                                                |                                                                                   |                                                                                   | No                                                                                  |                                                                                     |                                                                                     | No                                                                                  |                                                                                     |                                                                                     |
| Adj Sat Flow, veh/h/ln       | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                |
| Adj Flow Rate, veh/h         | 11                                                                                | 348                                                                               | 0                                                                                 | 65                                                                                | 283                                                                               | 0                                                                                 | 43                                                                                  | 511                                                                                 | 0                                                                                   | 228                                                                                 | 446                                                                                 | 33                                                                                  |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Cap, veh/h                   | 48                                                                                | 562                                                                               |                                                                                   | 197                                                                               | 715                                                                               |                                                                                   | 77                                                                                  | 1210                                                                                |                                                                                     | 336                                                                                 | 1323                                                                                | 98                                                                                  |
| Arrive On Green              | 0.01                                                                              | 0.16                                                                              | 0.00                                                                              | 0.06                                                                              | 0.20                                                                              | 0.00                                                                              | 0.04                                                                                | 0.35                                                                                | 0.00                                                                                | 0.10                                                                                | 0.40                                                                                | 0.40                                                                                |
| Sat Flow, veh/h              | 3401                                                                              | 3497                                                                              | 1560                                                                              | 3401                                                                              | 3497                                                                              | 1560                                                                              | 1753                                                                                | 3497                                                                                | 1560                                                                                | 3401                                                                                | 3302                                                                                | 244                                                                                 |
| Grp Volume(v), veh/h         | 11                                                                                | 348                                                                               | 0                                                                                 | 65                                                                                | 283                                                                               | 0                                                                                 | 43                                                                                  | 511                                                                                 | 0                                                                                   | 228                                                                                 | 236                                                                                 | 243                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1700                                                                              | 1749                                                                              | 1560                                                                              | 1700                                                                              | 1749                                                                              | 1560                                                                              | 1753                                                                                | 1749                                                                                | 1560                                                                                | 1700                                                                                | 1749                                                                                | 1797                                                                                |
| Q Serve(g_s), s              | 0.2                                                                               | 5.0                                                                               | 0.0                                                                               | 1.0                                                                               | 3.7                                                                               | 0.0                                                                               | 1.3                                                                                 | 6.0                                                                                 | 0.0                                                                                 | 3.5                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Cycle Q Clear(g_c), s        | 0.2                                                                               | 5.0                                                                               | 0.0                                                                               | 1.0                                                                               | 3.7                                                                               | 0.0                                                                               | 1.3                                                                                 | 6.0                                                                                 | 0.0                                                                                 | 3.5                                                                                 | 5.0                                                                                 | 5.0                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                                |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.14                                                                                |
| Lane Grp Cap(c), veh/h       | 48                                                                                | 562                                                                               |                                                                                   | 197                                                                               | 715                                                                               |                                                                                   | 77                                                                                  | 1210                                                                                |                                                                                     | 336                                                                                 | 701                                                                                 | 720                                                                                 |
| V/C Ratio(X)                 | 0.23                                                                              | 0.62                                                                              |                                                                                   | 0.33                                                                              | 0.40                                                                              |                                                                                   | 0.56                                                                                | 0.42                                                                                |                                                                                     | 0.68                                                                                | 0.34                                                                                | 0.34                                                                                |
| Avail Cap(c_a), veh/h        | 318                                                                               | 1177                                                                              |                                                                                   | 318                                                                               | 1177                                                                              |                                                                                   | 164                                                                                 | 1210                                                                                |                                                                                     | 350                                                                                 | 701                                                                                 | 720                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(l)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                                | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 26.1                                                                              | 20.9                                                                              | 0.0                                                                               | 24.2                                                                              | 18.4                                                                              | 0.0                                                                               | 25.0                                                                                | 13.4                                                                                | 0.0                                                                                 | 23.3                                                                                | 11.1                                                                                | 11.1                                                                                |
| Incr Delay (d2), s/veh       | 2.4                                                                               | 1.1                                                                               | 0.0                                                                               | 1.0                                                                               | 0.4                                                                               | 0.0                                                                               | 6.1                                                                                 | 1.1                                                                                 | 0.0                                                                                 | 5.0                                                                                 | 1.3                                                                                 | 1.3                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.1                                                                               | 1.9                                                                               | 0.0                                                                               | 0.4                                                                               | 1.3                                                                               | 0.0                                                                               | 0.6                                                                                 | 2.0                                                                                 | 0.0                                                                                 | 1.4                                                                                 | 1.7                                                                                 | 1.8                                                                                 |
| Unsig. Movement Delay, s/veh |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| LnGrp Delay(d),s/veh         | 28.5                                                                              | 22.0                                                                              | 0.0                                                                               | 25.2                                                                              | 18.8                                                                              | 0.0                                                                               | 31.1                                                                                | 14.5                                                                                | 0.0                                                                                 | 28.2                                                                                | 12.4                                                                                | 12.4                                                                                |
| LnGrp LOS                    | C                                                                                 | C                                                                                 |                                                                                   | C                                                                                 | B                                                                                 |                                                                                   | C                                                                                   | B                                                                                   |                                                                                     | C                                                                                   | B                                                                                   | B                                                                                   |
| Approach Vol, veh/h          |                                                                                   |                                                                                   | A                                                                                 |                                                                                   |                                                                                   | A                                                                                 |                                                                                     |                                                                                     | 554                                                                                 | A                                                                                   |                                                                                     |                                                                                     |
| Approach Delay, s/veh        |                                                                                   |                                                                                   | 22.2                                                                              |                                                                                   |                                                                                   | 20.0                                                                              |                                                                                     |                                                                                     | 15.8                                                                                |                                                                                     |                                                                                     | 17.5                                                                                |
| Approach LOS                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | B                                                                                 |                                                                                     |                                                                                     | B                                                                                   |                                                                                     |                                                                                     | B                                                                                   |
| Timer - Assigned Phs         | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                   | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 9.8                                                                               | 23.0                                                                              | 7.6                                                                               | 13.1                                                                              | 6.9                                                                               | 25.9                                                                              | 5.3                                                                                 | 15.4                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                                 | 4.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 5.5                                                                               | 18.5                                                                              | 5.0                                                                               | 18.0                                                                              | 5.0                                                                               | 19.0                                                                              | 5.0                                                                                 | 18.0                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 5.5                                                                               | 8.0                                                                               | 3.0                                                                               | 7.0                                                                               | 3.3                                                                               | 7.0                                                                               | 2.2                                                                                 | 5.7                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 2.2                                                                               | 0.0                                                                               | 1.6                                                                               | 0.0                                                                               | 2.0                                                                               | 0.0                                                                                 | 1.2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Intersection Summary

|                    |      |
|--------------------|------|
| HCM 6th Ctrl Delay | 18.3 |
| HCM 6th LOS        | B    |

Notes

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Roseville Parkway Extension and Bridge  
1: Roseville Pkwy Extension & Foothills Blvd

Existing (2020) plus Project  
Timing Plan: PM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Group Flow (vph)   | 11                                                                                | 228                                                                               | 163                                                                               | 98                                                                                | 185                                                                               | 76                                                                                | 98                                                                                 | 598                                                                                 | 65                                                                                  | 283                                                                                 | 870                                                                                 | 11                                                                                  |
| v/c Ratio               | 0.07                                                                              | 0.39                                                                              | 0.40                                                                              | 0.31                                                                              | 0.20                                                                              | 0.10                                                                              | 0.31                                                                               | 0.51                                                                                | 0.10                                                                                | 0.76                                                                                | 0.63                                                                                | 0.02                                                                                |
| Control Delay           | 25.6                                                                              | 22.8                                                                              | 6.9                                                                               | 27.6                                                                              | 16.4                                                                              | 2.3                                                                               | 27.6                                                                               | 17.4                                                                                | 0.3                                                                                 | 41.6                                                                                | 18.5                                                                                | 0.0                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 25.6                                                                              | 22.8                                                                              | 6.9                                                                               | 27.6                                                                              | 16.4                                                                              | 2.3                                                                               | 27.6                                                                               | 17.4                                                                                | 0.3                                                                                 | 41.6                                                                                | 18.5                                                                                | 0.0                                                                                 |
| Queue Length 50th (ft)  | 3                                                                                 | 36                                                                                | 0                                                                                 | 15                                                                                | 22                                                                                | 0                                                                                 | 15                                                                                 | 84                                                                                  | 0                                                                                   | 48                                                                                  | 131                                                                                 | 0                                                                                   |
| Queue Length 95th (ft)  | 17                                                                                | 63                                                                                | 36                                                                                | 37                                                                                | 53                                                                                | 15                                                                                | 37                                                                                 | 138                                                                                 | 0                                                                                   | #111                                                                                | #212                                                                                | 0                                                                                   |
| Internal Link Dist (ft) | 1797                                                                              |                                                                                   |                                                                                   | 3594                                                                              |                                                                                   |                                                                                   | 312                                                                                |                                                                                     |                                                                                     | 2459                                                                                |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    | 220                                                                               |                                                                                   | 230                                                                               | 220                                                                               |                                                                                   | 230                                                                               | 265                                                                                |                                                                                     | 265                                                                                 | 255                                                                                 |                                                                                     | 160                                                                                 |
| Base Capacity (vph)     | 161                                                                               | 1165                                                                              | 638                                                                               | 314                                                                               | 1187                                                                              | 772                                                                               | 314                                                                                | 1171                                                                                | 640                                                                                 | 370                                                                                 | 1380                                                                                | 723                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.07                                                                              | 0.20                                                                              | 0.26                                                                              | 0.31                                                                              | 0.16                                                                              | 0.10                                                                              | 0.31                                                                               | 0.51                                                                                | 0.10                                                                                | 0.76                                                                                | 0.63                                                                                | 0.02                                                                                |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Roseville Parkway Extension and Bridge  
2: Washington Blvd & Roseville Pkwy Extension

Existing (2020) plus Project  
Timing Plan: PM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Group Flow (vph)   | 11                                                                                | 348                                                                               | 217                                                                               | 65                                                                                | 283                                                                               | 489                                                                               | 43                                                                                 | 511                                                                                 | 54                                                                                  | 228                                                                                 | 479                                                                                 |
| v/c Ratio               | 0.04                                                                              | 0.47                                                                              | 0.43                                                                              | 0.21                                                                              | 0.29                                                                              | 0.67                                                                              | 0.27                                                                               | 0.43                                                                                | 0.08                                                                                | 0.67                                                                                | 0.30                                                                                |
| Control Delay           | 27.2                                                                              | 21.5                                                                              | 6.3                                                                               | 28.2                                                                              | 16.4                                                                              | 8.8                                                                               | 31.4                                                                               | 17.3                                                                                | 0.3                                                                                 | 38.6                                                                                | 13.2                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 27.2                                                                              | 21.5                                                                              | 6.3                                                                               | 28.2                                                                              | 16.4                                                                              | 8.8                                                                               | 31.4                                                                               | 17.3                                                                                | 0.3                                                                                 | 38.6                                                                                | 13.2                                                                                |
| Queue Length 50th (ft)  | 2                                                                                 | 57                                                                                | 0                                                                                 | 11                                                                                | 35                                                                                | 17                                                                                | 15                                                                                 | 75                                                                                  | 0                                                                                   | 41                                                                                  | 48                                                                                  |
| Queue Length 95th (ft)  | 9                                                                                 | 91                                                                                | 44                                                                                | 29                                                                                | 75                                                                                | 105                                                                               | 44                                                                                 | 132                                                                                 | 0                                                                                   | #100                                                                                | 119                                                                                 |
| Internal Link Dist (ft) | 3594                                                                              |                                                                                   |                                                                                   | 342                                                                               |                                                                                   |                                                                                   | 3613                                                                               |                                                                                     |                                                                                     | 349                                                                                 |                                                                                     |
| Turn Bay Length (ft)    | 200                                                                               |                                                                                   | 200                                                                               | 235                                                                               |                                                                                   | 200                                                                               | 200                                                                                |                                                                                     | 220                                                                                 | 245                                                                                 |                                                                                     |
| Base Capacity (vph)     | 311                                                                               | 1153                                                                              | 661                                                                               | 311                                                                               | 1260                                                                              | 828                                                                               | 160                                                                                | 1185                                                                                | 646                                                                                 | 341                                                                                 | 1607                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.04                                                                              | 0.30                                                                              | 0.33                                                                              | 0.21                                                                              | 0.22                                                                              | 0.59                                                                              | 0.27                                                                               | 0.43                                                                                | 0.08                                                                                | 0.67                                                                                | 0.30                                                                                |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

## Appendix D

*Analysis Worksheets for  
Cumulative (2035) plus Proposed Project Conditions*

Roseville Parkway Extension and Bridge  
1: Roseville Pkwy Extension & Foothills Blvd

Cumulative (2035) plus Project

Timing Plan: AM Peak-Hour

|                              |  |                                                                                    |  |                                                                                    |                                                                                    |  |                                                                                       |                                                                                      |  |                                                                                      |                                                                                      |  |
|------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                                                                                                                 | EBR                                                                               | WBL                                                                                                                                                                 | WBT                                                                                                                                                                 | WBR                                                                               | NBL                                                                                                                                                                     | NBT                                                                                                                                                                     | NBR                                                                                 | SBL                                                                                                                                                                     | SBT                                                                                                                                                                     | SBR                                                                                 |
| Lane Configurations          |  |   |  |   |   |  |   |   |  |   |   |  |
| Traffic Volume (veh/h)       | 21                                                                                | 271                                                                                                                                                                 | 164                                                                               | 356                                                                                                                                                                 | 460                                                                                                                                                                 | 374                                                                               | 244                                                                                                                                                                     | 941                                                                                                                                                                     | 358                                                                                 | 572                                                                                                                                                                     | 580                                                                                                                                                                     | 19                                                                                  |
| Future Volume (veh/h)        | 21                                                                                | 271                                                                                                                                                                 | 164                                                                               | 356                                                                                                                                                                 | 460                                                                                                                                                                 | 374                                                                               | 244                                                                                                                                                                     | 941                                                                                                                                                                     | 358                                                                                 | 572                                                                                                                                                                     | 580                                                                                                                                                                     | 19                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                                                                                                       | 0                                                                                                                                                                       | 0                                                                                   | 0                                                                                                                                                                       | 0                                                                                                                                                                       | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                    |                                                                                                                                                                         | 1.00                                                                                | 1.00                                                                                                                                                                    |                                                                                                                                                                         | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Work Zone On Approach        |                                                                                   | No                                                                                                                                                                  |                                                                                   |                                                                                                                                                                     | No                                                                                                                                                                  |                                                                                   |                                                                                                                                                                         | No                                                                                                                                                                      |                                                                                     |                                                                                                                                                                         | No                                                                                                                                                                      |                                                                                     |
| Adj Sat Flow, veh/h/ln       | 1841                                                                              | 1841                                                                                                                                                                | 1841                                                                              | 1841                                                                                                                                                                | 1841                                                                                                                                                                | 1841                                                                              | 1841                                                                                                                                                                    | 1841                                                                                                                                                                    | 1841                                                                                | 1841                                                                                                                                                                    | 1841                                                                                                                                                                    | 1841                                                                                |
| Adj Flow Rate, veh/h         | 23                                                                                | 295                                                                                                                                                                 | 178                                                                               | 387                                                                                                                                                                 | 500                                                                                                                                                                 | 407                                                                               | 265                                                                                                                                                                     | 1023                                                                                                                                                                    | 389                                                                                 | 622                                                                                                                                                                     | 630                                                                                                                                                                     | 21                                                                                  |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                                                                                                                | 0.92                                                                              | 0.92                                                                                                                                                                | 0.92                                                                                                                                                                | 0.92                                                                              | 0.92                                                                                                                                                                    | 0.92                                                                                                                                                                    | 0.92                                                                                | 0.92                                                                                                                                                                    | 0.92                                                                                                                                                                    | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                                                                                                   | 4                                                                                 | 4                                                                                                                                                                   | 4                                                                                                                                                                   | 4                                                                                 | 4                                                                                                                                                                       | 4                                                                                                                                                                       | 4                                                                                   | 4                                                                                                                                                                       | 4                                                                                                                                                                       | 4                                                                                   |
| Cap, veh/h                   | 43                                                                                | 522                                                                                                                                                                 | 233                                                                               | 434                                                                                                                                                                 | 882                                                                                                                                                                 | 703                                                                               | 351                                                                                                                                                                     | 1091                                                                                                                                                                    | 487                                                                                 | 675                                                                                                                                                                     | 1425                                                                                                                                                                    | 635                                                                                 |
| Arrive On Green              | 0.02                                                                              | 0.15                                                                                                                                                                | 0.15                                                                              | 0.13                                                                                                                                                                | 0.25                                                                                                                                                                | 0.25                                                                              | 0.10                                                                                                                                                                    | 0.31                                                                                                                                                                    | 0.31                                                                                | 0.20                                                                                                                                                                    | 0.41                                                                                                                                                                    | 0.41                                                                                |
| Sat Flow, veh/h              | 1753                                                                              | 3497                                                                                                                                                                | 1560                                                                              | 3401                                                                                                                                                                | 3497                                                                                                                                                                | 1560                                                                              | 3401                                                                                                                                                                    | 3497                                                                                                                                                                    | 1560                                                                                | 3401                                                                                                                                                                    | 3497                                                                                                                                                                    | 1560                                                                                |
| Grp Volume(v), veh/h         | 23                                                                                | 295                                                                                                                                                                 | 178                                                                               | 387                                                                                                                                                                 | 500                                                                                                                                                                 | 407                                                                               | 265                                                                                                                                                                     | 1023                                                                                                                                                                    | 389                                                                                 | 622                                                                                                                                                                     | 630                                                                                                                                                                     | 21                                                                                  |
| Grp Sat Flow(s),veh/h/ln     | 1753                                                                              | 1749                                                                                                                                                                | 1560                                                                              | 1700                                                                                                                                                                | 1749                                                                                                                                                                | 1560                                                                              | 1700                                                                                                                                                                    | 1749                                                                                                                                                                    | 1560                                                                                | 1700                                                                                                                                                                    | 1749                                                                                                                                                                    | 1560                                                                                |
| Q Serve(g_s), s              | 1.1                                                                               | 6.6                                                                                                                                                                 | 9.3                                                                               | 9.5                                                                                                                                                                 | 10.6                                                                                                                                                                | 16.4                                                                              | 6.4                                                                                                                                                                     | 24.1                                                                                                                                                                    | 19.3                                                                                | 15.2                                                                                                                                                                    | 11.0                                                                                                                                                                    | 0.7                                                                                 |
| Cycle Q Clear(g_c), s        | 1.1                                                                               | 6.6                                                                                                                                                                 | 9.3                                                                               | 9.5                                                                                                                                                                 | 10.6                                                                                                                                                                | 16.4                                                                              | 6.4                                                                                                                                                                     | 24.1                                                                                                                                                                    | 19.3                                                                                | 15.2                                                                                                                                                                    | 11.0                                                                                                                                                                    | 0.7                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                    |                                                                                                                                                                         | 1.00                                                                                | 1.00                                                                                                                                                                    |                                                                                                                                                                         | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 43                                                                                | 522                                                                                                                                                                 | 233                                                                               | 434                                                                                                                                                                 | 882                                                                                                                                                                 | 703                                                                               | 351                                                                                                                                                                     | 1091                                                                                                                                                                    | 487                                                                                 | 675                                                                                                                                                                     | 1425                                                                                                                                                                    | 635                                                                                 |
| V/C Ratio(X)                 | 0.53                                                                              | 0.57                                                                                                                                                                | 0.76                                                                              | 0.89                                                                                                                                                                | 0.57                                                                                                                                                                | 0.58                                                                              | 0.76                                                                                                                                                                    | 0.94                                                                                                                                                                    | 0.80                                                                                | 0.92                                                                                                                                                                    | 0.44                                                                                                                                                                    | 0.03                                                                                |
| Avail Cap(c_a), veh/h        | 114                                                                               | 744                                                                                                                                                                 | 332                                                                               | 434                                                                                                                                                                 | 963                                                                                                                                                                 | 739                                                                               | 502                                                                                                                                                                     | 1091                                                                                                                                                                    | 487                                                                                 | 675                                                                                                                                                                     | 1425                                                                                                                                                                    | 635                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Upstream Filter(l)           | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 40.8                                                                              | 33.4                                                                                                                                                                | 34.6                                                                              | 36.3                                                                                                                                                                | 27.6                                                                                                                                                                | 17.3                                                                              | 36.9                                                                                                                                                                    | 28.3                                                                                                                                                                    | 26.7                                                                                | 33.3                                                                                                                                                                    | 18.1                                                                                                                                                                    | 15.1                                                                                |
| Incr Delay (d2), s/veh       | 9.8                                                                               | 1.0                                                                                                                                                                 | 6.5                                                                               | 20.1                                                                                                                                                                | 0.7                                                                                                                                                                 | 1.0                                                                               | 4.0                                                                                                                                                                     | 15.9                                                                                                                                                                    | 12.9                                                                                | 18.1                                                                                                                                                                    | 1.0                                                                                                                                                                     | 0.1                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                                                                                                                     | 0.0                                                                                                                                                                     | 0.0                                                                                 | 0.0                                                                                                                                                                     | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.6                                                                               | 2.8                                                                                                                                                                 | 3.9                                                                               | 5.1                                                                                                                                                                 | 4.4                                                                                                                                                                 | 5.7                                                                               | 2.7                                                                                                                                                                     | 11.5                                                                                                                                                                    | 8.6                                                                                 | 7.5                                                                                                                                                                     | 4.2                                                                                                                                                                     | 0.3                                                                                 |
| Unsig. Movement Delay, s/veh |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| LnGrp Delay(d),s/veh         | 50.5                                                                              | 34.4                                                                                                                                                                | 41.0                                                                              | 56.4                                                                                                                                                                | 28.3                                                                                                                                                                | 18.3                                                                              | 40.9                                                                                                                                                                    | 44.2                                                                                                                                                                    | 39.6                                                                                | 51.4                                                                                                                                                                    | 19.1                                                                                                                                                                    | 15.2                                                                                |
| LnGrp LOS                    | D                                                                                 | C                                                                                                                                                                   | D                                                                                 | E                                                                                                                                                                   | C                                                                                                                                                                   | B                                                                                 | D                                                                                                                                                                       | D                                                                                                                                                                       | D                                                                                   | D                                                                                                                                                                       | B                                                                                                                                                                       | B                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 496                                                                                                                                                                 |                                                                                   |                                                                                                                                                                     | 1294                                                                                                                                                                |                                                                                   |                                                                                                                                                                         | 1677                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         | 1273                                                                                                                                                                    |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 37.5                                                                                                                                                                |                                                                                   |                                                                                                                                                                     | 33.6                                                                                                                                                                |                                                                                   |                                                                                                                                                                         | 42.6                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         | 34.8                                                                                                                                                                    |                                                                                     |
| Approach LOS                 |                                                                                   | D                                                                                                                                                                   |                                                                                   |                                                                                                                                                                     | C                                                                                                                                                                   |                                                                                   |                                                                                                                                                                         | D                                                                                                                                                                       |                                                                                     |                                                                                                                                                                         | C                                                                                                                                                                       |                                                                                     |
| Timer - Assigned Phs         | 1                                                                                 | 2                                                                                                                                                                   | 3                                                                                 | 4                                                                                                                                                                   | 5                                                                                                                                                                   | 6                                                                                 | 7                                                                                                                                                                       | 8                                                                                                                                                                       |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 21.3                                                                              | 30.9                                                                                                                                                                | 15.3                                                                              | 17.1                                                                                                                                                                | 13.2                                                                                                                                                                | 39.0                                                                              | 6.6                                                                                                                                                                     | 25.8                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Change Period (Y+Rc), s      | 4.5                                                                               | 4.5                                                                                                                                                                 | 4.5                                                                               | 4.5                                                                                                                                                                 | 4.5                                                                                                                                                                 | 4.5                                                                               | 4.5                                                                                                                                                                     | 4.5                                                                                                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Max Green Setting (Gmax), s  | 16.8                                                                              | 26.4                                                                                                                                                                | 10.8                                                                              | 18.0                                                                                                                                                                | 12.5                                                                                                                                                                | 30.7                                                                              | 5.5                                                                                                                                                                     | 23.3                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 17.2                                                                              | 26.1                                                                                                                                                                | 11.5                                                                              | 11.3                                                                                                                                                                | 8.4                                                                                                                                                                 | 13.0                                                                              | 3.1                                                                                                                                                                     | 18.4                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Green Ext Time (p_c), s      | 0.0                                                                               | 0.2                                                                                                                                                                 | 0.0                                                                               | 1.4                                                                                                                                                                 | 0.3                                                                                                                                                                 | 3.7                                                                               | 0.0                                                                                                                                                                     | 2.2                                                                                                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| HCM 6th Ctrl Delay           |                                                                                   |                                                                                                                                                                     | 37.5                                                                              |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| HCM 6th LOS                  |                                                                                   |                                                                                                                                                                     | D                                                                                 |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |

Roseville Parkway Extension and Bridge  
2: Washington Blvd & Roseville Pkwy Extension

Cumulative (2035) plus Project  
Timing Plan: AM Peak-Hour

|                              |  |  |  |  |  |  |  |  |  |  |  |  |
|------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Configurations          |  |  |  |  |  |  |  |  |  |  |  |  |
| Traffic Volume (veh/h)       | 43                                                                                | 635                                                                               | 7                                                                                 | 24                                                                                | 766                                                                               | 543                                                                               | 29                                                                                 | 535                                                                                 | 25                                                                                  | 307                                                                                 | 642                                                                                 | 19                                                                                  |
| Future Volume (veh/h)        | 43                                                                                | 635                                                                               | 7                                                                                 | 24                                                                                | 766                                                                               | 543                                                                               | 29                                                                                 | 535                                                                                 | 25                                                                                  | 307                                                                                 | 642                                                                                 | 19                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Work Zone On Approach        |                                                                                   | No                                                                                |                                                                                   |                                                                                   | No                                                                                |                                                                                   |                                                                                    | No                                                                                  |                                                                                     |                                                                                     | No                                                                                  |                                                                                     |
| Adj Sat Flow, veh/h/ln       | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                              | 1841                                                                               | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                | 1841                                                                                |
| Adj Flow Rate, veh/h         | 47                                                                                | 690                                                                               | 0                                                                                 | 26                                                                                | 833                                                                               | 0                                                                                 | 32                                                                                 | 582                                                                                 | 0                                                                                   | 334                                                                                 | 698                                                                                 | 21                                                                                  |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                 | 4                                                                                  | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   | 4                                                                                   |
| Cap, veh/h                   | 146                                                                               | 1047                                                                              |                                                                                   | 97                                                                                | 996                                                                               |                                                                                   | 58                                                                                 | 1007                                                                                |                                                                                     | 427                                                                                 | 1318                                                                                | 40                                                                                  |
| Arrive On Green              | 0.04                                                                              | 0.30                                                                              | 0.00                                                                              | 0.03                                                                              | 0.28                                                                              | 0.00                                                                              | 0.03                                                                               | 0.29                                                                                | 0.00                                                                                | 0.13                                                                                | 0.38                                                                                | 0.38                                                                                |
| Sat Flow, veh/h              | 3401                                                                              | 3497                                                                              | 1560                                                                              | 3401                                                                              | 3497                                                                              | 1560                                                                              | 1753                                                                               | 3497                                                                                | 1560                                                                                | 3401                                                                                | 3466                                                                                | 104                                                                                 |
| Grp Volume(v), veh/h         | 47                                                                                | 690                                                                               | 0                                                                                 | 26                                                                                | 833                                                                               | 0                                                                                 | 32                                                                                 | 582                                                                                 | 0                                                                                   | 334                                                                                 | 352                                                                                 | 367                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1700                                                                              | 1749                                                                              | 1560                                                                              | 1700                                                                              | 1749                                                                              | 1560                                                                              | 1753                                                                               | 1749                                                                                | 1560                                                                                | 1700                                                                                | 1749                                                                                | 1822                                                                                |
| Q Serve(g_s), s              | 0.9                                                                               | 12.0                                                                              | 0.0                                                                               | 0.5                                                                               | 15.5                                                                              | 0.0                                                                               | 1.2                                                                                | 9.9                                                                                 | 0.0                                                                                 | 6.6                                                                                 | 10.9                                                                                | 10.9                                                                                |
| Cycle Q Clear(g_c), s        | 0.9                                                                               | 12.0                                                                              | 0.0                                                                               | 0.5                                                                               | 15.5                                                                              | 0.0                                                                               | 1.2                                                                                | 9.9                                                                                 | 0.0                                                                                 | 6.6                                                                                 | 10.9                                                                                | 10.9                                                                                |
| Prop In Lane                 | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                              |                                                                                   | 1.00                                                                              | 1.00                                                                               |                                                                                     | 1.00                                                                                | 1.00                                                                                |                                                                                     | 0.06                                                                                |
| Lane Grp Cap(c), veh/h       | 146                                                                               | 1047                                                                              |                                                                                   | 97                                                                                | 996                                                                               |                                                                                   | 58                                                                                 | 1007                                                                                |                                                                                     | 427                                                                                 | 665                                                                                 | 693                                                                                 |
| V/C Ratio(X)                 | 0.32                                                                              | 0.66                                                                              |                                                                                   | 0.27                                                                              | 0.84                                                                              |                                                                                   | 0.55                                                                               | 0.58                                                                                |                                                                                     | 0.78                                                                                | 0.53                                                                                | 0.53                                                                                |
| Avail Cap(c_a), veh/h        | 245                                                                               | 1132                                                                              |                                                                                   | 245                                                                               | 1132                                                                              |                                                                                   | 129                                                                                | 1007                                                                                |                                                                                     | 465                                                                                 | 665                                                                                 | 693                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                              | 1.00                                                                              | 0.00                                                                              | 1.00                                                                               | 1.00                                                                                | 0.00                                                                                | 1.00                                                                                | 1.00                                                                                | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 32.3                                                                              | 21.3                                                                              | 0.0                                                                               | 33.1                                                                              | 23.3                                                                              | 0.0                                                                               | 33.1                                                                               | 21.1                                                                                | 0.0                                                                                 | 29.5                                                                                | 16.7                                                                                | 16.7                                                                                |
| Incr Delay (d2), s/veh       | 1.3                                                                               | 1.3                                                                               | 0.0                                                                               | 1.5                                                                               | 5.1                                                                               | 0.0                                                                               | 7.9                                                                                | 2.4                                                                                 | 0.0                                                                                 | 7.8                                                                                 | 3.0                                                                                 | 2.9                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.4                                                                               | 4.8                                                                               | 0.0                                                                               | 0.2                                                                               | 6.3                                                                               | 0.0                                                                               | 0.6                                                                                | 3.9                                                                                 | 0.0                                                                                 | 2.9                                                                                 | 4.3                                                                                 | 4.4                                                                                 |
| Unsig. Movement Delay, s/veh |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                   |                                                                                    |                                                                                     |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| LnGrp Delay(d),s/veh         | 33.5                                                                              | 22.5                                                                              | 0.0                                                                               | 34.5                                                                              | 28.4                                                                              | 0.0                                                                               | 41.0                                                                               | 23.6                                                                                | 0.0                                                                                 | 37.3                                                                                | 19.7                                                                                | 19.6                                                                                |
| LnGrp LOS                    | C                                                                                 | C                                                                                 |                                                                                   | C                                                                                 | C                                                                                 |                                                                                   | D                                                                                  | C                                                                                   |                                                                                     | D                                                                                   | B                                                                                   | B                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 737                                                                               | A                                                                                 |                                                                                   | 859                                                                               | A                                                                                 |                                                                                    | 614                                                                                 | A                                                                                   |                                                                                     | 1053                                                                                |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 23.2                                                                              |                                                                                   |                                                                                   | 28.6                                                                              |                                                                                   |                                                                                    | 24.5                                                                                |                                                                                     |                                                                                     | 25.3                                                                                |                                                                                     |
| Approach LOS                 |                                                                                   | C                                                                                 |                                                                                   |                                                                                   | C                                                                                 |                                                                                   |                                                                                    | C                                                                                   |                                                                                     |                                                                                     | C                                                                                   |                                                                                     |
| Timer - Assigned Phs         | 1                                                                                 | 2                                                                                 | 3                                                                                 | 4                                                                                 | 5                                                                                 | 6                                                                                 | 7                                                                                  | 8                                                                                   |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 13.2                                                                              | 24.5                                                                              | 6.5                                                                               | 25.3                                                                              | 6.8                                                                               | 30.9                                                                              | 7.5                                                                                | 24.3                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Change Period (Y+Rc), s      | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                               | 4.5                                                                                | 4.5                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Green Setting (Gmax), s  | 9.5                                                                               | 20.0                                                                              | 5.0                                                                               | 22.5                                                                              | 5.1                                                                               | 24.4                                                                              | 5.0                                                                                | 22.5                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 8.6                                                                               | 11.9                                                                              | 2.5                                                                               | 14.0                                                                              | 3.2                                                                               | 12.9                                                                              | 2.9                                                                                | 17.5                                                                                |                                                                                     |                                                                                     |                                                                                     |                                                                                     |
| Green Ext Time (p_c), s      | 0.1                                                                               | 2.2                                                                               | 0.0                                                                               | 3.0                                                                               | 0.0                                                                               | 3.1                                                                               | 0.0                                                                                | 2.2                                                                                 |                                                                                     |                                                                                     |                                                                                     |                                                                                     |

Intersection Summary

|                    |      |
|--------------------|------|
| HCM 6th Ctrl Delay | 25.5 |
| HCM 6th LOS        | C    |

Notes

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Roseville Parkway Extension and Bridge  
1: Roseville Pkwy Extension & Foothills Blvd

Cumulative (2035) plus Project  
Timing Plan: AM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Group Flow (vph)   | 23                                                                                | 295                                                                               | 178                                                                               | 387                                                                               | 500                                                                               | 407                                                                               | 265                                                                                | 1023                                                                                | 389                                                                                 | 622                                                                                 | 630                                                                                 | 21                                                                                  |
| v/c Ratio               | 0.21                                                                              | 0.56                                                                              | 0.46                                                                              | 0.90                                                                              | 0.50                                                                              | 0.46                                                                              | 0.60                                                                               | 0.95                                                                                | 0.58                                                                                | 0.93                                                                                | 0.48                                                                                | 0.03                                                                                |
| Control Delay           | 43.7                                                                              | 37.5                                                                              | 8.9                                                                               | 64.1                                                                              | 28.2                                                                              | 10.8                                                                              | 41.4                                                                               | 47.9                                                                                | 12.3                                                                                | 57.6                                                                                | 22.5                                                                                | 0.1                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 43.7                                                                              | 37.5                                                                              | 8.9                                                                               | 64.1                                                                              | 28.2                                                                              | 10.8                                                                              | 41.4                                                                               | 47.9                                                                                | 12.3                                                                                | 57.6                                                                                | 22.5                                                                                | 0.1                                                                                 |
| Queue Length 50th (ft)  | 12                                                                                | 77                                                                                | 0                                                                                 | 105                                                                               | 108                                                                               | 71                                                                                | 68                                                                                 | 275                                                                                 | 48                                                                                  | 168                                                                                 | 132                                                                                 | 0                                                                                   |
| Queue Length 95th (ft)  | 37                                                                                | 117                                                                               | 51                                                                                | #204                                                                              | 181                                                                               | 176                                                                               | 113                                                                                | #447                                                                                | 147                                                                                 | #294                                                                                | 203                                                                                 | 0                                                                                   |
| Internal Link Dist (ft) | 1797                                                                              |                                                                                   |                                                                                   | 3594                                                                              |                                                                                   |                                                                                   | 312                                                                                |                                                                                     |                                                                                     | 2459                                                                                |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    | 220                                                                               |                                                                                   | 230                                                                               | 220                                                                               |                                                                                   | 230                                                                               | 265                                                                                |                                                                                     | 265                                                                                 | 255                                                                                 |                                                                                     | 160                                                                                 |
| Base Capacity (vph)     | 112                                                                               | 735                                                                               | 472                                                                               | 428                                                                               | 1021                                                                              | 892                                                                               | 495                                                                                | 1079                                                                                | 666                                                                                 | 666                                                                                 | 1312                                                                                | 700                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.21                                                                              | 0.40                                                                              | 0.38                                                                              | 0.90                                                                              | 0.49                                                                              | 0.46                                                                              | 0.54                                                                               | 0.95                                                                                | 0.58                                                                                | 0.93                                                                                | 0.48                                                                                | 0.03                                                                                |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



Roseville Parkway Extension and Bridge  
2: Washington Blvd & Roseville Pkwy Extension

Cumulative (2035) plus Project  
Timing Plan: AM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Group Flow (vph)   | 47                                                                                | 690                                                                               | 8                                                                                 | 26                                                                                | 833                                                                               | 590                                                                               | 32                                                                                 | 582                                                                                 | 27                                                                                  | 334                                                                                 | 719                                                                                 |
| v/c Ratio               | 0.19                                                                              | 0.60                                                                              | 0.01                                                                              | 0.11                                                                              | 0.78                                                                              | 0.86                                                                              | 0.25                                                                               | 0.58                                                                                | 0.05                                                                                | 0.74                                                                                | 0.48                                                                                |
| Control Delay           | 34.8                                                                              | 22.7                                                                              | 0.0                                                                               | 33.9                                                                              | 29.0                                                                              | 27.1                                                                              | 38.2                                                                               | 25.3                                                                                | 0.2                                                                                 | 41.9                                                                                | 17.8                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 34.8                                                                              | 22.7                                                                              | 0.0                                                                               | 33.9                                                                              | 29.0                                                                              | 27.1                                                                              | 38.2                                                                               | 25.3                                                                                | 0.2                                                                                 | 41.9                                                                                | 17.8                                                                                |
| Queue Length 50th (ft)  | 10                                                                                | 116                                                                               | 0                                                                                 | 6                                                                                 | 186                                                                               | 133                                                                               | 14                                                                                 | 125                                                                                 | 0                                                                                   | 78                                                                                  | 115                                                                                 |
| Queue Length 95th (ft)  | 26                                                                                | 203                                                                               | 0                                                                                 | 18                                                                                | #256                                                                              | #332                                                                              | 40                                                                                 | 177                                                                                 | 0                                                                                   | #139                                                                                | 204                                                                                 |
| Internal Link Dist (ft) | 3594                                                                              |                                                                                   |                                                                                   | 342                                                                               |                                                                                   |                                                                                   | 395                                                                                |                                                                                     |                                                                                     | 349                                                                                 |                                                                                     |
| Turn Bay Length (ft)    | 260                                                                               |                                                                                   | 260                                                                               | 235                                                                               |                                                                                   | 200                                                                               | 200                                                                                |                                                                                     | 220                                                                                 | 245                                                                                 |                                                                                     |
| Base Capacity (vph)     | 242                                                                               | 1210                                                                              | 641                                                                               | 242                                                                               | 1122                                                                              | 703                                                                               | 127                                                                                | 997                                                                                 | 555                                                                                 | 459                                                                                 | 1508                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.19                                                                              | 0.57                                                                              | 0.01                                                                              | 0.11                                                                              | 0.74                                                                              | 0.84                                                                              | 0.25                                                                               | 0.58                                                                                | 0.05                                                                                | 0.73                                                                                | 0.48                                                                                |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Roseville Parkway Extension and Bridge  
1: Roseville Pkwy Extension & Foothills Blvd

Cumulative (2035) plus Project  
Timing Plan: PM Peak-Hour

|                              |  |                                                                                    |  |                                                                                    |                                                                                    |  |                                                                                      |                                                                                      |  |                                                                                      |                                                                                      |  |
|------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                               | EBT                                                                                                                                                                 | EBR                                                                               | WBL                                                                                                                                                                 | WBT                                                                                                                                                                 | WBR                                                                               | NBL                                                                                                                                                                    | NBT                                                                                                                                                                     | NBR                                                                                 | SBL                                                                                                                                                                     | SBT                                                                                                                                                                     | SBR                                                                                 |
| Lane Configurations          |  |   |  |   |   |  |   |   |  |   |   |  |
| Traffic Volume (veh/h)       | 25                                                                                | 482                                                                                                                                                                 | 260                                                                               | 357                                                                                                                                                                 | 570                                                                                                                                                                 | 588                                                                               | 211                                                                                                                                                                    | 808                                                                                                                                                                     | 341                                                                                 | 420                                                                                                                                                                     | 1233                                                                                                                                                                    | 6                                                                                   |
| Future Volume (veh/h)        | 25                                                                                | 482                                                                                                                                                                 | 260                                                                               | 357                                                                                                                                                                 | 570                                                                                                                                                                 | 588                                                                               | 211                                                                                                                                                                    | 808                                                                                                                                                                     | 341                                                                                 | 420                                                                                                                                                                     | 1233                                                                                                                                                                    | 6                                                                                   |
| Initial Q (Qb), veh          | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                                                                                                      | 0                                                                                                                                                                       | 0                                                                                   | 0                                                                                                                                                                       | 0                                                                                                                                                                       | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                              |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                   |                                                                                                                                                                         | 1.00                                                                                | 1.00                                                                                                                                                                    |                                                                                                                                                                         | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                   | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Work Zone On Approach        |                                                                                   | No                                                                                                                                                                  |                                                                                   |                                                                                                                                                                     | No                                                                                                                                                                  |                                                                                   |                                                                                                                                                                        | No                                                                                                                                                                      |                                                                                     |                                                                                                                                                                         | No                                                                                                                                                                      |                                                                                     |
| Adj Sat Flow, veh/h/ln       | 1841                                                                              | 1841                                                                                                                                                                | 1841                                                                              | 1841                                                                                                                                                                | 1841                                                                                                                                                                | 1841                                                                              | 1841                                                                                                                                                                   | 1841                                                                                                                                                                    | 1841                                                                                | 1841                                                                                                                                                                    | 1841                                                                                                                                                                    | 1841                                                                                |
| Adj Flow Rate, veh/h         | 27                                                                                | 524                                                                                                                                                                 | 283                                                                               | 388                                                                                                                                                                 | 620                                                                                                                                                                 | 639                                                                               | 229                                                                                                                                                                    | 878                                                                                                                                                                     | 371                                                                                 | 457                                                                                                                                                                     | 1340                                                                                                                                                                    | 7                                                                                   |
| Peak Hour Factor             | 0.92                                                                              | 0.92                                                                                                                                                                | 0.92                                                                              | 0.92                                                                                                                                                                | 0.92                                                                                                                                                                | 0.92                                                                              | 0.92                                                                                                                                                                   | 0.92                                                                                                                                                                    | 0.92                                                                                | 0.92                                                                                                                                                                    | 0.92                                                                                                                                                                    | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                 | 4                                                                                                                                                                   | 4                                                                                 | 4                                                                                                                                                                   | 4                                                                                                                                                                   | 4                                                                                 | 4                                                                                                                                                                      | 4                                                                                                                                                                       | 4                                                                                   | 4                                                                                                                                                                       | 4                                                                                                                                                                       | 4                                                                                   |
| Cap, veh/h                   | 48                                                                                | 699                                                                                                                                                                 | 312                                                                               | 420                                                                                                                                                                 | 1035                                                                                                                                                                | 704                                                                               | 265                                                                                                                                                                    | 1123                                                                                                                                                                    | 501                                                                                 | 530                                                                                                                                                                     | 1395                                                                                                                                                                    | 622                                                                                 |
| Arrive On Green              | 0.03                                                                              | 0.20                                                                                                                                                                | 0.20                                                                              | 0.12                                                                                                                                                                | 0.30                                                                                                                                                                | 0.30                                                                              | 0.08                                                                                                                                                                   | 0.32                                                                                                                                                                    | 0.32                                                                                | 0.16                                                                                                                                                                    | 0.40                                                                                                                                                                    | 0.40                                                                                |
| Sat Flow, veh/h              | 1753                                                                              | 3497                                                                                                                                                                | 1560                                                                              | 3401                                                                                                                                                                | 3497                                                                                                                                                                | 1560                                                                              | 3401                                                                                                                                                                   | 3497                                                                                                                                                                    | 1560                                                                                | 3401                                                                                                                                                                    | 3497                                                                                                                                                                    | 1560                                                                                |
| Grp Volume(v), veh/h         | 27                                                                                | 524                                                                                                                                                                 | 283                                                                               | 388                                                                                                                                                                 | 620                                                                                                                                                                 | 639                                                                               | 229                                                                                                                                                                    | 878                                                                                                                                                                     | 371                                                                                 | 457                                                                                                                                                                     | 1340                                                                                                                                                                    | 7                                                                                   |
| Grp Sat Flow(s),veh/h/ln     | 1753                                                                              | 1749                                                                                                                                                                | 1560                                                                              | 1700                                                                                                                                                                | 1749                                                                                                                                                                | 1560                                                                              | 1700                                                                                                                                                                   | 1749                                                                                                                                                                    | 1560                                                                                | 1700                                                                                                                                                                    | 1749                                                                                                                                                                    | 1560                                                                                |
| Q Serve(g_s), s              | 1.4                                                                               | 12.7                                                                                                                                                                | 16.0                                                                              | 10.2                                                                                                                                                                | 13.7                                                                                                                                                                | 26.6                                                                              | 6.0                                                                                                                                                                    | 20.5                                                                                                                                                                    | 19.1                                                                                | 11.8                                                                                                                                                                    | 33.6                                                                                                                                                                    | 0.2                                                                                 |
| Cycle Q Clear(g_c), s        | 1.4                                                                               | 12.7                                                                                                                                                                | 16.0                                                                              | 10.2                                                                                                                                                                | 13.7                                                                                                                                                                | 26.6                                                                              | 6.0                                                                                                                                                                    | 20.5                                                                                                                                                                    | 19.1                                                                                | 11.8                                                                                                                                                                    | 33.6                                                                                                                                                                    | 0.2                                                                                 |
| Prop In Lane                 | 1.00                                                                              |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                   |                                                                                                                                                                         | 1.00                                                                                | 1.00                                                                                                                                                                    |                                                                                                                                                                         | 1.00                                                                                |
| Lane Grp Cap(c), veh/h       | 48                                                                                | 699                                                                                                                                                                 | 312                                                                               | 420                                                                                                                                                                 | 1035                                                                                                                                                                | 704                                                                               | 265                                                                                                                                                                    | 1123                                                                                                                                                                    | 501                                                                                 | 530                                                                                                                                                                     | 1395                                                                                                                                                                    | 622                                                                                 |
| V/C Ratio(X)                 | 0.56                                                                              | 0.75                                                                                                                                                                | 0.91                                                                              | 0.92                                                                                                                                                                | 0.60                                                                                                                                                                | 0.91                                                                              | 0.87                                                                                                                                                                   | 0.78                                                                                                                                                                    | 0.74                                                                                | 0.86                                                                                                                                                                    | 0.96                                                                                                                                                                    | 0.01                                                                                |
| Avail Cap(c_a), veh/h        | 105                                                                               | 700                                                                                                                                                                 | 312                                                                               | 420                                                                                                                                                                 | 1035                                                                                                                                                                | 704                                                                               | 265                                                                                                                                                                    | 1123                                                                                                                                                                    | 501                                                                                 | 563                                                                                                                                                                     | 1395                                                                                                                                                                    | 622                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                   | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                   | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 43.2                                                                              | 33.9                                                                                                                                                                | 35.2                                                                              | 39.0                                                                                                                                                                | 27.1                                                                                                                                                                | 22.9                                                                              | 41.0                                                                                                                                                                   | 27.7                                                                                                                                                                    | 27.2                                                                                | 37.0                                                                                                                                                                    | 26.3                                                                                                                                                                    | 16.3                                                                                |
| Incr Delay (d2), s/veh       | 10.0                                                                              | 4.5                                                                                                                                                                 | 28.7                                                                              | 26.2                                                                                                                                                                | 1.0                                                                                                                                                                 | 15.5                                                                              | 24.6                                                                                                                                                                   | 5.4                                                                                                                                                                     | 9.5                                                                                 | 12.5                                                                                                                                                                    | 16.3                                                                                                                                                                    | 0.0                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                                                                                                                    | 0.0                                                                                                                                                                     | 0.0                                                                                 | 0.0                                                                                                                                                                     | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.7                                                                               | 5.6                                                                                                                                                                 | 8.4                                                                               | 5.7                                                                                                                                                                 | 5.7                                                                                                                                                                 | 14.7                                                                              | 3.3                                                                                                                                                                    | 8.7                                                                                                                                                                     | 8.2                                                                                 | 5.6                                                                                                                                                                     | 15.6                                                                                                                                                                    | 0.1                                                                                 |
| Unsig. Movement Delay, s/veh |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                        |                                                                                                                                                                         |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| LnGrp Delay(d),s/veh         | 53.3                                                                              | 38.4                                                                                                                                                                | 63.9                                                                              | 65.2                                                                                                                                                                | 28.1                                                                                                                                                                | 38.5                                                                              | 65.6                                                                                                                                                                   | 33.1                                                                                                                                                                    | 36.7                                                                                | 49.6                                                                                                                                                                    | 42.7                                                                                                                                                                    | 16.4                                                                                |
| LnGrp LOS                    | D                                                                                 | D                                                                                                                                                                   | E                                                                                 | E                                                                                                                                                                   | C                                                                                                                                                                   | D                                                                                 | E                                                                                                                                                                      | C                                                                                                                                                                       | D                                                                                   | D                                                                                                                                                                       | D                                                                                                                                                                       | B                                                                                   |
| Approach Vol, veh/h          |                                                                                   | 834                                                                                                                                                                 |                                                                                   |                                                                                                                                                                     | 1647                                                                                                                                                                |                                                                                   |                                                                                                                                                                        | 1478                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         | 1804                                                                                                                                                                    |                                                                                     |
| Approach Delay, s/veh        |                                                                                   | 47.5                                                                                                                                                                |                                                                                   |                                                                                                                                                                     | 40.9                                                                                                                                                                |                                                                                   |                                                                                                                                                                        | 39.1                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         | 44.3                                                                                                                                                                    |                                                                                     |
| Approach LOS                 |                                                                                   | D                                                                                                                                                                   |                                                                                   |                                                                                                                                                                     | D                                                                                                                                                                   |                                                                                   |                                                                                                                                                                        | D                                                                                                                                                                       |                                                                                     |                                                                                                                                                                         | D                                                                                                                                                                       |                                                                                     |
| Timer - Assigned Phs         | 1                                                                                 | 2                                                                                                                                                                   | 3                                                                                 | 4                                                                                                                                                                   | 5                                                                                                                                                                   | 6                                                                                 | 7                                                                                                                                                                      | 8                                                                                                                                                                       |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 18.5                                                                              | 33.4                                                                                                                                                                | 15.6                                                                              | 22.5                                                                                                                                                                | 11.5                                                                                                                                                                | 40.4                                                                              | 7.0                                                                                                                                                                    | 31.1                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Change Period (Y+Rc), s      | 4.5                                                                               | 4.5                                                                                                                                                                 | 4.5                                                                               | 4.5                                                                                                                                                                 | 4.5                                                                                                                                                                 | 4.5                                                                               | 4.5                                                                                                                                                                    | 4.5                                                                                                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Max Green Setting (Gmax), s  | 14.9                                                                              | 28.0                                                                                                                                                                | 11.1                                                                              | 18.0                                                                                                                                                                | 7.0                                                                                                                                                                 | 35.9                                                                              | 5.4                                                                                                                                                                    | 23.7                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 13.8                                                                              | 22.5                                                                                                                                                                | 12.2                                                                              | 18.0                                                                                                                                                                | 8.0                                                                                                                                                                 | 35.6                                                                              | 3.4                                                                                                                                                                    | 28.6                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Green Ext Time (p_c), s      | 0.2                                                                               | 3.1                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 | 0.2                                                                               | 0.0                                                                                                                                                                    | 0.0                                                                                                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| <b>Intersection Summary</b>  |                                                                                   |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                        |                                                                                                                                                                         |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| HCM 6th Ctrl Delay           |                                                                                   |                                                                                                                                                                     | 42.4                                                                              |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                        |                                                                                                                                                                         |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| HCM 6th LOS                  |                                                                                   |                                                                                                                                                                     | D                                                                                 |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                        |                                                                                                                                                                         |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |

# Roseville Parkway Extension and Bridge

## 2: Washington Blvd & Roseville Pkwy Extension

Cumulative (2035) plus Project  
Timing Plan: PM Peak-Hour

|                              |                                                                                    |                                                                                    |  |                                                                                    |                                                                                    |  |  |                                                                                      |  |                                                                                      |                                                                                      |  |
|------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Movement                     | EBL                                                                                                                                                                 | EBT                                                                                                                                                                 | EBR                                                                               | WBL                                                                                                                                                                 | WBT                                                                                                                                                                 | WBR                                                                               | NBL                                                                                | NBT                                                                                                                                                                     | NBR                                                                                 | SBL                                                                                                                                                                     | SBT                                                                                                                                                                     | SBR                                                                                 |
| Lane Configurations          |   |   |  |   |   |  |  |   |  |   |   |  |
| Traffic Volume (veh/h)       | 55                                                                                                                                                                  | 753                                                                                                                                                                 | 16                                                                                | 45                                                                                                                                                                  | 943                                                                                                                                                                 | 590                                                                               | 1                                                                                  | 635                                                                                                                                                                     | 36                                                                                  | 589                                                                                                                                                                     | 1017                                                                                                                                                                    | 55                                                                                  |
| Future Volume (veh/h)        | 55                                                                                                                                                                  | 753                                                                                                                                                                 | 16                                                                                | 45                                                                                                                                                                  | 943                                                                                                                                                                 | 590                                                                               | 1                                                                                  | 635                                                                                                                                                                     | 36                                                                                  | 589                                                                                                                                                                     | 1017                                                                                                                                                                    | 55                                                                                  |
| Initial Q (Qb), veh          | 0                                                                                                                                                                   | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                                                                                                   | 0                                                                                                                                                                   | 0                                                                                 | 0                                                                                  | 0                                                                                                                                                                       | 0                                                                                   | 0                                                                                                                                                                       | 0                                                                                                                                                                       | 0                                                                                   |
| Ped-Bike Adj(A_pbT)          | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                               |                                                                                                                                                                         | 1.00                                                                                | 1.00                                                                                                                                                                    |                                                                                                                                                                         | 1.00                                                                                |
| Parking Bus, Adj             | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Work Zone On Approach        |                                                                                                                                                                     | No                                                                                                                                                                  |                                                                                   |                                                                                                                                                                     | No                                                                                                                                                                  |                                                                                   |                                                                                    | No                                                                                                                                                                      |                                                                                     |                                                                                                                                                                         | No                                                                                                                                                                      |                                                                                     |
| Adj Sat Flow, veh/h/ln       | 1841                                                                                                                                                                | 1841                                                                                                                                                                | 1841                                                                              | 1841                                                                                                                                                                | 1841                                                                                                                                                                | 1841                                                                              | 1841                                                                               | 1841                                                                                                                                                                    | 1841                                                                                | 1841                                                                                                                                                                    | 1841                                                                                                                                                                    | 1841                                                                                |
| Adj Flow Rate, veh/h         | 60                                                                                                                                                                  | 818                                                                                                                                                                 | 0                                                                                 | 49                                                                                                                                                                  | 1025                                                                                                                                                                | 0                                                                                 | 1                                                                                  | 690                                                                                                                                                                     | 0                                                                                   | 640                                                                                                                                                                     | 1105                                                                                                                                                                    | 60                                                                                  |
| Peak Hour Factor             | 0.92                                                                                                                                                                | 0.92                                                                                                                                                                | 0.92                                                                              | 0.92                                                                                                                                                                | 0.92                                                                                                                                                                | 0.92                                                                              | 0.92                                                                               | 0.92                                                                                                                                                                    | 0.92                                                                                | 0.92                                                                                                                                                                    | 0.92                                                                                                                                                                    | 0.92                                                                                |
| Percent Heavy Veh, %         | 4                                                                                                                                                                   | 4                                                                                                                                                                   | 4                                                                                 | 4                                                                                                                                                                   | 4                                                                                                                                                                   | 4                                                                                 | 4                                                                                  | 4                                                                                                                                                                       | 4                                                                                   | 4                                                                                                                                                                       | 4                                                                                                                                                                       | 4                                                                                   |
| Cap, veh/h                   | 149                                                                                                                                                                 | 1123                                                                                                                                                                |                                                                                   | 135                                                                                                                                                                 | 1109                                                                                                                                                                |                                                                                   | 2                                                                                  | 795                                                                                                                                                                     |                                                                                     | 706                                                                                                                                                                     | 1462                                                                                                                                                                    | 79                                                                                  |
| Arrive On Green              | 0.04                                                                                                                                                                | 0.32                                                                                                                                                                | 0.00                                                                              | 0.04                                                                                                                                                                | 0.32                                                                                                                                                                | 0.00                                                                              | 0.00                                                                               | 0.23                                                                                                                                                                    | 0.00                                                                                | 0.21                                                                                                                                                                    | 0.43                                                                                                                                                                    | 0.43                                                                                |
| Sat Flow, veh/h              | 3401                                                                                                                                                                | 3497                                                                                                                                                                | 1560                                                                              | 3401                                                                                                                                                                | 3497                                                                                                                                                                | 1560                                                                              | 1753                                                                               | 3497                                                                                                                                                                    | 1560                                                                                | 3401                                                                                                                                                                    | 3373                                                                                                                                                                    | 183                                                                                 |
| Grp Volume(v), veh/h         | 60                                                                                                                                                                  | 818                                                                                                                                                                 | 0                                                                                 | 49                                                                                                                                                                  | 1025                                                                                                                                                                | 0                                                                                 | 1                                                                                  | 690                                                                                                                                                                     | 0                                                                                   | 640                                                                                                                                                                     | 573                                                                                                                                                                     | 592                                                                                 |
| Grp Sat Flow(s),veh/h/ln     | 1700                                                                                                                                                                | 1749                                                                                                                                                                | 1560                                                                              | 1700                                                                                                                                                                | 1749                                                                                                                                                                | 1560                                                                              | 1753                                                                               | 1749                                                                                                                                                                    | 1560                                                                                | 1700                                                                                                                                                                    | 1749                                                                                                                                                                    | 1808                                                                                |
| Q Serve(g_s), s              | 1.5                                                                                                                                                                 | 18.2                                                                                                                                                                | 0.0                                                                               | 1.2                                                                                                                                                                 | 24.9                                                                                                                                                                | 0.0                                                                               | 0.1                                                                                | 16.7                                                                                                                                                                    | 0.0                                                                                 | 16.2                                                                                                                                                                    | 24.3                                                                                                                                                                    | 24.3                                                                                |
| Cycle Q Clear(g_c), s        | 1.5                                                                                                                                                                 | 18.2                                                                                                                                                                | 0.0                                                                               | 1.2                                                                                                                                                                 | 24.9                                                                                                                                                                | 0.0                                                                               | 0.1                                                                                | 16.7                                                                                                                                                                    | 0.0                                                                                 | 16.2                                                                                                                                                                    | 24.3                                                                                                                                                                    | 24.3                                                                                |
| Prop In Lane                 | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                                                                                                                |                                                                                                                                                                     | 1.00                                                                              | 1.00                                                                               |                                                                                                                                                                         | 1.00                                                                                | 1.00                                                                                                                                                                    |                                                                                                                                                                         | 0.10                                                                                |
| Lane Grp Cap(c), veh/h       | 149                                                                                                                                                                 | 1123                                                                                                                                                                |                                                                                   | 135                                                                                                                                                                 | 1109                                                                                                                                                                |                                                                                   | 2                                                                                  | 795                                                                                                                                                                     |                                                                                     | 706                                                                                                                                                                     | 758                                                                                                                                                                     | 784                                                                                 |
| V/C Ratio(X)                 | 0.40                                                                                                                                                                | 0.73                                                                                                                                                                |                                                                                   | 0.36                                                                                                                                                                | 0.92                                                                                                                                                                |                                                                                   | 0.42                                                                               | 0.87                                                                                                                                                                    |                                                                                     | 0.91                                                                                                                                                                    | 0.76                                                                                                                                                                    | 0.76                                                                                |
| Avail Cap(c_a), veh/h        | 193                                                                                                                                                                 | 1132                                                                                                                                                                |                                                                                   | 193                                                                                                                                                                 | 1132                                                                                                                                                                |                                                                                   | 100                                                                                | 795                                                                                                                                                                     |                                                                                     | 715                                                                                                                                                                     | 758                                                                                                                                                                     | 784                                                                                 |
| HCM Platoon Ratio            | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 1.00                                                                              | 1.00                                                                               | 1.00                                                                                                                                                                    | 1.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Upstream Filter(I)           | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 0.00                                                                              | 1.00                                                                                                                                                                | 1.00                                                                                                                                                                | 0.00                                                                              | 1.00                                                                               | 1.00                                                                                                                                                                    | 0.00                                                                                | 1.00                                                                                                                                                                    | 1.00                                                                                                                                                                    | 1.00                                                                                |
| Uniform Delay (d), s/veh     | 41.0                                                                                                                                                                | 26.5                                                                                                                                                                | 0.0                                                                               | 41.2                                                                                                                                                                | 29.0                                                                                                                                                                | 0.0                                                                               | 43.9                                                                               | 32.7                                                                                                                                                                    | 0.0                                                                                 | 34.0                                                                                                                                                                    | 21.0                                                                                                                                                                    | 21.0                                                                                |
| Incr Delay (d2), s/veh       | 1.8                                                                                                                                                                 | 2.4                                                                                                                                                                 | 0.0                                                                               | 1.6                                                                                                                                                                 | 12.4                                                                                                                                                                | 0.0                                                                               | 86.6                                                                               | 12.4                                                                                                                                                                    | 0.0                                                                                 | 15.2                                                                                                                                                                    | 6.9                                                                                                                                                                     | 6.7                                                                                 |
| Initial Q Delay(d3),s/veh    | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                                                                                                                 | 0.0                                                                                                                                                                 | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                                                                                                     | 0.0                                                                                 | 0.0                                                                                                                                                                     | 0.0                                                                                                                                                                     | 0.0                                                                                 |
| %ile BackOfQ(50%),veh/ln     | 0.7                                                                                                                                                                 | 7.7                                                                                                                                                                 | 0.0                                                                               | 0.5                                                                                                                                                                 | 11.4                                                                                                                                                                | 0.0                                                                               | 0.1                                                                                | 7.9                                                                                                                                                                     | 0.0                                                                                 | 7.7                                                                                                                                                                     | 10.2                                                                                                                                                                    | 10.5                                                                                |
| Unsig. Movement Delay, s/veh |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                                                                                                     |                                                                                                                                                                     |                                                                                   |                                                                                    |                                                                                                                                                                         |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| LnGrp Delay(d),s/veh         | 42.7                                                                                                                                                                | 28.9                                                                                                                                                                | 0.0                                                                               | 42.8                                                                                                                                                                | 41.4                                                                                                                                                                | 0.0                                                                               | 130.5                                                                              | 45.1                                                                                                                                                                    | 0.0                                                                                 | 49.2                                                                                                                                                                    | 27.9                                                                                                                                                                    | 27.7                                                                                |
| LnGrp LOS                    | D                                                                                                                                                                   | C                                                                                                                                                                   |                                                                                   | D                                                                                                                                                                   | D                                                                                                                                                                   |                                                                                   | F                                                                                  | D                                                                                                                                                                       |                                                                                     | D                                                                                                                                                                       | C                                                                                                                                                                       | C                                                                                   |
| Approach Vol, veh/h          |                                                                                                                                                                     | 878                                                                                                                                                                 | A                                                                                 |                                                                                                                                                                     | 1074                                                                                                                                                                | A                                                                                 |                                                                                    | 691                                                                                                                                                                     | A                                                                                   |                                                                                                                                                                         | 1805                                                                                                                                                                    |                                                                                     |
| Approach Delay, s/veh        |                                                                                                                                                                     | 29.8                                                                                                                                                                |                                                                                   |                                                                                                                                                                     | 41.5                                                                                                                                                                |                                                                                   |                                                                                    | 45.2                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         | 35.4                                                                                                                                                                    |                                                                                     |
| Approach LOS                 |                                                                                                                                                                     | C                                                                                                                                                                   |                                                                                   |                                                                                                                                                                     | D                                                                                                                                                                   |                                                                                   |                                                                                    | D                                                                                                                                                                       |                                                                                     |                                                                                                                                                                         | D                                                                                                                                                                       |                                                                                     |
| Timer - Assigned Phs         | 1                                                                                                                                                                   | 2                                                                                                                                                                   | 3                                                                                 | 4                                                                                                                                                                   | 5                                                                                                                                                                   | 6                                                                                 | 7                                                                                  | 8                                                                                                                                                                       |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Phs Duration (G+Y+Rc), s     | 22.8                                                                                                                                                                | 24.5                                                                                                                                                                | 8.0                                                                               | 32.8                                                                                                                                                                | 4.6                                                                                                                                                                 | 42.7                                                                              | 8.3                                                                                | 32.4                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Change Period (Y+Rc), s      | 4.5                                                                                                                                                                 | 4.5                                                                                                                                                                 | 4.5                                                                               | 4.5                                                                                                                                                                 | 4.5                                                                                                                                                                 | 4.5                                                                               | 4.5                                                                                | 4.5                                                                                                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Max Green Setting (Gmax), s  | 18.5                                                                                                                                                                | 20.0                                                                                                                                                                | 5.0                                                                               | 28.5                                                                                                                                                                | 5.0                                                                                                                                                                 | 33.5                                                                              | 5.0                                                                                | 28.5                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Max Q Clear Time (g_c+I1), s | 18.2                                                                                                                                                                | 18.7                                                                                                                                                                | 3.2                                                                               | 20.2                                                                                                                                                                | 2.1                                                                                                                                                                 | 26.3                                                                              | 3.5                                                                                | 26.9                                                                                                                                                                    |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |
| Green Ext Time (p_c), s      | 0.1                                                                                                                                                                 | 0.6                                                                                                                                                                 | 0.0                                                                               | 3.5                                                                                                                                                                 | 0.0                                                                                                                                                                 | 3.9                                                                               | 0.0                                                                                | 1.0                                                                                                                                                                     |                                                                                     |                                                                                                                                                                         |                                                                                                                                                                         |                                                                                     |

### Intersection Summary

|                    |      |
|--------------------|------|
| HCM 6th Ctrl Delay | 37.3 |
| HCM 6th LOS        | D    |

### Notes

Unsignalized Delay for [NBR, EBR, WBR] is excluded from calculations of the approach delay and intersection delay.

Roseville Parkway Extension and Bridge  
1: Roseville Pkwy Extension & Foothills Blvd

Cumulative (2035) plus Project  
Timing Plan: PM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 | SBR                                                                                 |
| Lane Group Flow (vph)   | 27                                                                                | 524                                                                               | 283                                                                               | 388                                                                               | 620                                                                               | 639                                                                               | 229                                                                                | 878                                                                                 | 371                                                                                 | 457                                                                                 | 1340                                                                                | 7                                                                                   |
| v/c Ratio               | 0.26                                                                              | 0.79                                                                              | 0.58                                                                              | 0.92                                                                              | 0.55                                                                              | 0.72                                                                              | 0.87                                                                               | 0.80                                                                                | 0.57                                                                                | 0.82                                                                                | 0.96                                                                                | 0.01                                                                                |
| Control Delay           | 46.8                                                                              | 44.0                                                                              | 12.6                                                                              | 69.0                                                                              | 28.2                                                                              | 19.2                                                                              | 72.2                                                                               | 34.7                                                                                | 13.2                                                                                | 50.0                                                                                | 43.0                                                                                | 0.0                                                                                 |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 46.8                                                                              | 44.0                                                                              | 12.6                                                                              | 69.0                                                                              | 28.2                                                                              | 19.2                                                                              | 72.2                                                                               | 34.7                                                                                | 13.2                                                                                | 50.0                                                                                | 43.0                                                                                | 0.0                                                                                 |
| Queue Length 50th (ft)  | 15                                                                                | 148                                                                               | 22                                                                                | 114                                                                               | 138                                                                               | 182                                                                               | 67                                                                                 | 240                                                                                 | 58                                                                                  | 130                                                                                 | 384                                                                                 | 0                                                                                   |
| Queue Length 95th (ft)  | 42                                                                                | 206                                                                               | 96                                                                                | #201                                                                              | 225                                                                               | #411                                                                              | #132                                                                               | 315                                                                                 | 147                                                                                 | #204                                                                                | #538                                                                                | 0                                                                                   |
| Internal Link Dist (ft) | 1797                                                                              |                                                                                   |                                                                                   | 3594                                                                              |                                                                                   |                                                                                   | 312                                                                                |                                                                                     |                                                                                     | 2459                                                                                |                                                                                     |                                                                                     |
| Turn Bay Length (ft)    | 220                                                                               |                                                                                   | 230                                                                               | 220                                                                               |                                                                                   | 230                                                                               | 265                                                                                |                                                                                     | 265                                                                                 | 255                                                                                 |                                                                                     | 160                                                                                 |
| Base Capacity (vph)     | 105                                                                               | 702                                                                               | 502                                                                               | 420                                                                               | 1119                                                                              | 893                                                                               | 264                                                                                | 1100                                                                                | 653                                                                                 | 563                                                                                 | 1399                                                                                | 734                                                                                 |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.26                                                                              | 0.75                                                                              | 0.56                                                                              | 0.92                                                                              | 0.55                                                                              | 0.72                                                                              | 0.87                                                                               | 0.80                                                                                | 0.57                                                                                | 0.81                                                                                | 0.96                                                                                | 0.01                                                                                |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.

Roseville Parkway Extension and Bridge  
2: Washington Blvd & Roseville Pkwy Extension

Cumulative (2035) plus Project  
Timing Plan: PM Peak-Hour

|                         |  |  |  |  |  |  |  |  |  |  |  |
|-------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Lane Group              | EBL                                                                               | EBT                                                                               | EBR                                                                               | WBL                                                                               | WBT                                                                               | WBR                                                                               | NBL                                                                                | NBT                                                                                 | NBR                                                                                 | SBL                                                                                 | SBT                                                                                 |
| Lane Group Flow (vph)   | 60                                                                                | 818                                                                               | 17                                                                                | 49                                                                                | 1025                                                                              | 641                                                                               | 1                                                                                  | 690                                                                                 | 39                                                                                  | 640                                                                                 | 1165                                                                                |
| v/c Ratio               | 0.31                                                                              | 0.69                                                                              | 0.01                                                                              | 0.25                                                                              | 0.92                                                                              | 0.41                                                                              | 0.01                                                                               | 0.86                                                                                | 0.03                                                                                | 0.91                                                                                | 0.72                                                                                |
| Control Delay           | 45.3                                                                              | 29.2                                                                              | 0.0                                                                               | 44.2                                                                              | 43.9                                                                              | 0.8                                                                               | 40.0                                                                               | 45.8                                                                                | 0.0                                                                                 | 53.1                                                                                | 23.3                                                                                |
| Queue Delay             | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                               | 0.0                                                                                | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 | 0.0                                                                                 |
| Total Delay             | 45.3                                                                              | 29.2                                                                              | 0.0                                                                               | 44.2                                                                              | 43.9                                                                              | 0.8                                                                               | 40.0                                                                               | 45.8                                                                                | 0.0                                                                                 | 53.1                                                                                | 23.3                                                                                |
| Queue Length 50th (ft)  | 17                                                                                | 217                                                                               | 0                                                                                 | 13                                                                                | 295                                                                               | 0                                                                                 | 1                                                                                  | 201                                                                                 | 0                                                                                   | 185                                                                                 | 262                                                                                 |
| Queue Length 95th (ft)  | 37                                                                                | 286                                                                               | 0                                                                                 | 31                                                                                | #423                                                                              | 0                                                                                 | 6                                                                                  | #302                                                                                | 0                                                                                   | #287                                                                                | #455                                                                                |
| Internal Link Dist (ft) |                                                                                   | 3594                                                                              |                                                                                   |                                                                                   | 342                                                                               |                                                                                   |                                                                                    | 284                                                                                 |                                                                                     |                                                                                     | 349                                                                                 |
| Turn Bay Length (ft)    | 260                                                                               |                                                                                   | 260                                                                               | 235                                                                               |                                                                                   | 200                                                                               | 200                                                                                |                                                                                     | 220                                                                                 | 245                                                                                 |                                                                                     |
| Base Capacity (vph)     | 194                                                                               | 1213                                                                              | 1553                                                                              | 194                                                                               | 1140                                                                              | 1553                                                                              | 100                                                                                | 800                                                                                 | 1553                                                                                | 718                                                                                 | 1623                                                                                |
| Starvation Cap Reductn  | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Spillback Cap Reductn   | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Storage Cap Reductn     | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                 | 0                                                                                  | 0                                                                                   | 0                                                                                   | 0                                                                                   | 0                                                                                   |
| Reduced v/c Ratio       | 0.31                                                                              | 0.67                                                                              | 0.01                                                                              | 0.25                                                                              | 0.90                                                                              | 0.41                                                                              | 0.01                                                                               | 0.86                                                                                | 0.03                                                                                | 0.89                                                                                | 0.72                                                                                |

Intersection Summary

# 95th percentile volume exceeds capacity, queue may be longer.  
Queue shown is maximum after two cycles.



# **CEQA Mitigation Monitoring and Reporting Program for the Roseville Parkway Extension Project**

**August 2020**

# Roseville Parkway Extension Project

## MITIGATION MONITORING AND REPORTING PROGRAM

### Introduction

Public Resources Code section 21081.6 and section 15097 of the California Environmental Quality Act (CEQA) Guidelines require public agencies to adopt a monitoring or reporting program for projects approved under CEQA that require implementation of mitigation measures as part of project approval.

The following is the Mitigation Monitoring and Reporting Program (MMRP) for the Roseville Parkway Extension Project (proposed project). The intent of the MMRP is to aid the City of Roseville with implementation and monitoring of mitigation measures adopted as part of the Roseville Parkway Extension Project Final Initial Study/Mitigated Negative Declaration (IS/MND).

The following mitigation measures are from the Roseville Parkway Extension Project Final IS/MND and are the responsibility of the City to implement. The MMRP describes the actions that must take place to implement each mitigation measure, the timing of those actions, and the entities responsible for implementing and monitoring the actions.

### MMRP Components

The components of the attached table, which contains applicable mitigation measures, are addressed briefly, below.

**Impact:** This column summarizes the impact identified in the Final IS/MND.

**Mitigation Measure:** All mitigation measures identified in the Roseville Parkway Extension Project Draft IS/MND are presented.

**Action(s):** For every mitigation measure, one or more actions are described. The actions delineate the means by which the mitigation measures will be implemented, and, in some instances, the criteria for determining whether a measure has been successfully implemented. Where mitigation measures are particularly detailed, the action may refer back to the measure for specifics.

**Implementing Party:** This item identifies the entity that will undertake the required action.

**Timing:** Implementation of the action must occur prior to or during some part of project approval, project design or construction or on an ongoing basis. The timing for each measure is identified.



**Monitoring Party:** The City of Roseville Development Services Department, in coordination with the Public Works Department, is primarily responsible for ensuring that mitigation measures are successfully implemented. Within the City of Roseville, a number of departments and divisions could have responsibility for monitoring some aspect of the overall project. Other agencies may also be responsible for monitoring the implementation of mitigation measures. As a result, more than one monitoring party may be identified.

| Roseville Parkway Extension Project, Mitigation Monitoring and Reporting Program                                                                                                                                                                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                       |                                                   |                             |                                                                     |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|-----------------------------|---------------------------------------------------------------------|
| Impact                                                                                                                                                                                                                                                                                                        | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Action(s)                                                                                                                                                             | Implementing Party                                | Timing                      | Monitoring Party                                                    |
| Air Quality                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                       |                                                   |                             |                                                                     |
| Cumulatively considerable net increase in construction generated NOx emissions.                                                                                                                                                                                                                               | <p><b>Mitigation Measure AQ-1: Reduce construction-generated emissions from equipment exhaust</b></p> <p>The City shall require its prime construction contractor to implement the following measures to reduce construction-generated emissions from equipment and vehicle exhaust. The list of required measures was informed by PCAPCD's recommended construction mitigation measures.</p> <ul style="list-style-type: none"><li>Use construction equipment with engines meeting USEPA Tier 4 Final or better emission standards. Equipment requirements may be waived by the City, but only under any of the following unusual circumstances: if a particular piece of off-road equipment with Tier 4 Final standards is technically not feasible; not commercially available; or there is a compelling emergency need to use off-road equipment that does not meet the equipment requirements above. If the City grants the waiver, the contractor shall use the next cleanest piece of off-road equipment available, in the following order: Tier 4 Interim, Tier 3, and then Tier 2 engines.</li><li>Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (California Code of Regulations, Title 13, sections 2449(d)(3) and 2485). Provide clear signage that posts this requirement for workers at the entrances to the site.</li><li>Maintain all construction equipment in proper working condition according to manufacturer's specifications.</li></ul> | Minimize construction project-related NOx emissions to the maximum extent feasible.                                                                                   | Construction Contractor                           | During construction         | City of Roseville Development Services Department                   |
| Biological Resources                                                                                                                                                                                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |                                                                                                                                                                       |                                                   |                             |                                                                     |
| Have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service. | <p><b>Mitigation Measure BIO-1: Install Fencing and/or Flagging to Protect Sensitive Biological Resources</b></p> <p>Prior to construction, the City's contractor will install high-visibility orange construction fencing and/or flagging around the detention basin to ensure direct and indirect effects on suitable habitat for western spadefoot is avoided. The City will ensure that the final construction plans show the locations where fencing and/or flagging will be installed. The plans will also define the fencing installation procedure. The City or contractor (at the discretion of the City) will ensure that the fencing is maintained throughout the duration of the construction period. If the fencing is removed, damaged, or otherwise compromised during the construction period, construction activities will cease until the fencing is repaired or replaced. The project's special provisions package will provide clear language regarding acceptable fencing material and prohibited construction-related activities, vehicle operation, material and equipment storage, and other surface-disturbing activities within environmentally sensitive areas. A note specifying this information will be included on the project Improvement Plans.</p>                                                                                                                                                                                                                                              | Identify sensitive biological resources on improvement plans, protect in the field during construction and identify and limit construction site boundaries the field. | Design team and Contractor                        | Plan check and construction | City of Roseville Public Works and Development Services Departments |
|                                                                                                                                                                                                                                                                                                               | <p><b>Mitigation Measure BIO-2: Conduct Mandatory Environmental Awareness Training for Construction Personnel</b></p> <p>Before any work occurs in the project area, including grading, the City will retain a qualified biologist (familiar with the resources to be protected) to conduct a mandatory contractor/worker environmental awareness training for construction personnel. The awareness training will be provided to all construction personnel (contractors and subcontractors) to brief them on the need to avoid effects on sensitive biological resources adjacent to construction areas.</p> <p>The environmental training also will cover general restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on sensitive biological resources during project construction. The crew foreman will be responsible for ensuring that crew members adhere to these guidelines and restrictions, and that new personnel review the environmental training prior to starting work on-site.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | Conduct environmental awareness training for construction personnel.                                                                                                  | City of Roseville Development Services Department | Prior to construction       | City of Roseville Development Services Department                   |
|                                                                                                                                                                                                                                                                                                               | <p><b>Mitigation Measure BIO-3: Provide Escape Ramps for Wildlife and Inspect Pits and Trenches Daily</b></p> <p>To prevent inadvertent entrapment of western spadefoot toads during construction in grassland habitat, all excavated, steep-walled holes, and trenches more than 6 inches deep, will be provided with one or more escape ramps constructed of earth fill or wooden planks and will be inspected prior to being filled to ensure that no wildlife are present. In the event that holes or pits cannot be ramped, they will be properly covered at night to prevent access by wildlife. Coverings may consist of wooden boards, metal plates, or tarps held down by soil or rocks, with no openings between the cover and the ground. The biological monitor or a designated construction crew member will inspect covered and open trenches and pits each morning and evening during construction to look for spadefoot toads or other wildlife that may have become trapped. It should be noted that spadefoot toads can fall into a trench or pit through the excavated wall of the trench or pit; therefore, these areas must be inspected daily, even if covered.</p>                                                                                                                                                                                                                                                                                                                                         | Provide "escape ramps" or cover all trenches and/or excavation areas. Inspect these areas daily for wildlife entrapment.                                              | Construction Contractor                           | During construction         | City of Roseville Public Works and Development Services Departments |

| Roseville Parkway Extension Project, Mitigation Monitoring and Reporting Program                                                    |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                     |                                                                                                           |                                                                                                                                                                              |                                                               |
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| Impact                                                                                                                              | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Action(s)                                                                                                                                                                                                                                           | Implementing Party                                                                                        | Timing                                                                                                                                                                       | Monitoring Party                                              |
|                                                                                                                                     | <p><b>Mitigation Measure BIO-4: Construct the Project during the Nonbreeding Season or Conduct Pre-Construction Surveys for Nesting Migratory Birds and Raptors</b></p> <p>Where vegetation removal is required to construct project features, the City will conduct this activity during the nonbreeding season for migratory birds and raptors (generally between September 1 and February 28), to the extent feasible.</p> <p>If construction activities (including vegetation removal) cannot be confined to the nonbreeding season, the City will retain a qualified wildlife biologist with knowledge of the relevant species to conduct nesting surveys before the start of construction. The migratory bird and raptor nesting surveys will include a minimum of two separate surveys to look for active migratory bird and raptor nests. Surveys will include a search of all vegetation that provides suitable nesting habitat in the construction area. In addition, a 500-foot area around the construction area will be surveyed for raptors (including burrowing owl) and a 100-foot area around the construction area will be surveyed for song birds. In addition, solitary trees and woodland habitats within 0.25 mile of the project site will be surveyed for nesting Swainson's hawks. For survey areas outside the project site, the surveyors will walk areas where property access is authorized. For portions of the survey area without property access, the biologist will scan vegetation using binoculars from the project site or from public roads. One survey should be conducted no more than 14 days prior to construction and the second survey should be conducted within 48 hours of the start of construction or vegetation removal. If no active nests are detected during these surveys, no protective measures are required.</p> <p>If an active nest is found in the survey area, a no-disturbance buffer will be established around the nest site to avoid disturbance or destruction of the nest until the end of the breeding season (August 31) or after a qualified wildlife biologist determines that the young have fledged and moved out of the nesting substrate (this date varies by species). The extent of these buffers will be determined by the biologist and will depend on the level of construction disturbance, line of sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species but will be established a minimum of 50 feet from active construction for passerine species and up to 500 feet for non-listed raptor species. A minimum buffer of 1,000 feet will be established for an active Swainson's hawk nest. If site-specific conditions or the nature of the activity (e.g., steep topography, dense vegetation, or minimal construction activities) indicate that a smaller buffer could be used, the City will coordinate with CDFW to determine the appropriate buffer size.</p> | Conduct vegetation removal during the non-breeding season and/or conduct preconstruction surveys for nesting migratory birds and raptors and protect active nests in consultation with CDFW.                                                        | Contractor and City of Roseville Development Services Department                                          | Conduct vegetation removal during the non-breeding season (between September 1 and February 28) or conduct nesting surveys to determine allowable construction work windows. | City of Roseville Development Services Department             |
| Cultural Resources                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                     |                                                                                                           |                                                                                                                                                                              |                                                               |
| Potential for a substantial adverse change in the significance of unknown buried cultural resources encountered during construction | <p><b>Mitigation Measure CUL-1: Implement Measures to Protect Previously Unidentified Cultural Resources</b></p> <p>The City shall ensure that construction specifications include the following information in the grading notes.</p> <ul style="list-style-type: none"><li>Construction shall stop if potential cultural resources are encountered. It is possible that previous activities have obscured surface evidence of cultural resources. If signs of an archeological site, such as any unusual amounts of stone, bone, or shell, are uncovered during grading or other construction activities, work will be halted within 100 feet of the find and the City of Roseville will be notified. A qualified archeologist will be consulted for an onsite evaluation. If the site appears to be eligible for listing in state or federal registers, additional mitigation, such as further testing for evaluation or data recovery, may be necessary.</li><li>In the event resources are discovered, the City will retain a qualified archaeologist to assess the find and to determine whether the resource requires further study. Any previously undiscovered resources found during construction will be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria.</li><li>All work will stop in the immediate vicinity of the find, and, if the find is determined to be an important cultural resource, the City will make available contingency funding and a time allotment sufficient to allow recovery of an archaeological sample or to implement an avoidance measure. Construction work may continue on other parts of the project while archaeological mitigation takes place.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | Stop work if cultural resources are encountered during ground-disturbing activities and have a qualified archaeologist evaluate the find and develop a response plan.                                                                               | Contractor, Qualified Archaeologist, and City of Roseville Development Services Department                | During construction                                                                                                                                                          | Contractor, City of Roseville Development Services Department |
| Potential to disturb human remains, including those interred outside of dedicated cemeteries                                        | <p><b>Mitigation Measure CUL-2: Implement Measures if Construction Activities Inadvertently Discover or Disturb Human Remains</b></p> <p>The City shall ensure that construction specifications include the following in the grading notes.</p> <ul style="list-style-type: none"><li>If human remains are discovered during any phase of construction, including disarticulated or cremated remains, the construction contractor will immediately cease all ground-disturbing activities within 100 feet of the remains and notify the City of Roseville.</li><li>In accordance with California State Health and Safety Code Section 7050.5, no further disturbance will occur until the following steps have been completed:</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Implement appropriate treatment for discovery of human remains and contact the Placer County coroner. If remains are Native American, the coroner shall contact the NAHC which will appoint an MLD to provide treatment recommendations. Develop an | Qualified Archaeologist, County Coroner, NAHC, MLD, and City of Roseville Development Services Department | During construction                                                                                                                                                          | City of Roseville Development Services Department             |

| Roseville Parkway Extension Project, Mitigation Monitoring and Reporting Program                                                           |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                            |                                                                                             |                                  |                                                                     |
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| Impact                                                                                                                                     | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Action(s)                                                                                                                                                                                                                                  | Implementing Party                                                                          | Timing                           | Monitoring Party                                                    |
|                                                                                                                                            | <ul style="list-style-type: none"><li>○ The County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98.</li><li>○ If the remains are determined by the County Coroner to be Native American, NAHC will be notified within 24 hours, and the treatment and disposition of the remains will comply with NAHC guidelines.</li><li>● It is further recommended that a professional archaeologist with Native American burial experience conduct a field investigation of the specific site and consult with the Most Likely Descendant (MLD), if any, identified by NAHC. As necessary and appropriate, a professional archaeologist may provide technical assistance to the MLD, including excavation and removal of the human remains.</li></ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | agreement for the dignified treatment of human remains and associated or unassociated funerary objects and implement provision of the agreement.                                                                                           |                                                                                             |                                  |                                                                     |
| Geology and Soils                                                                                                                          |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                            |                                                                                             |                                  |                                                                     |
| Potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature                           | <b>Mitigation Measure GEO-1: If Paleontological Resources Found Cease Work until Review Conducted by Qualified Paleontologist and Recommendations Implemented</b><br><br>Should evidence of sensitive paleontological resources (e.g., fossils) be encountered during grading or excavation, work shall be suspended within 100 feet of the find, and the City of Roseville shall be immediately notified. At that time, the City shall coordinate all necessary investigation of the site with a qualified paleontologist to assess the resource and provide proper management recommendations. Possible management recommendations for sensitive resources could include resource avoidance or data recovery excavations. The contractor shall implement any measures deemed necessary by the paleontologist for the protection of sensitive paleontological resources.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          | Stop work if paleontological materials are encountered during construction and have a qualified paleontologist assess the resource, provide proper management recommendations and implement recommendations.                               | Contractor, Qualified Paleontologist, and City of Roseville Development Services Department | During construction              | Contractor, City of Roseville Development Services Department       |
|                                                                                                                                            | <b>Mitigation Measure GEO-2: Prepare and Implement a Worker Education Program for Those Involved with Earthwork</b><br><br>A worker education program, prepared by a qualified professional paleontologist, shall review applicable local, state, and federal ordinances, laws, and regulations pertaining to paleontological resources; describe the types of fossils that can be encountered and their general appearance; discuss site avoidance requirements and notification procedures to be followed in the event that a sensitive paleontological resource is found during construction; and describe disciplinary and other actions that can be taken against persons violating such laws.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                | Prepare and implement a worker education program for those involved with earthwork.                                                                                                                                                        | Contractor and City of Roseville Development Services Department                            | Prior to and during construction | City of Roseville Public Works and Development Services Departments |
| Tribal Cultural Resources                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |                                                                                                                                                                                                                                            |                                                                                             |                                  |                                                                     |
| Potential for a substantial adverse change in the significance of unknown buried tribal cultural resources encountered during construction | <b>Mitigation Measure TRC-1: Implement Measures to Protect Previously Unidentified Tribal Cultural Resources</b><br><br>If subsurface deposits believed to be cultural or human in origin, or tribal cultural resources, are discovered during construction, all work shall halt within a 100-foot radius of the discovery, and the Construction Manager shall immediately notify the City of Roseville Development Services Director by phone. The Construction Manager shall also immediately coordinate with the monitoring archaeologist or project archaeologist, or, in the absence of either, contact a qualified professional archaeologist, meeting the Secretary of the Interior's Professional Qualification Standards for archaeology and subject to approval by the City, to evaluate the significance of the find and develop appropriate management recommendations. All management recommendations shall be provided to the City in writing for the City's review and approval. If recommended by the qualified professional and approved by the City, this may include modification of the no-work radius.<br><br>The professional archaeologist must make a determination, based on professional judgement and supported by substantial evidence, within one business day of being notified, as to whether or not the find represents a cultural resource or has the potential to be a tribal cultural resource. The subsequent actions will be determined by the type of discovery, as described below. These include: (1) a work pause that, upon further investigation, is not actually a discovery and the work pause was simply needed in order to allow for closer examination of soil (a "false alarm"); (2) a work pause and subsequent action for discoveries that are clearly not related to tribal resources, such as can and bottle dumps, artifacts of European origin, and remnants of built environment features; and (3) a work pause and subsequent action for discoveries that are likely related to tribal resources, such as midden soil, bedrock mortars, groundstone, or other similar expressions.<br><br>Whenever there is question as to whether or not the discovery represents a tribal resource, culturally affiliated tribes shall be consulted in making the determination. The following processes shall apply, depending on the nature of the find, subject to the review and approval of the City: <ul style="list-style-type: none"><li>● <u>Response to False Alarms:</u> If the professional archaeologist determines that the find is negative for any cultural indicators, then work may resume immediately upon notice to proceed from the City's representative. No further notifications or tribal consultation is necessary,</li></ul> | Stop work if potential tribal cultural resources are encountered during ground-disturbing activities and have a qualified archaeologist, in consultation with culturally affiliated tribes, evaluate the find and develop a response plan. | Contractor, Qualified Archaeologist, and City of Roseville Development Services Department  | During construction              | Contractor, City of Roseville Development Services Department       |

| Roseville Parkway Extension Project, Mitigation Monitoring and Reporting Program |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |           |                    |        |                  |
|----------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|--------------------|--------|------------------|
| Impact                                                                           | Mitigation Measures                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Action(s) | Implementing Party | Timing | Monitoring Party |
|                                                                                  | <p>because the discovery is not a cultural resource of any kind. The professional archaeologist shall provide written documentation of this finding to the City.</p> <ul style="list-style-type: none"><li>• <u>Response to Non-Tribal Discoveries</u>: If at the time of discovery a professional archaeologist determines that the find represents a non-tribal cultural resource from any time period or cultural affiliation, the City shall be notified immediately, to consult on a finding of eligibility and implementation of appropriate treatment measures, if the find is determined to be a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines. The professional archaeologist shall provide a photograph of the find and a written description to the City of Roseville. The City of Roseville will notify any tribe(s) who, in writing, requested notice of unanticipated discovery of non-tribal resources. Notice shall include the photograph and description of the find, and a tribal representative shall have the opportunity to determine whether or not the find represents a tribal cultural resource. If a response is not received within 24 hours of notification (none of which time period may fall on weekends or City holidays), the City will deem this portion of the measure completed in good faith as long as the notification was made and documented. If requested by a tribe(s), the City may extend this timeframe, which shall be documented in writing (electronic communication may be used to satisfy this measure). If a notified tribe responds within 24 hours to indicate that the find represents a tribal cultural resource, then the Response to Tribal Discoveries portion of this measure applies. If the tribe does not respond or concurs that the discovery is non-tribal, work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: (1) is not a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or (2) that the treatment measures have been completed to its satisfaction.</li><li>• <u>Response to Tribal Discoveries</u>: If the find represents a tribal or potentially tribal cultural resource that does not include human remains, the tribe(s) and City shall be notified. The City will consult with the tribe(s) on a finding of eligibility and implement appropriate treatment measures, if the find is determined to be either a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines, or a tribal cultural resource, as defined in Section 21074 of the Public Resources Code. Preservation in place is the preferred treatment, if feasible. Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the site either: (1) is not a historical resource under CEQA, as defined in Section 15064.5(a) of the CEQA Guidelines; or (2) not a tribal cultural resource, as defined in Section 21074 of the Public Resources Code; or (3) that the treatment measures have been completed to its satisfaction.</li><li>• <u>Response to Human Remains</u>: If the find includes human remains, or remains that are potentially human, the construction supervisor or on-site archaeologist shall ensure reasonable protection measures are taken to protect the discovery from disturbance (AB 2641) and shall notify the City and Placer County Coroner (per Section 7050.5 of the Health and Safety Code). The provisions of California Health and Safety Code Section 7050.5, California Public Resources Code Section 5097.98, and AB 2641 shall be implemented. If the Coroner determines the remains are Native American and not the result of a crime scene, the Coroner will notify the NAHC, which then will designate a Native American MLD for the project (Public Resources Code Section 5097.98). The designated MLD will have 48 hours from the time access to the property is granted to make recommendations concerning treatment of the remains. Public Resources Code Section 5097.94 provides structure for mediation through the NAHC if necessary. If no agreement is reached, the City shall rebury the remains in a respectful manner where they will not be further disturbed (Public Resources Code Section 5097.98). This will also include either recording the site with the NAHC or the appropriate Information Center; using an open space or conservation zoning designation or easement; or recording a reinternment document with the county in which the property is located (AB 2641). Work shall not resume within the no-work radius until the City, through consultation as appropriate, determines that the treatment measures have been completed to its satisfaction.</li></ul> |           |                    |        |                  |



## COUNCIL COMMUNICATION

**CC #: 0987**

**File #: 0324**

**Title:** Fire Department Performance Audit Presentation  
**Contact:** Brian Diemer 916-746-1392 bdiemer@roseville.ca.us

**Meeting Date: 9/16/2020**

**Item #: 9.1.**

### RECOMMENDATION TO COUNCIL

Staff is providing a summary report of the Fire Department performance audit, which was conducted by Fitch and Associates.

### BACKGROUND

In 2017, the Roseville City Council approved the formation of a volunteer Community Priorities Advisory Committee (CPAC) as one of several comprehensive activities to ensure direct and meaningful community participation in reviewing levels of City-provided services, to assess specific General Fund services and programs, and provide policy level recommendations to prioritize what we value as a community.

Input and recommendations from the CPAC resulted in the recommendation that the City Council direct the City Manager to conduct a study on the Fire Department's staffing model in an effort to look for efficiencies in the current model and to evaluate if the current model is the highest and best use of equipment and staffing resources, and identify opportunities for cost savings. This was to be a comprehensive operational evaluation, by a third party consultant/auditor.

The results of this study, which was performed by Fitch and Associates, are presented in the data driven report. The summary results, highlights, and recommendations are provided along with staff recommendations for implementation.

### FISCAL IMPACT

There is no fiscal impact related to this item.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not

considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. The presentation of a performance audit meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Brian Diemer, Assistant Fire Chief

Rick Bartee, Fire Chief



---

Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

Roseville CA Final GIS Report to Client

Roseville Fire Department Final Data Report to Client

Roseville Fire Department Standards of Cover - Final to Client 2020

Roseville, CA - Combined Final Summary Report to Client - February 2020

February 2020

## Final GIS Analysis



**Roseville Fire Department  
Roseville, California**

*Prepared by:*



**FITCH & ASSOCIATES, LLC**

2901 Williamsburg Terrace #G ■ Platte City ■ Missouri ■ 64079

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# CONSULTANT REPORT



# ROSEVILLE FIRE DEPARTMENT GIS ANALYSIS

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## ESTABLISHING BASELINE PERFORMANCE

The first step in completing GIS planning analyses is to establish the desired performance parameters. Measures of total response time can be significantly influenced by both internal and external influences. For example, the dispatch time, defined as the time from call creation at the 911-center to the dispatching of units, contributes to the customer's overall response time experience. Another element in the total response time continuum is the turnout time, defined as the time from when the units are notified of the incident until they are actually responding. Turnout time can have a significant impact on the overall response time for the customer and is generally considered under management's control. However, the travel time, defined as the period from when the units are actually responding until arrival at the incident is a factor of the number of fire stations, the ability to travel unimpeded on the road network, the existing road network's ability to navigate the community, and the availability of the units. Largely, travel time is the most stable variable to utilize in system design regarding response time performance.

Therefore, these GIS planning analyses will focus on travel time capability as the unit of measure. Performance for travel time of first arriving Roseville Fire Department (RFD) units to emergency calls by program for the 2018 reporting period (i.e., January 1, 2018 to December 31, 2018; hereinafter referred to as 2018) is provided on the next page. Overall, travel time was 5.5 minutes or less for 90% of the incidents (Table 1). However, EMS related incidents had a travel time performance of 5.4 minutes or less for 90% of the incidents, and fire related incidents had a travel time performance of 6.0 minutes or less for 90% of the incidents.

**Table 1: 90th Percentile Dispatch, Turnout, Travel, and Response Times by Program – First Arriving Units**

| Call Category                                | Dispatch Time (Minutes) |            |                         | Turnout Time (Minutes) |            |                                      | Travel Time (Minutes) |            |                         | Response Time (Minutes) |            |                                      | Sample Size <sup>1</sup> |
|----------------------------------------------|-------------------------|------------|-------------------------|------------------------|------------|--------------------------------------|-----------------------|------------|-------------------------|-------------------------|------------|--------------------------------------|--------------------------|
|                                              | Observed                | Benchmark  | % At or Below Benchmark | Observed               | Benchmark  | % At or Below Benchmark <sup>2</sup> | Observed              | Benchmark  | % At or Below Benchmark | Observed                | Benchmark  | % At or Below Benchmark <sup>3</sup> |                          |
| <b>EMS</b>                                   | <b>2.1</b>              | <b>1.0</b> | <b>57.4</b>             | <b>2.2</b>             | <b>1.0</b> | <b>26.7</b>                          | <b>5.4</b>            | <b>5.2</b> | <b>88.3</b>             | <b>8.2</b>              | <b>7.2</b> | <b>80.4</b>                          | <b>9,922</b>             |
| <b>False Alarm &amp; False Call</b>          | <b>2.6</b>              | --         | --                      | <b>2.6</b>             | --         | --                                   | <b>6.1</b>            | --         | --                      | <b>9.4</b>              | --         | --                                   | <b>304</b>               |
| Fire (Not Building or Wildland)              | 2.5                     | 1.0        | 44.2                    | 2.2                    | 1.7        | 63.4                                 | 5.4                   | 5.2        | 87.2                    | 8.9                     | 7.9        | 85.4                                 | 86                       |
| Building Fire                                | 2.4                     | 1.0        | 44.0                    | 2.4                    | 1.7        | 45.9                                 | 5.5                   | 5.2        | 88.4                    | 8.7                     | 7.9        | 84.5                                 | 116                      |
| Wildland Fire                                | 2.5                     | 1.0        | 42.3                    | 3.2                    | 1.7        | 50.0                                 | 8.8                   | 5.2        | 73.7                    | 13.3                    | 7.9        | 71.1                                 | 97                       |
| <b>Fire (All)</b>                            | <b>2.5</b>              | <b>1.0</b> | <b>43.5</b>             | <b>2.4</b>             | <b>1.7</b> | <b>52.3</b>                          | <b>6.0</b>            | <b>5.2</b> | <b>83.3</b>             | <b>9.6</b>              | <b>7.9</b> | <b>80.5</b>                          | <b>299</b>               |
| <b>Good Intent Call</b>                      | <b>3.0</b>              | --         | --                      | <b>2.3</b>             | --         | --                                   | <b>5.4</b>            | --         | --                      | <b>8.8</b>              | --         | --                                   | <b>900</b>               |
| <b>Hazardous Conditions (No Fire)</b>        | <b>3.4</b>              | <b>1.0</b> | <b>22.8</b>             | <b>2.6</b>             | <b>2.0</b> | <b>77.9</b>                          | <b>6.0</b>            | <b>5.2</b> | <b>82.8</b>             | <b>9.3</b>              | <b>8.2</b> | <b>78.9</b>                          | <b>170</b>               |
| <b>Rescue</b>                                | <b>3.1</b>              | <b>1.0</b> | <b>41.0</b>             | <b>2.2</b>             | <b>1.7</b> | <b>73.1</b>                          | <b>5.4</b>            | <b>5.2</b> | <b>87.7</b>             | <b>9.5</b>              | <b>7.9</b> | <b>80.9</b>                          | <b>870</b>               |
| <b>Service Call</b>                          | <b>3.9</b>              | --         | --                      | <b>2.7</b>             | --         | --                                   | <b>7.6</b>            | --         | --                      | <b>12.1</b>             | --         | --                                   | <b>738</b>               |
| <b>Severe Weather &amp; Natural Disaster</b> | --                      | --         | --                      | --                     | --         | --                                   | --                    | --         | --                      | --                      | --         | --                                   | <b>2</b>                 |
| <b>Special Incident Type</b>                 | --                      | --         | --                      | --                     | --         | --                                   | --                    | --         | --                      | --                      | --         | --                                   | <b>0</b>                 |
| <b>Total</b>                                 | <b>2.4</b>              | --         | --                      | <b>2.2</b>             | --         | --                                   | <b>5.5</b>            | --         | --                      | <b>8.6</b>              | --         | --                                   | <b>13,205</b>            |

<sup>1</sup>Sample sizes reflect the number of responses made by first arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

<sup>2</sup>Benchmark value used to represent 01:43 or 1.7-minute turnout time in calculation of percentage was 1.7167.

<sup>3</sup>Benchmark value used to represent 07:55 or 7.9-minute response time in calculation of percentage was 7.9167.

## Comparison to National References

There are two notable references for travel time available to the fire service in National Fire Protection Association (NFPA) 1710.<sup>1</sup> and the Commission on Fire Accreditation International (CFAI)<sup>2</sup>. NFPA 1710 suggests a 4-minute travel time at the 90<sup>th</sup> percentile for first due arrival of Basic Life Support (BLS) and fire incidents, and the CFAI recommends a 5 minute and 12 seconds travel time for first due arrival in an urban/suburban population density. The arrival of an Advanced Life Support (ALS) unit is recommended at 8 minutes travel time by NFPA 1710. It is important to note that the latest edition (9<sup>th</sup> edition) of the CFAI guidelines have de-emphasized response time and only reference the legacy standards with a separately provided companion document<sup>3</sup>.

Considering the overall 90<sup>th</sup> percentile travel time value of 5.5 minutes, and a 6.0-minute travel time at the 90<sup>th</sup> percentile for fire related incidents, a 5-minute travel time was used as a surrogate measure for the more restrictive 4-minute or 5:12 thresholds identified. When referring to the marginal utility analysis provided in the tables on the following pages, the ascending rank order is the station's capability to cover risk (incidents) in relation to the total historical call volume of the sample period (2018). Station is the current RFD station identifier; station capture is the number of calls the station would capture within a 5-minute travel time; total capture is the cumulative number of calls captured with the addition of each fire station; and percent capture is the total cumulative percentage of risk covered by each station. The goal would be to achieve at least 90% capture. Figures depict drive time mapping.

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<sup>1</sup> National Fire Protection Association. (2010). NFPA 1710, *Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*. Boston, MA: National Fire Protection Association.

<sup>2</sup> CFAI. (2009). *Fire & emergency service self-assessment manual*, (8<sup>th</sup> ed.). Chantilly, Virginia: Author. (page 71)

<sup>3</sup> CFAI. (2016). *Fire & emergency service self-assessment manual*, (9<sup>th</sup> ed.). Chantilly, Virginia: Author.

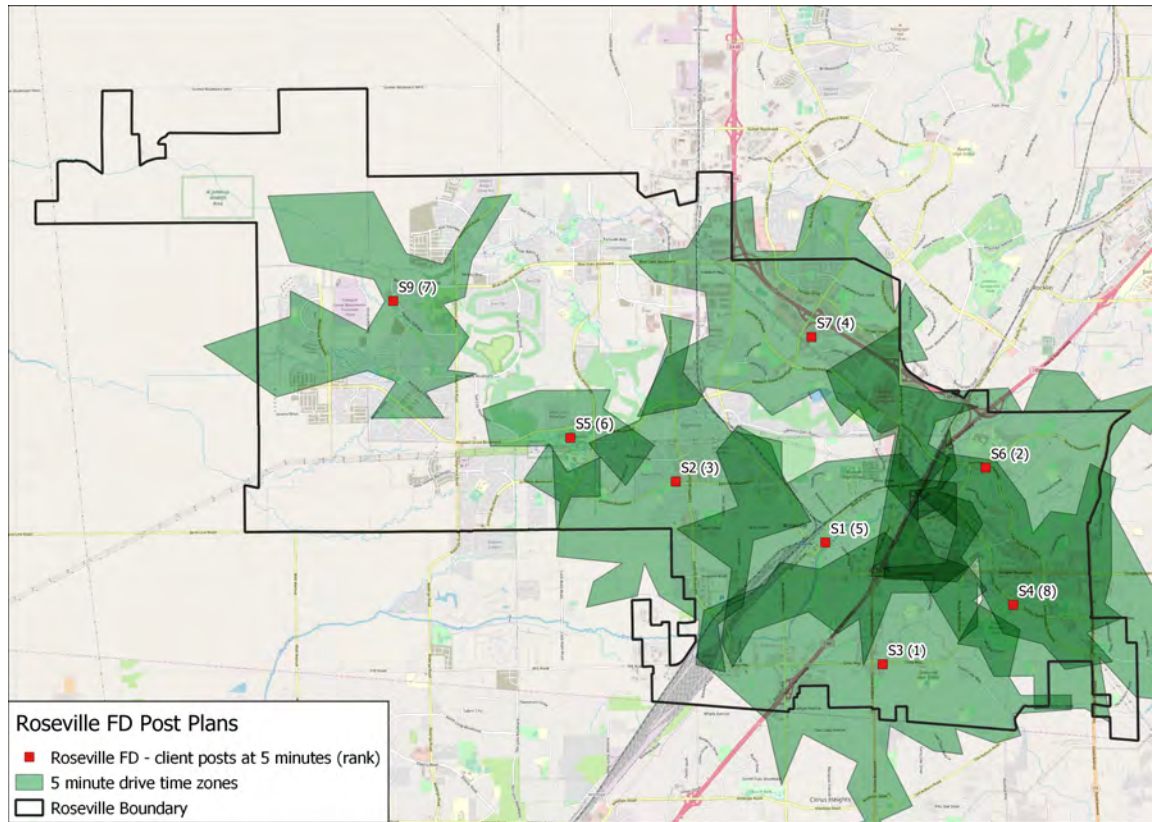
With the current configuration of stations, the department could achieve 80.71% risk coverage within 5 minutes travel time from all eight stations (Table 2; Figure 1). The station that could contribute the most to the overall system's performance is Station 3 (S3) in the first row that could capture 29.96% of the risks within 5 minutes. Station 6 (S6) could cover an additional 17.49% of the risk, bringing the cumulative total to 47.45% between Stations 3 and 6.

**Table 2: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S7      | 1,354           | 11,641        | 69.00%          |
| 5    | S1      | 944             | 12,585        | 74.60%          |
| 6    | S5      | 488             | 13,073        | 77.49%          |
| 7    | S9      | 438             | 13,511        | 80.08%          |
| 8    | S4      | 106             | 13,617        | 80.71%          |



**Figure 1: Current Fire Station Bleed Maps for 5-Minute Travel Time**



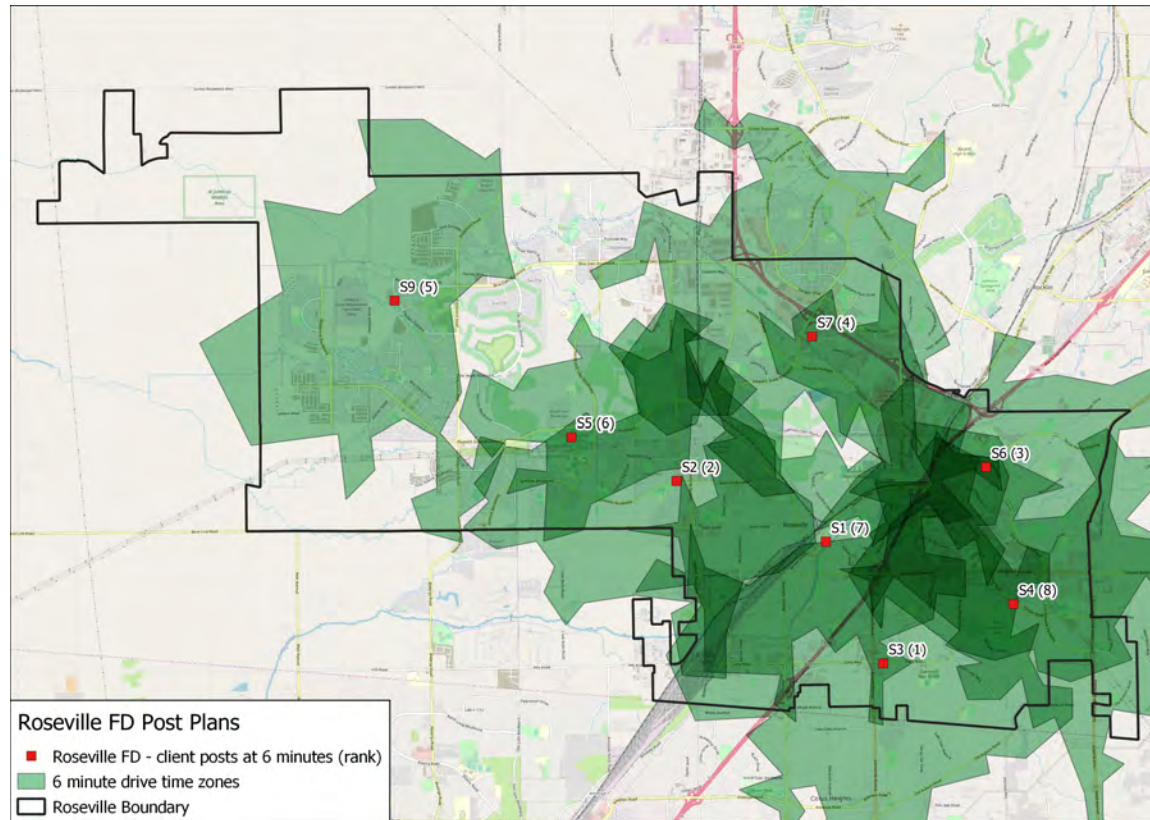
## Validation of Planning Analysis

The first step in this validation analysis is to utilize the historical performance to validate the planning analyses utilized by the GIS system. The historical performance demonstrated a 5.5-minute overall department travel time performance, and a 6.0-minute travel time capability to fire related calls from the existing fire stations at the 90<sup>th</sup> percentile. The planning assessments estimated 87.57% risk coverage with 6 minutes travel time from all eight stations (Table 3). The GIS planning efforts utilize average road speeds and impedance and it is not uncommon for the fire department responses to outperform the average road speed. Therefore, there is a high degree of agreement between the planning tools and actual historical performance.

**Table 3: Marginal Fire Station Contribution for 6-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 6,457           | 6,457         | 38.27%          |
| 2    | S2      | 2,953           | 9,410         | 55.78%          |
| 3    | S6      | 2,696           | 12,106        | 71.76%          |
| 4    | S7      | 908             | 13,014        | 77.14%          |
| 5    | S9      | 785             | 13,799        | 81.79%          |
| 6    | S5      | 644             | 14,443        | 85.61%          |
| 7    | S1      | 277             | 14,720        | 87.25%          |
| 8    | S4      | 54              | 14,774        | 87.57%          |

**Figure 2: Current Fire Station Bleed Maps for 6-Minute Travel Time**



## **EVALUATION OF VARIOUS DISTRIBUTION MODELS**

As previously discussed, these analyses utilized 2018 historical performance as the desired performance for system design. Various configurations of 4-, 5-, 6-, 7-, and 8-minute travel times were completed to consider alternatives compared to the current performance of 5.5 minutes travel time at the 90<sup>th</sup> percentile. The following analyses are offered to compare and contrast the various potential distribution models. Results for RFD at 5- and 6-minute travel times are presented here again for ease of comparison.

## Current Stations

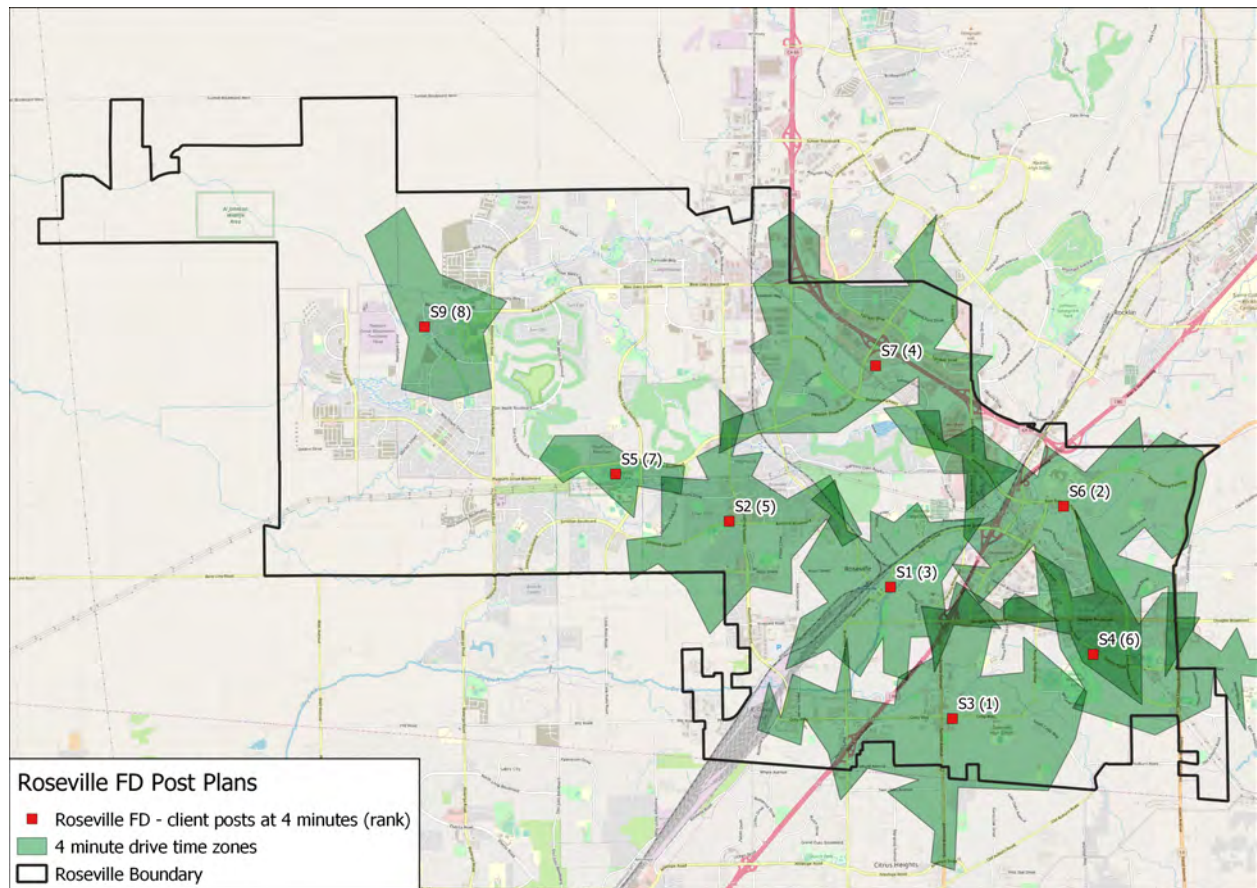
### 4-Minute Travel Time

Results suggest that with all eight RFD fire stations, 64.87% of the incidents could be responded to within 4 minutes or less travel time.

**Table 4: Marginal Fire Station Contribution for 4-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 3,481           | 3,481         | 20.63%          |
| 2    | S6      | 2,319           | 5,800         | 34.38%          |
| 3    | S1      | 1,606           | 7,406         | 43.90%          |
| 4    | S7      | 1,527           | 8,933         | 52.95%          |
| 5    | S2      | 1,146           | 10,079        | 59.74%          |
| 6    | S4      | 440             | 10,519        | 62.35%          |
| 7    | S5      | 284             | 10,803        | 64.03%          |
| 8    | S9      | 142             | 10,945        | 64.87%          |

**Figure 3: Current Fire Station Bleed Maps for 4-Minute Travel Time**





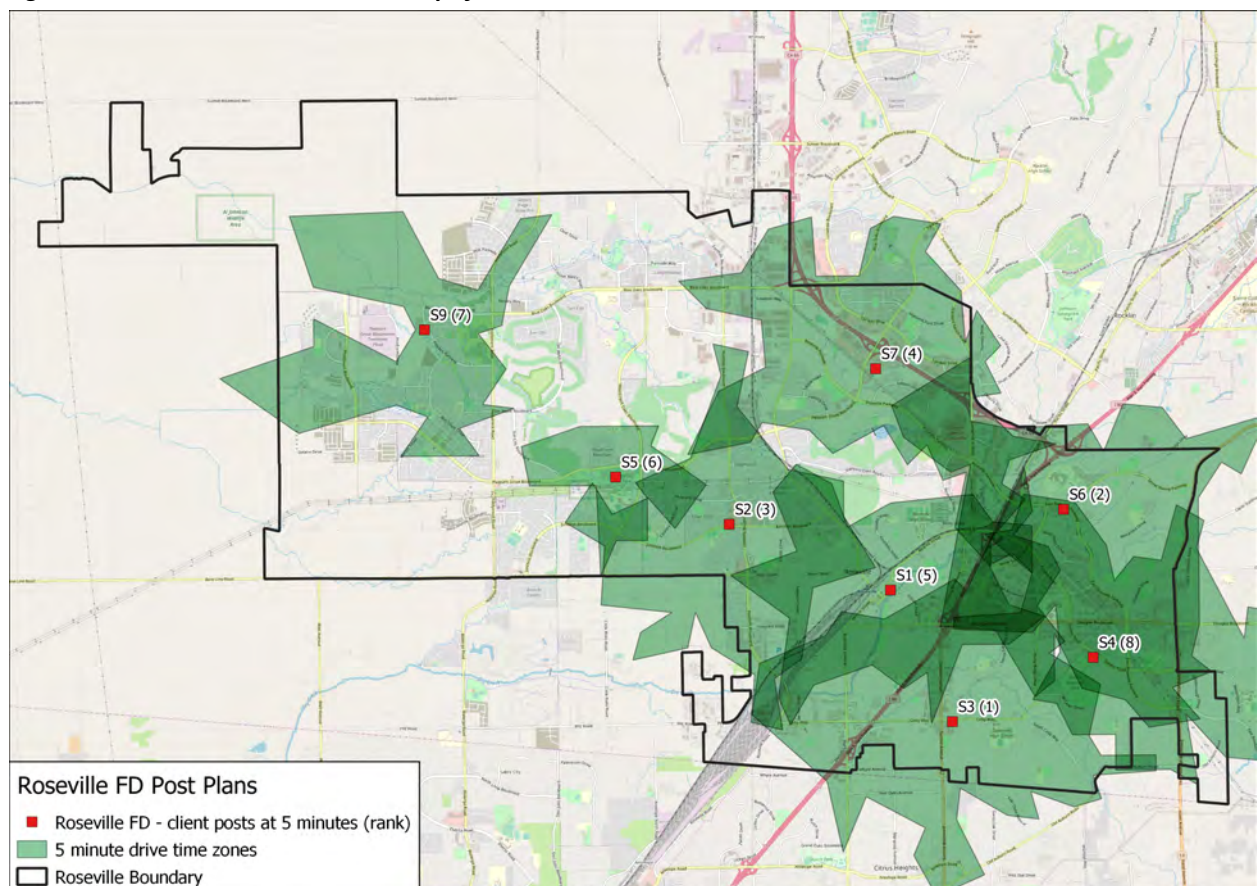
## 5-Minute Travel Time

Results suggest that with all eight RFD fire stations, 80.71% of the incidents could be responded to within 5 minutes or less travel time.

**Table 5: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S7      | 1,354           | 11,641        | 69.00%          |
| 5    | S1      | 944             | 12,585        | 74.60%          |
| 6    | S5      | 488             | 13,073        | 77.49%          |
| 7    | S9      | 438             | 13,511        | 80.08%          |
| 8    | S4      | 106             | 13,617        | 80.71%          |

**Figure 4: Current Fire Station Bleed Maps for 5-Minute Travel Time**



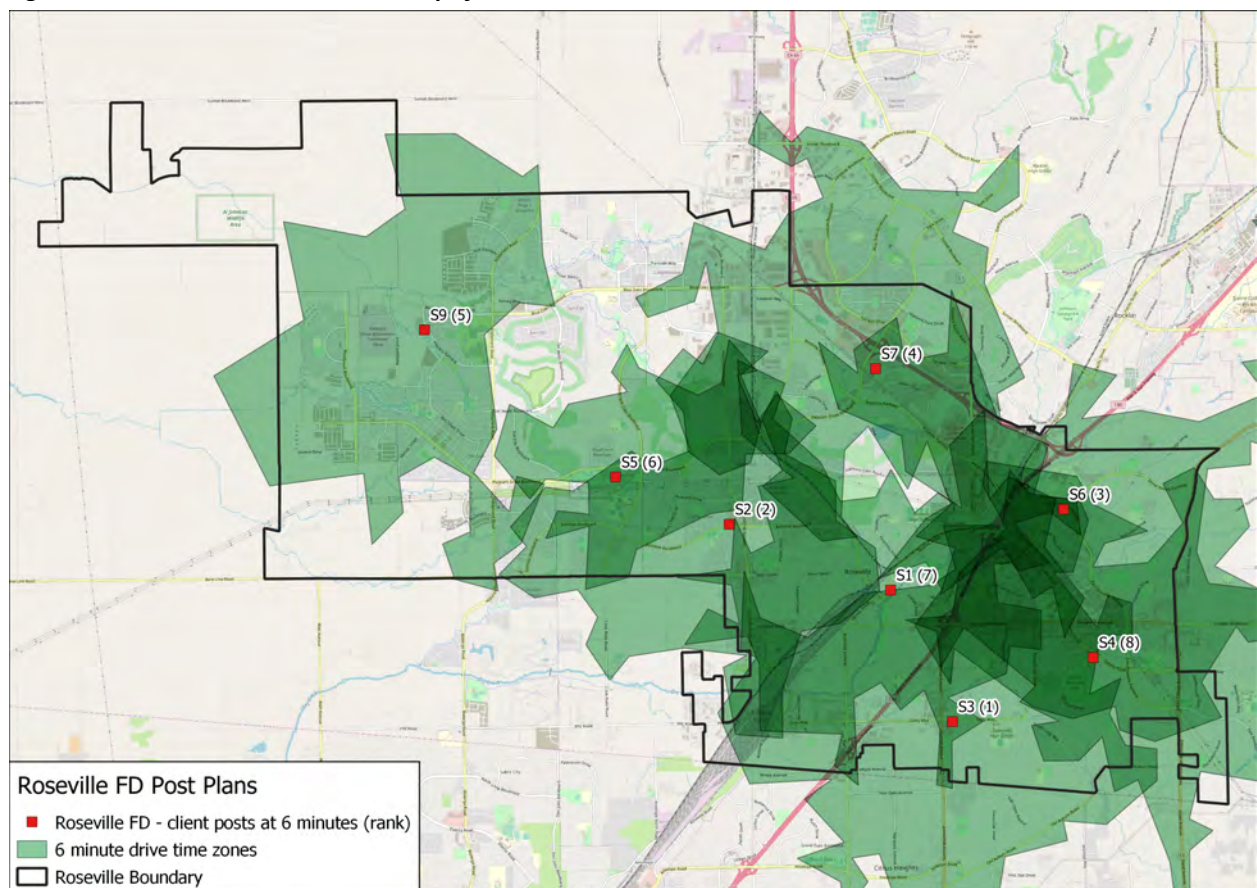
## 6-Minute Travel Time

Results suggest that with all eight RFD fire stations, 87.57% of the incidents could be responded to within 6 minutes or less travel time.

**Table 6: Marginal Fire Station Contribution for 6-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 6,457           | 6,457         | 38.27%          |
| 2    | S2      | 2,953           | 9,410         | 55.78%          |
| 3    | S6      | 2,696           | 12,106        | 71.76%          |
| 4    | S7      | 908             | 13,014        | 77.14%          |
| 5    | S9      | 785             | 13,799        | 81.79%          |
| 6    | S5      | 644             | 14,443        | 85.61%          |
| 7    | S1      | 277             | 14,720        | 87.25%          |
| 8    | S4      | 54              | 14,774        | 87.57%          |

**Figure 5: Current Fire Station Bleed Maps for 6-Minute Travel Time**





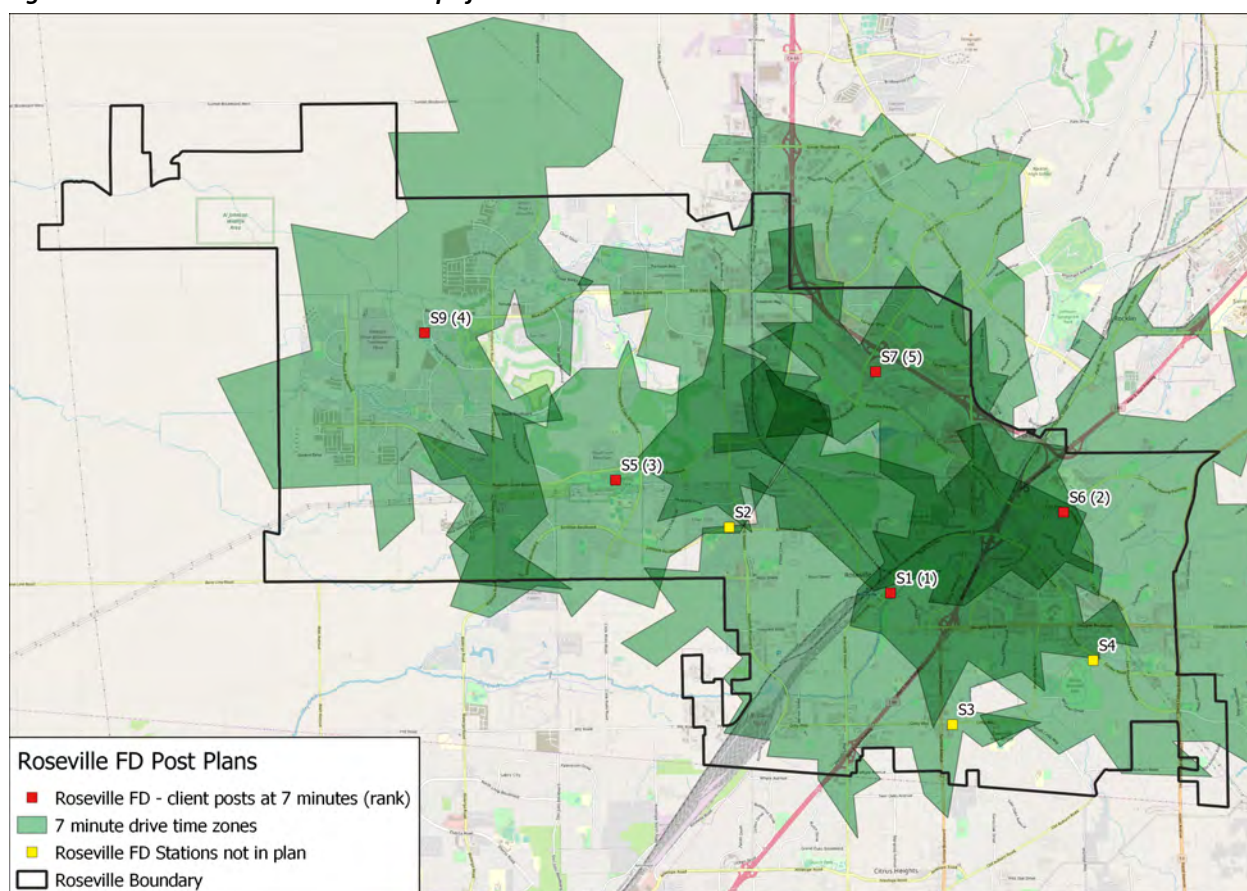
## 7-Minute Travel Time

Results suggest that with five RFD fire stations, 92.21% of the incidents could be responded to within 7 minutes or less travel time. All eight RFD fire stations could cover 95.44% of the risk within 7 minutes or less travel time.

**Table 7: Marginal Fire Station Contribution for 7-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S1      | 8,106           | 8,106         | 48.05%          |
| 2    | S6      | 3,217           | 11,323        | 67.12%          |
| 3    | S5      | 2,526           | 13,849        | 82.09%          |
| 4    | S9      | 914             | 14,763        | 87.51%          |
| 5    | S7      | 794             | 15,557        | 92.21%          |
| 6    | S3      | 464             | 16,021        | 94.96%          |
| 7    | S4      | 41              | 16,062        | 95.20%          |
| 8    | S2      | 40              | 16,102        | 95.44%          |

**Figure 6: Current Fire Station Bleed Maps for 7-Minute Travel Time**





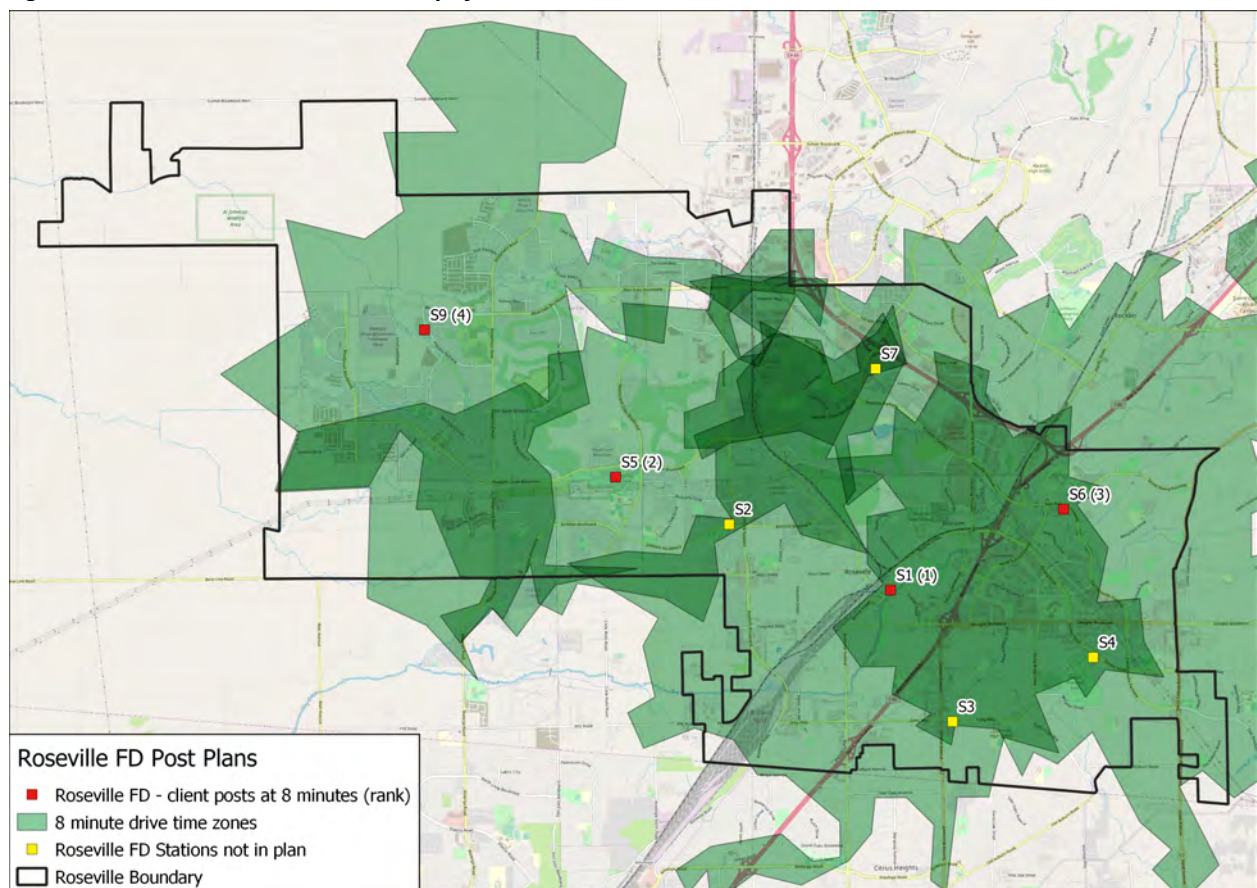
## 8-Minute Travel Time

Results suggest that with four RFD fire stations, 95.70% of the incidents could be responded to within 8 minutes or less travel time. All eight RFD fire stations could cover 97.88% of the risk within 8 minutes or less travel time.

**Table 8: Marginal Fire Station Contribution for 8-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S1      | 10,505          | 10,505        | 62.27%          |
| 2    | S5      | 2,711           | 13,216        | 78.34%          |
| 3    | S6      | 1,618           | 14,834        | 87.93%          |
| 4    | S9      | 1,311           | 16,145        | 95.70%          |
| 5    | S7      | 179             | 16,324        | 96.76%          |
| 6    | S3      | 158             | 16,482        | 97.69%          |
| 7    | S4      | 26              | 16,508        | 97.85%          |
| 8    | S2      | 5               | 16,513        | 97.88%          |

**Figure 7: Current Fire Station Bleed Maps for 8-Minute Travel Time**



## ALTERNATIVE STATION CONFIGURATIONS

The Roseville Fire Department has projected future station locations and construction for future fire Station's 8 and Station 10, respectively. The following scenarios were created to validate and analyze the potential alternative configurations.

- Scenario 1: All existing stations with the addition of Station 8
- Scenario 2: All existing stations with the addition of Station 8 and relocated Station 5
- Scenario 3: All existing stations with the addition of Stations 8 and 10
- Scenario 4: All existing stations with the addition of Station 8, relocated Station 5, and Station 10

### Scenario 1

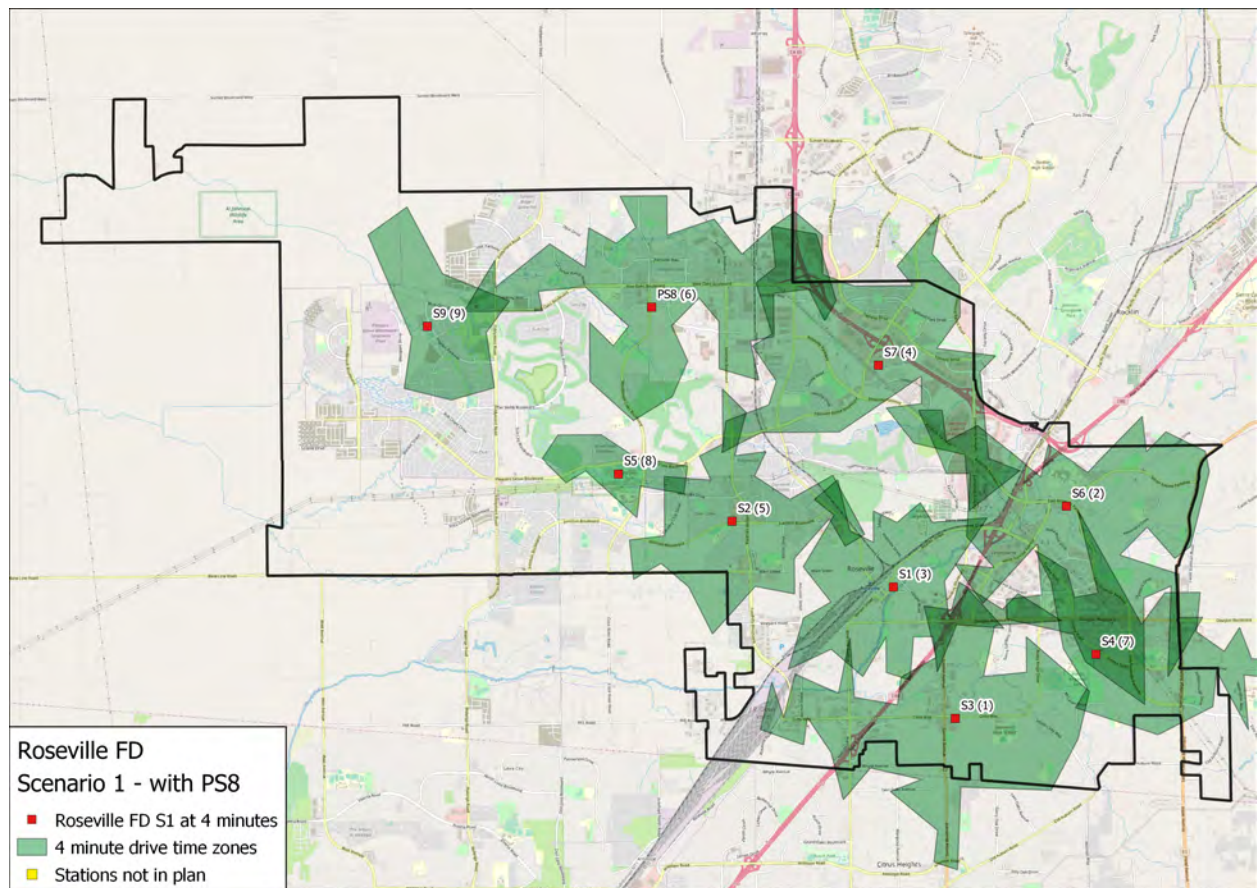
#### *4-Minute Travel Time*

Results suggest that with all nine RFD fire stations, 70.2% of the incidents could be responded to within 4 minutes or less travel time. This is approximately a 5% improvement over the current configuration prior to the addition of Station 8.

**Table 9: Marginal Fire Station Contribution for 4-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 3,481           | 3,481         | 20.63%          |
| 2    | S6      | 2,319           | 5,800         | 34.38%          |
| 3    | S1      | 1,606           | 7,406         | 43.90%          |
| 4    | S7      | 1,527           | 8,933         | 52.95%          |
| 5    | S2      | 1,146           | 10,079        | 59.74%          |
| 6    | S8      | 905             | 10,984        | 65.11%          |
| 7    | S4      | 440             | 11,424        | 67.71%          |
| 8    | S5      | 284             | 11,708        | 69.40%          |
| 9    | S9      | 135             | 11,843        | 70.20%          |

**Figure 8: Current Fire Stations and Station 8 Bleed Maps for 4-Minute Travel Time**





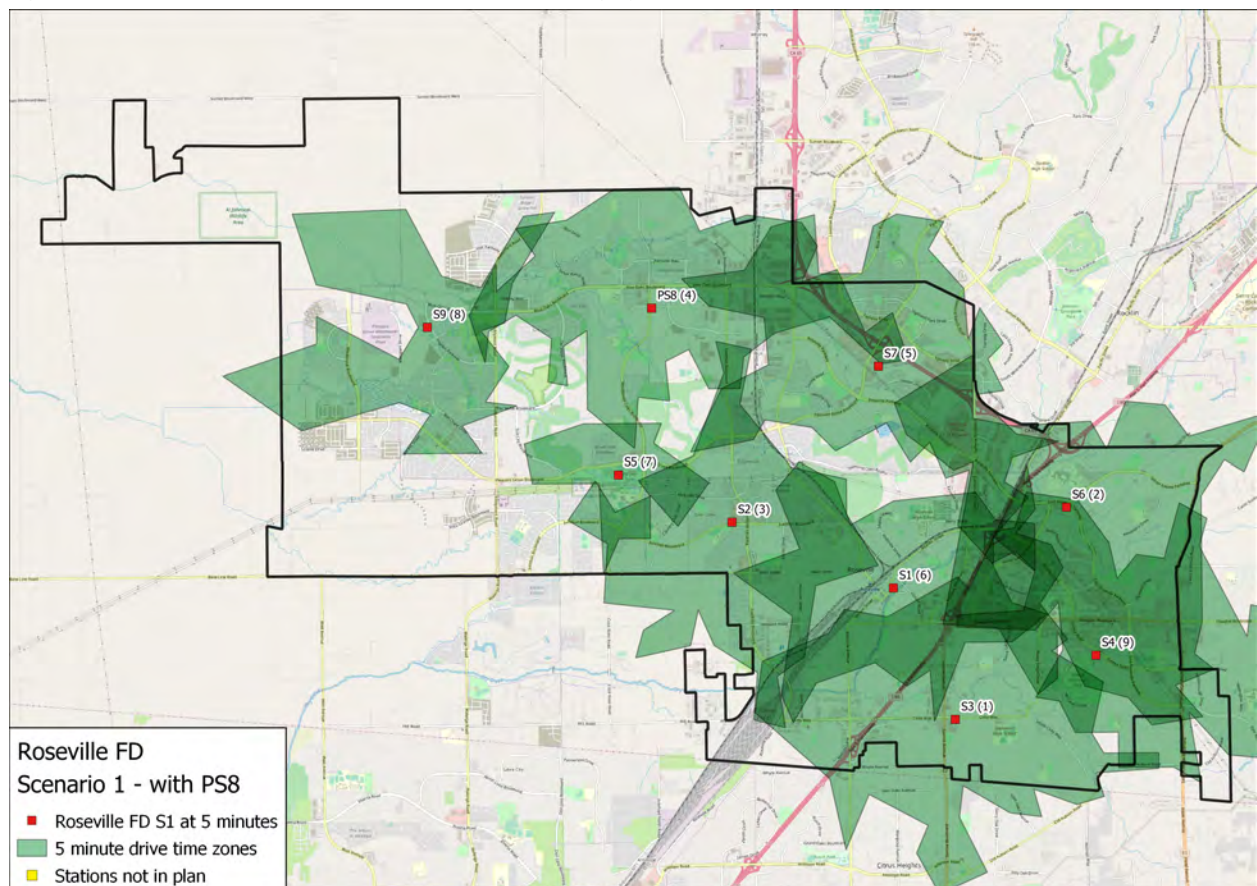
## 5-Minute Travel Time

Results suggest that with all nine RFD fire stations, 87.85% of the incidents could be responded to within 5 minutes or less travel time. This is approximately a 7% improvement over the current configuration prior to the addition of Station 8.

**Table 10: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S7      | 967             | 12,895        | 76.43%          |
| 6    | S1      | 944             | 13,839        | 82.03%          |
| 7    | S5      | 474             | 14,313        | 84.84%          |
| 8    | S9      | 403             | 14,716        | 87.23%          |
| 9    | S4      | 106             | 14,822        | 87.85%          |

**Figure 9: Current Fire Stations and Station 8 Bleed Maps for 5-Minute Travel Time**



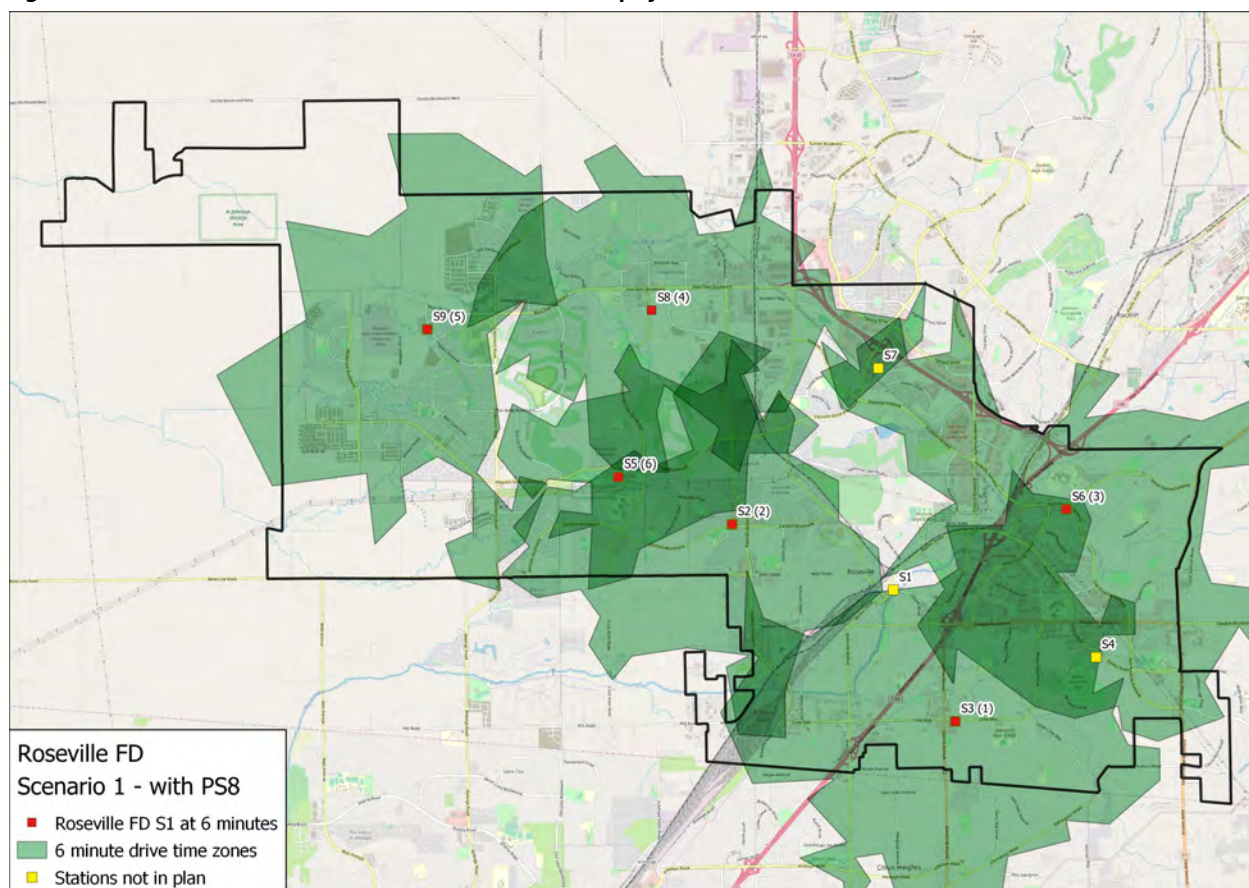
## 6-Minute Travel Time

Results suggest that with all nine RFD fire stations, 95.09% of the incidents could be responded to within 6 minutes or less travel time. This represents approximately a 7% improvement over the current configuration prior to the addition of Station 8.

**Table 11: Marginal Fire Station Contribution for 6-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 6,457           | 6,457         | 38.27%          |
| 2    | S2      | 2,953           | 9,410         | 55.78%          |
| 3    | S6      | 2,696           | 12,106        | 71.76%          |
| 4    | S8      | 2,001           | 14,107        | 83.62%          |
| 5    | S9      | 724             | 14,831        | 87.91%          |
| 6    | S5      | 475             | 15,306        | 90.72%          |
| 7    | S7      | 406             | 15,712        | 93.13%          |
| 8    | S1      | 277             | 15,989        | 94.77%          |
| 9    | S4      | 54              | 16,043        | 95.09%          |

**Figure 10: Current Fire Stations and Station 8 Bleed Maps for 6-Minute Travel Time**





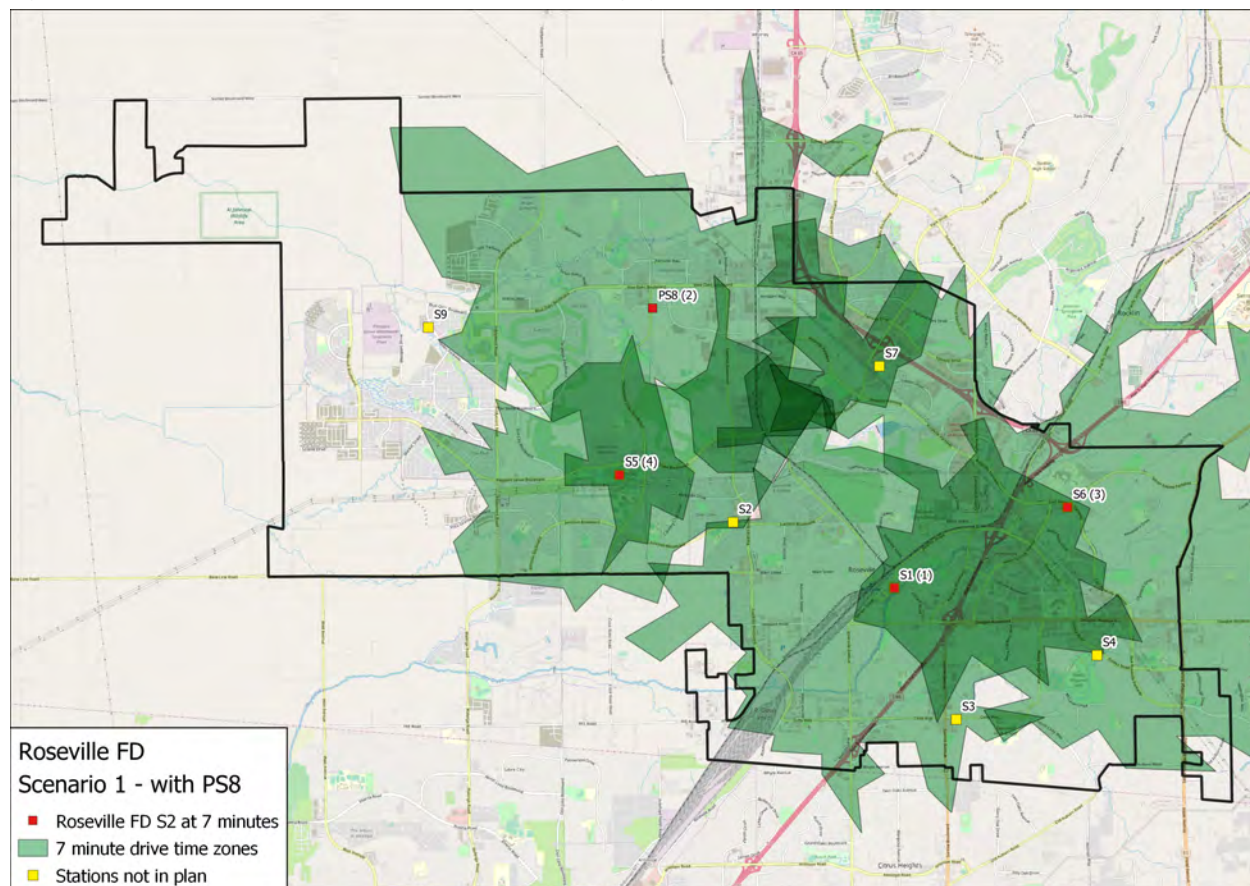
### 7-Minute Travel Time

Results suggest that with all nine RFD fire stations, 98.75% of the incidents could be responded to within 7 minutes or less travel time. This represents an approximate improvement of 3% over the current eight station configuration.

**Table 12: Marginal Fire Station Contribution for 7-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S1      | 8,106           | 8,106         | 48.05%          |
| 2    | S8      | 3,510           | 11,616        | 68.85%          |
| 3    | S6      | 2,485           | 14,101        | 83.58%          |
| 4    | S5      | 1,464           | 15,565        | 92.26%          |
| 5    | S9      | 529             | 16,094        | 95.39%          |
| 6    | S3      | 464             | 16,558        | 98.14%          |
| 7    | S4      | 41              | 16,599        | 98.39%          |
| 8    | S2      | 40              | 16,639        | 98.62%          |
| 9    | S7      | 21              | 16,660        | 98.75%          |

**Figure 11: Current Fire Stations and Station 8 Bleed Maps for 7-Minute Travel Time**



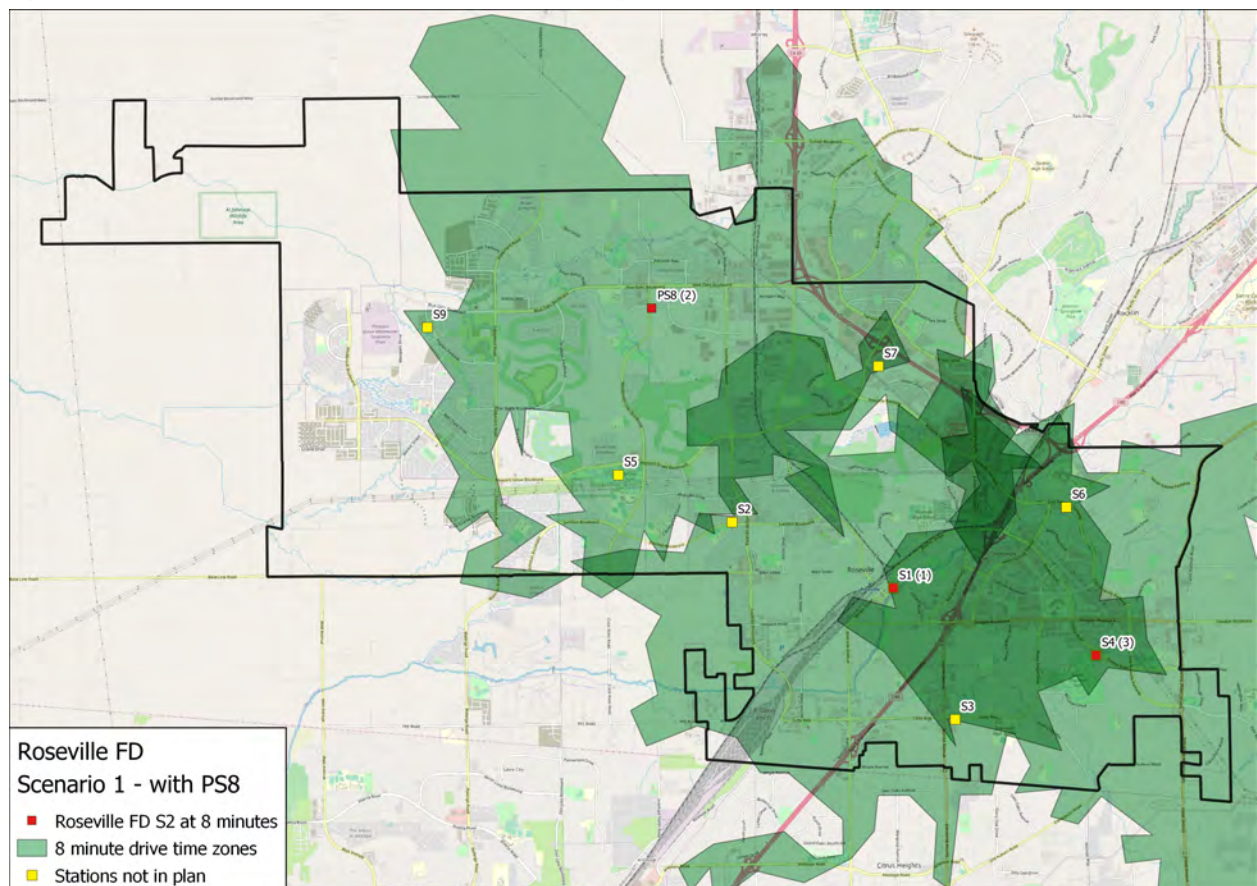
## 8-Minute Travel Time

Results suggest that with all nine fire stations, 99.05% of the incidents could be responded to within 8 minutes or less travel time. This represents an approximate 2% improvement over the current eight fire stations configuration.

**Table 13: Marginal Fire Station Contribution for 8-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S1      | 10,505          | 10,505        | 62.27%          |
| 2    | S8      | 4,107           | 14,612        | 86.61%          |
| 3    | S4      | 1,058           | 15,670        | 92.88%          |
| 4    | S5      | 754             | 16,424        | 97.35%          |
| 5    | S9      | 153             | 16,577        | 98.26%          |
| 6    | S6      | 86              | 16,663        | 98.77%          |
| 7    | S3      | 34              | 16,697        | 98.97%          |
| 8    | S7      | 8               | 16,705        | 99.02%          |
| 9    | S2      | 5               | 16,710        | 99.05%          |

**Figure 12: Current Fire Stations and Station 8 Bleed Maps for 8-Minute Travel Time**



## Scenario 2

### ***4-Minute Travel Time***

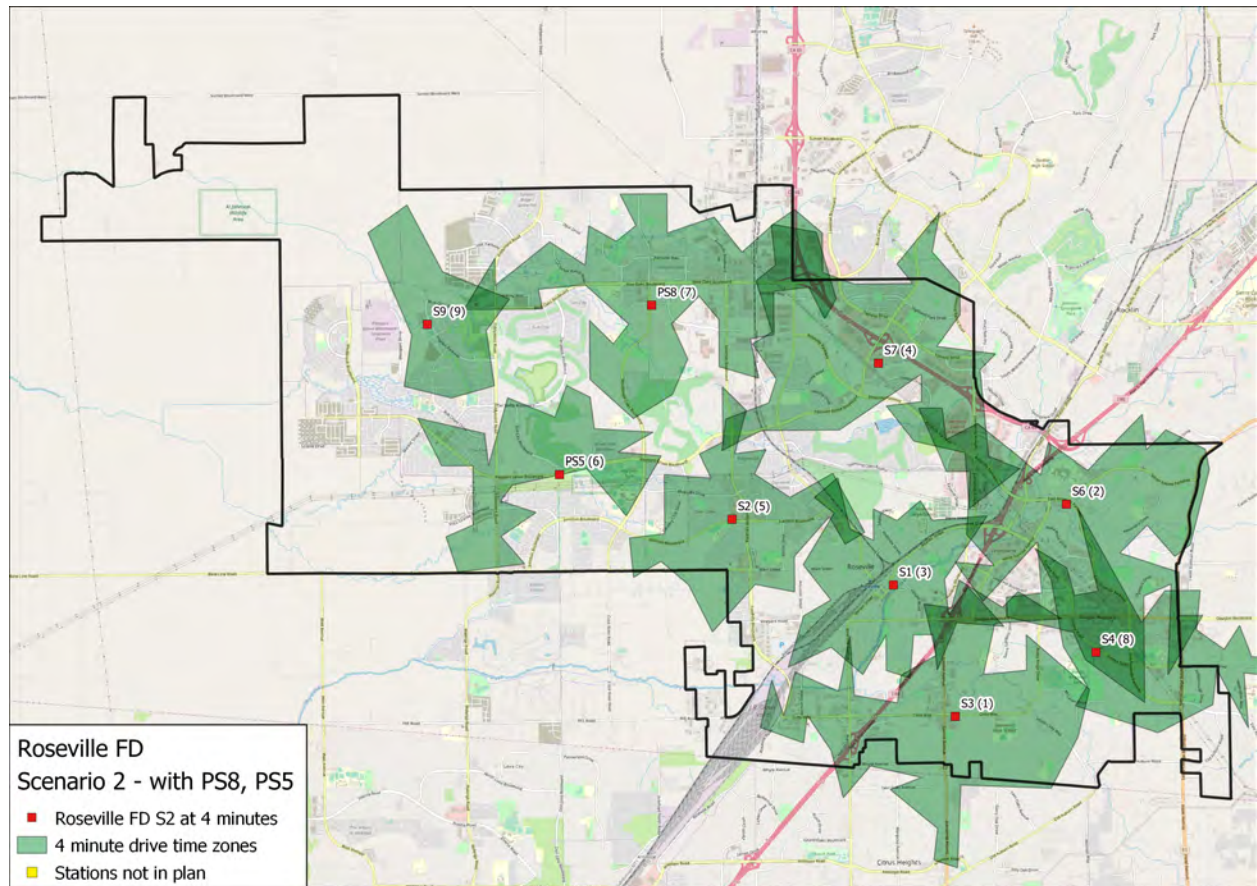
Results suggest that with all nine RFD fire stations, 74.04% of the incidents could be responded to within 4 minutes or less travel time. This is approximately a 9% improvement over the current configuration prior to the addition of Station 8 or relocation of Station 5.

***Table 14: Marginal Fire Station Contribution for 4-Minute Travel Time***

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 3,481           | 3,481         | 20.63%          |
| 2    | S6      | 2,319           | 5,800         | 34.38%          |
| 3    | S1      | 1,606           | 7,406         | 43.90%          |
| 4    | S7      | 1,527           | 8,933         | 52.95%          |
| 5    | S2      | 1,146           | 10,079        | 59.74%          |
| 6    | S5N     | 932             | 11,011        | 65.27%          |
| 7    | S8      | 905             | 11,916        | 70.63%          |
| 8    | S4      | 440             | 12,356        | 73.24%          |
| 9    | S9      | 135             | 12,491        | 74.04%          |



**Figure 13: Current Fire Stations, Station 8, and Relocation of Station 5 Bleed Maps for 4-Minute Travel Time**



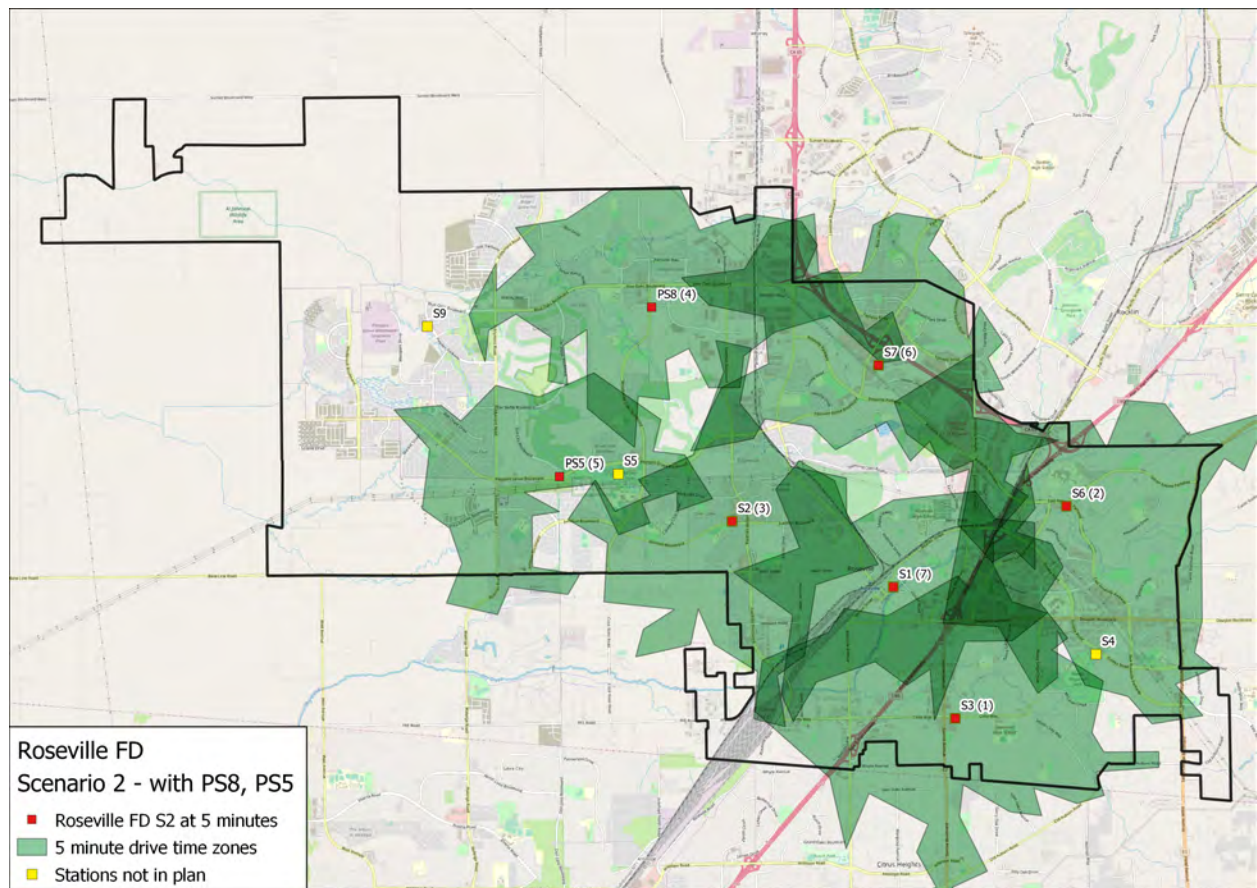
### 5-Minute Travel Time

Results suggest that with all nine RFD fire stations, 92.56% of the incidents could be responded to within 5 minutes or less travel time. This is approximately an 11% improvement over the current configuration prior to the addition of Station 8 or relocation of Station 5.

**Table 15: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S5N     | 1,397           | 13,325        | 78.98%          |
| 6    | S7      | 967             | 14,292        | 84.71%          |
| 7    | S1      | 944             | 15,236        | 90.31%          |
| 8    | S9      | 274             | 15,510        | 91.93%          |
| 9    | S4      | 106             | 15,616        | 92.56%          |

**Figure 14: Current Fire Stations, Station 8, and Relocation of Station 5 Bleed Maps for 5-Minute Travel Time**





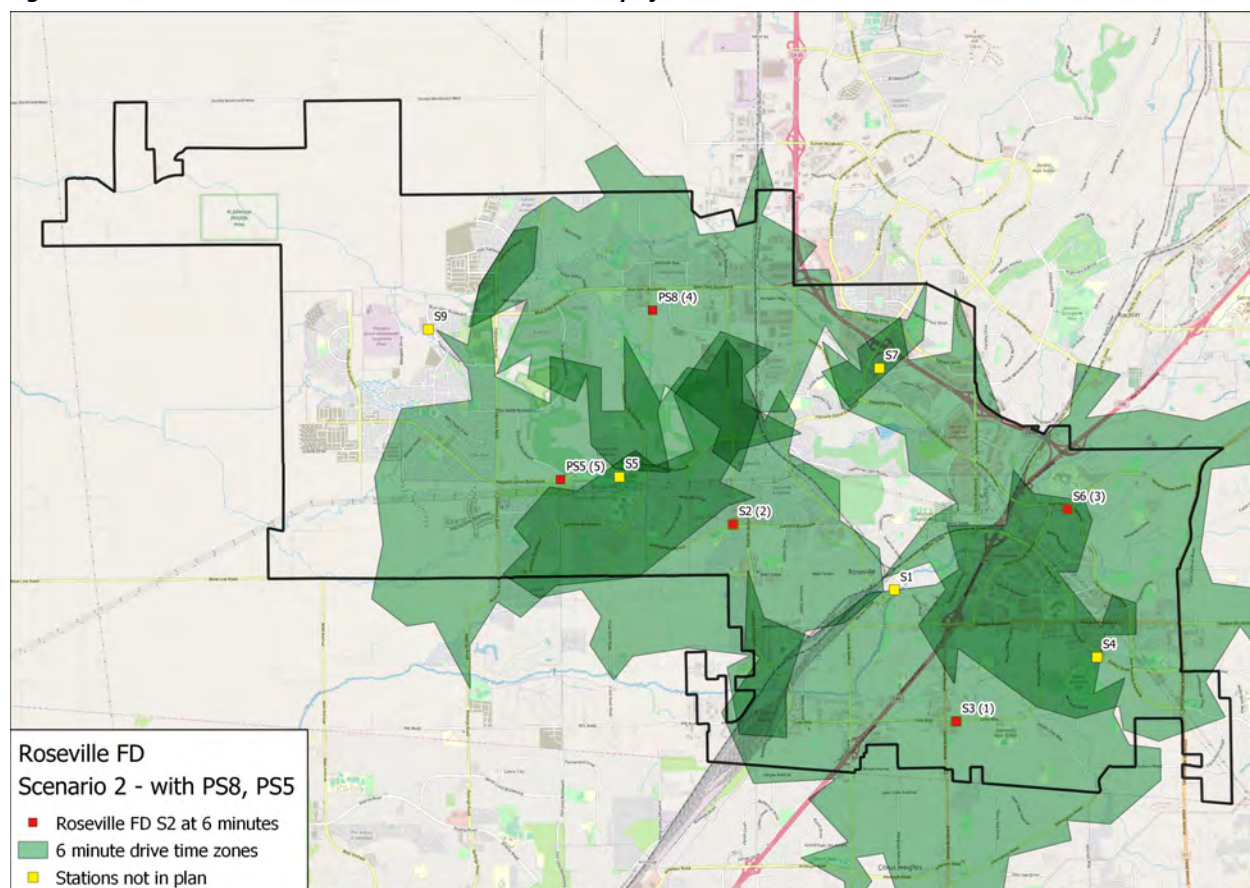
## 6-Minute Travel Time

Results suggest that with all nine RFD fire stations, 97.09% of the incidents could be responded to within 6 minutes or less travel time. This represents approximately a 9% improvement over the current configuration prior to the addition of Station 8 or relocation of Station 5.

**Table 16: Marginal Fire Station Contribution for 6-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 6,457           | 6,457         | 38.27%          |
| 2    | S2      | 2,953           | 9,410         | 55.78%          |
| 3    | S6      | 2,696           | 12,106        | 71.76%          |
| 4    | S8      | 2,001           | 14,107        | 83.62%          |
| 5    | S5N     | 1,185           | 15,292        | 90.64%          |
| 6    | S7      | 423             | 15,715        | 93.15%          |
| 7    | S9      | 334             | 16,049        | 95.13%          |
| 8    | S1      | 277             | 16,326        | 96.77%          |
| 9    | S4      | 54              | 16,380        | 97.09%          |

**Figure 15: Current Fire Stations and Station 8 Bleed Maps for 6-Minute Travel Time**



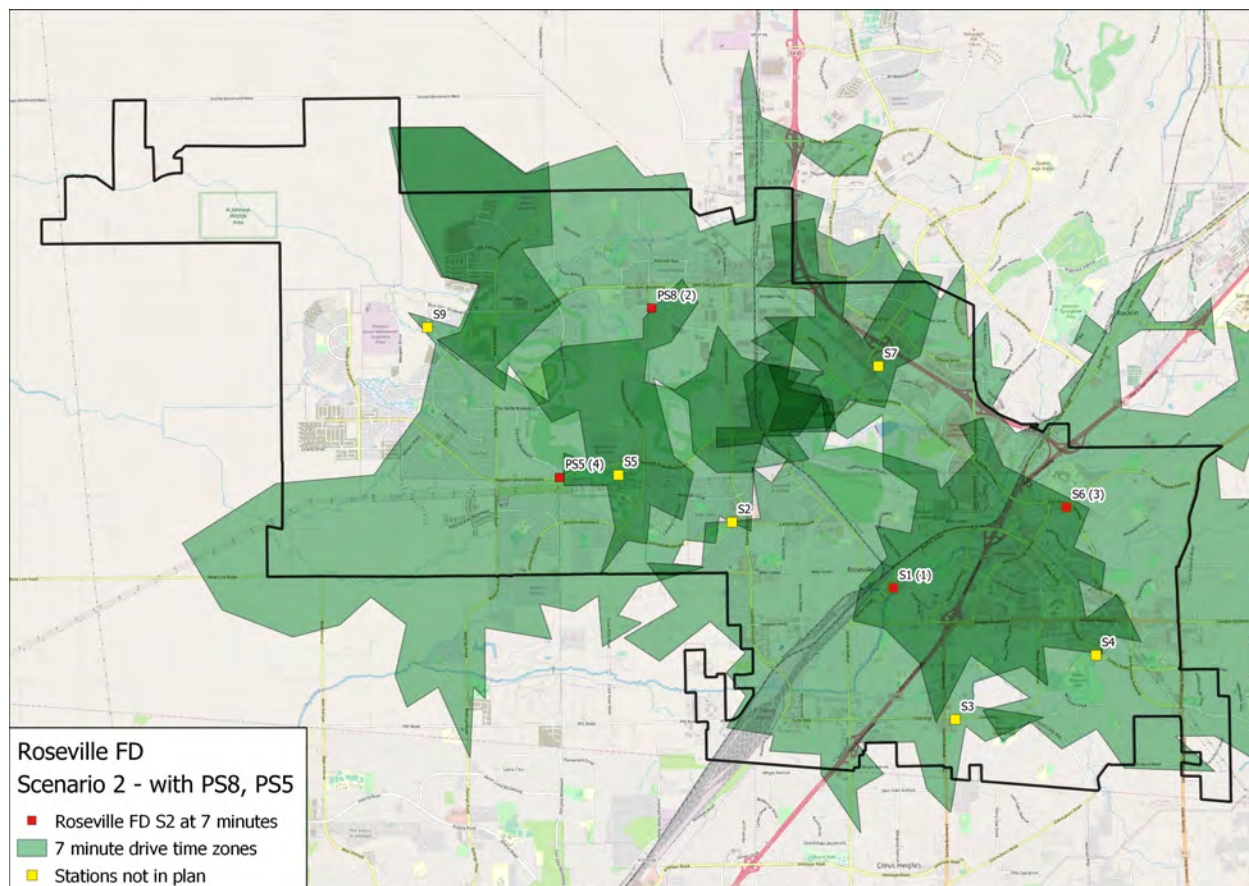
## 7-Minute Travel Time

Results suggest that with all nine RFD fire stations, 98.98% of the incidents could be responded to within 7 minutes or less travel time. This represents an approximate improvement of 3% over the current eight station configuration.

**Table 17: Marginal Fire Station Contribution for 7-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S1      | 8,106           | 8,106         | 48.05%          |
| 2    | S8      | 3,510           | 11,616        | 68.85%          |
| 3    | S6      | 2,485           | 14,101        | 83.58%          |
| 4    | S5N     | 1,666           | 15,767        | 93.46%          |
| 5    | S3      | 464             | 16,231        | 96.21%          |
| 6    | S2      | 224             | 16,455        | 97.53%          |
| 7    | S9      | 183             | 16,638        | 98.62%          |
| 8    | S4      | 41              | 16,679        | 98.86%          |
| 9    | S7      | 20              | 16,699        | 98.98%          |

**Figure 16: Current Fire Stations, Station 8, and Relocated Station 5 Bleed Maps for 7-Minute Travel Time**





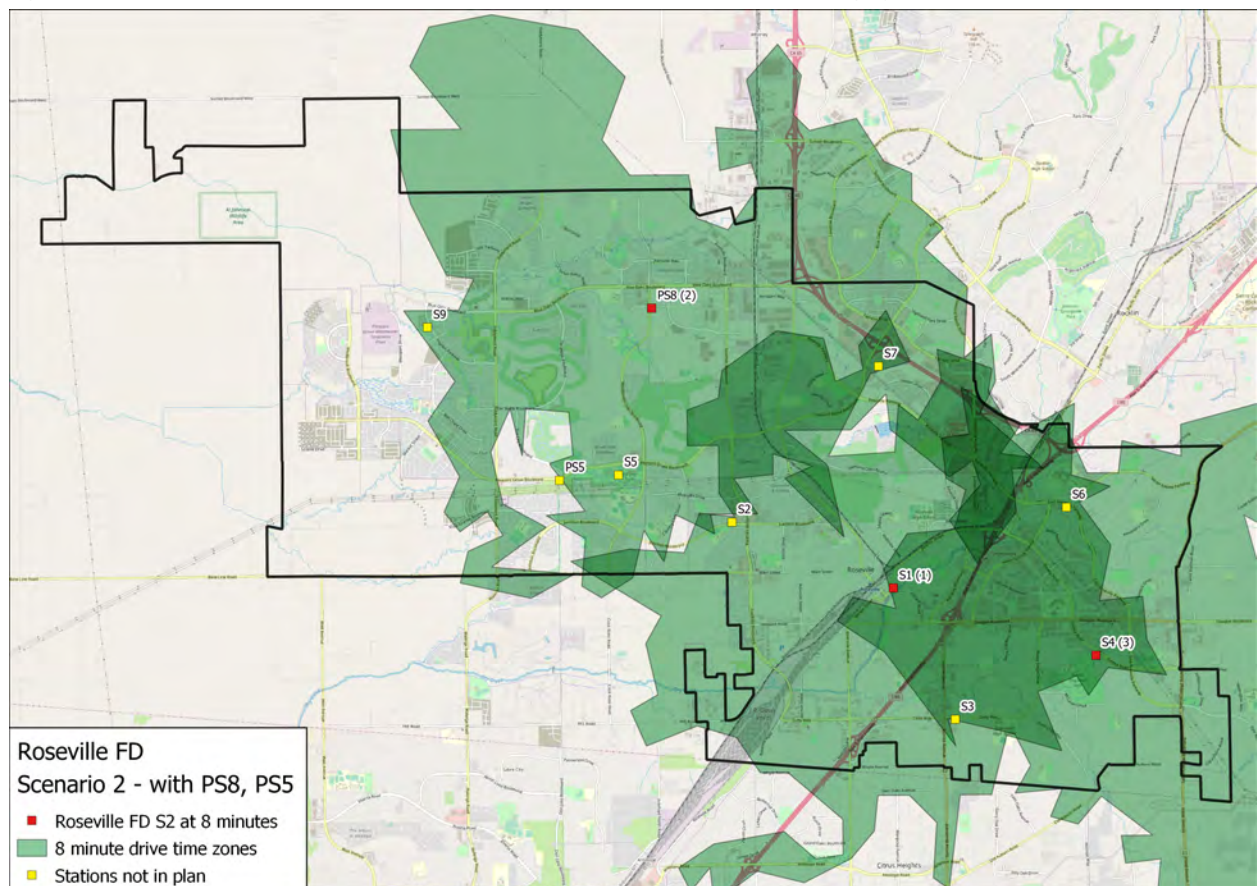
## 8-Minute Travel Time

Results suggest that with all nine fire stations, 99.24% of the incidents could be responded to within 8 minutes or less travel time. This represents an approximate 2% improvement over the current eight fire stations configuration.

**Table 18: Marginal Fire Station Contribution for 8-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S1      | 10,505          | 10,505        | 62.27%          |
| 2    | S8      | 4,107           | 14,612        | 86.61%          |
| 3    | S4      | 1,058           | 15,670        | 92.88%          |
| 4    | S5N     | 828             | 16,498        | 97.79%          |
| 5    | S9      | 112             | 16,610        | 98.45%          |
| 6    | S6      | 89              | 16,699        | 98.98%          |
| 7    | S3      | 34              | 16,733        | 99.18%          |
| 8    | S7      | 8               | 16,741        | 99.23%          |
| 9    | S2      | 2               | 16,743        | 99.24%          |

**Figure 17: Current Fire Stations, Station 8, and Relocated Station 5 Bleed Maps for 8-Minute Travel Time**



## Scenario 3

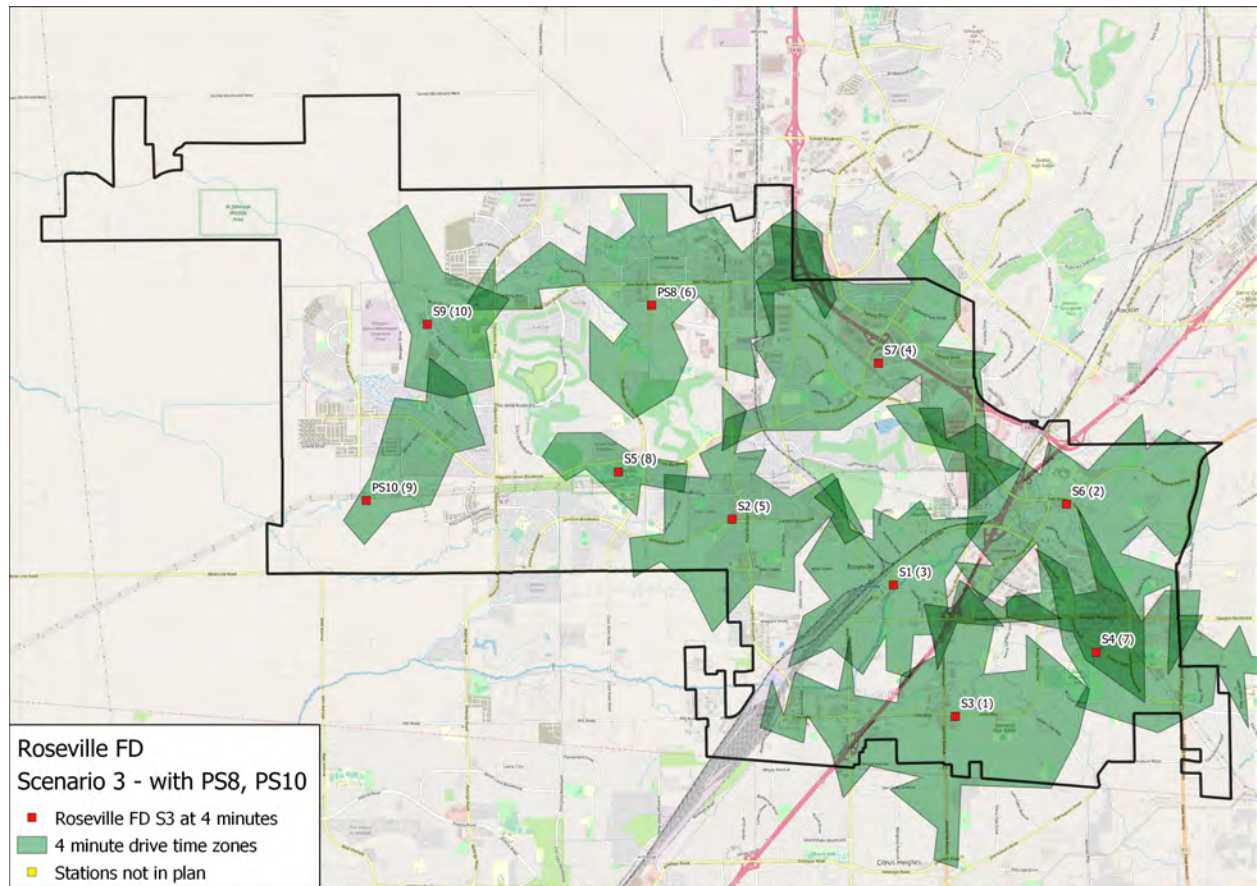
### *4-Minute Travel Time*

Results suggest that with all 10 RFD fire stations, 71.26% of the incidents could be responded to within 4 minutes or less travel time. This is approximately a 6% improvement over the current configuration, but 3% less than the configuration of Station 8 and relocation of Station 5.

**Table 19: Marginal Fire Station Contribution for 4-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 3,481           | 3,481         | 20.63%          |
| 2    | S6      | 2,319           | 5,800         | 34.38%          |
| 3    | S1      | 1,606           | 7,406         | 43.90%          |
| 4    | S7      | 1,527           | 8,933         | 52.95%          |
| 5    | S2      | 1,146           | 10,079        | 59.74%          |
| 6    | S8      | 905             | 10,984        | 65.11%          |
| 7    | S4      | 440             | 11,424        | 67.71%          |
| 8    | S5      | 284             | 11,708        | 69.40%          |
| 9    | S10     | 197             | 11,905        | 70.56%          |
| 10   | S9      | 117             | 12,022        | 71.26%          |

**Figure 18: Current Fire Stations with Stations 8 and 10 Bleed Maps for 4-Minute Travel Time**



### 5-Minute Travel Time

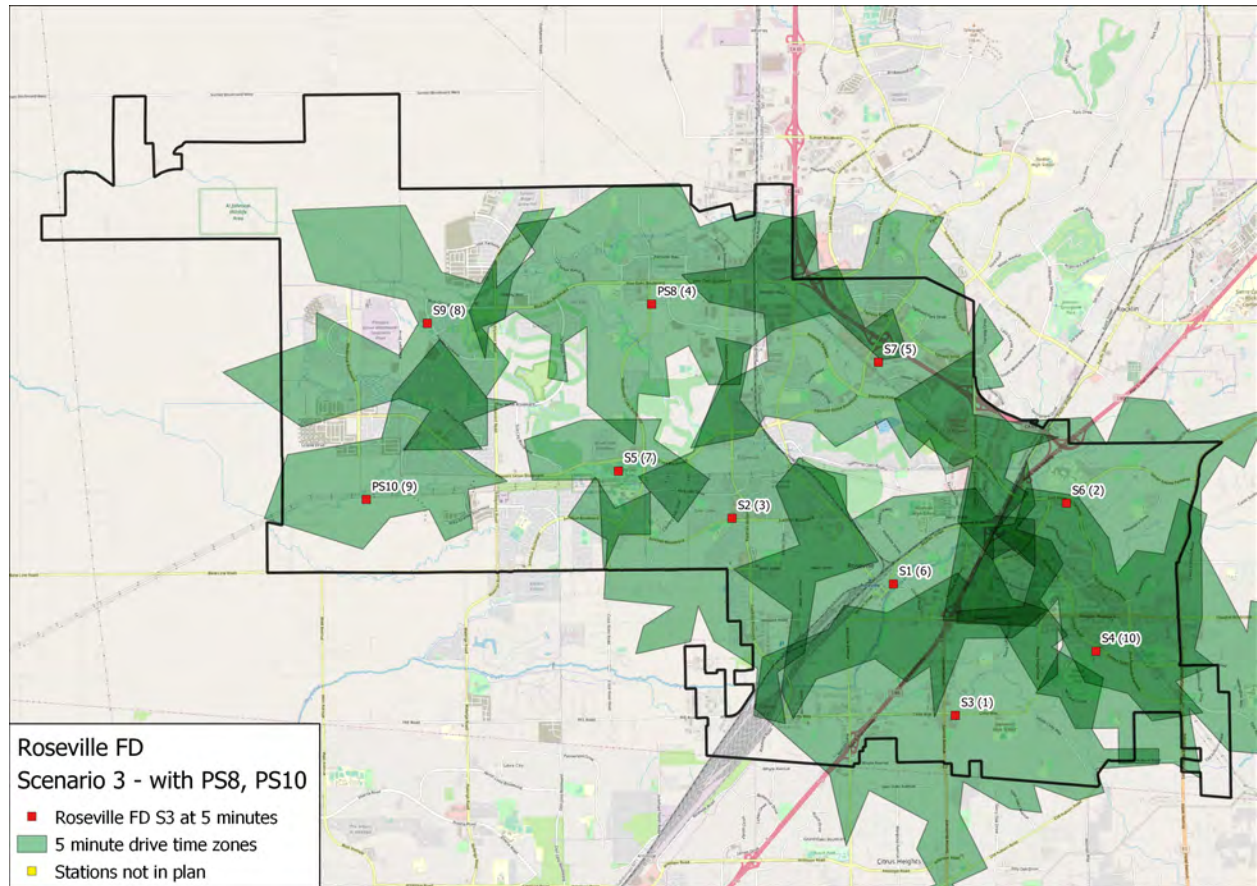
Results suggest that with all 10 RFD fire stations, 88.64% of the incidents could be responded to within 5 minutes or less travel time. This is approximately a 7% improvement over the current configuration, but 4% less than the configuration of Station 8 and the relocation of Station 5.

**Table 20: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S7      | 967             | 12,895        | 76.43%          |
| 6    | S1      | 944             | 13,839        | 82.03%          |
| 7    | S5      | 474             | 14,313        | 84.84%          |
| 8    | S9      | 403             | 14,716        | 87.23%          |
| 9    | S10     | 133             | 14,849        | 88.01%          |
| 10   | S4      | 106             | 14,955        | 88.64%          |



**Figure 19: Current Fire Stations with Stations 8 and 10 Bleed Maps for 5-Minute Travel Time**





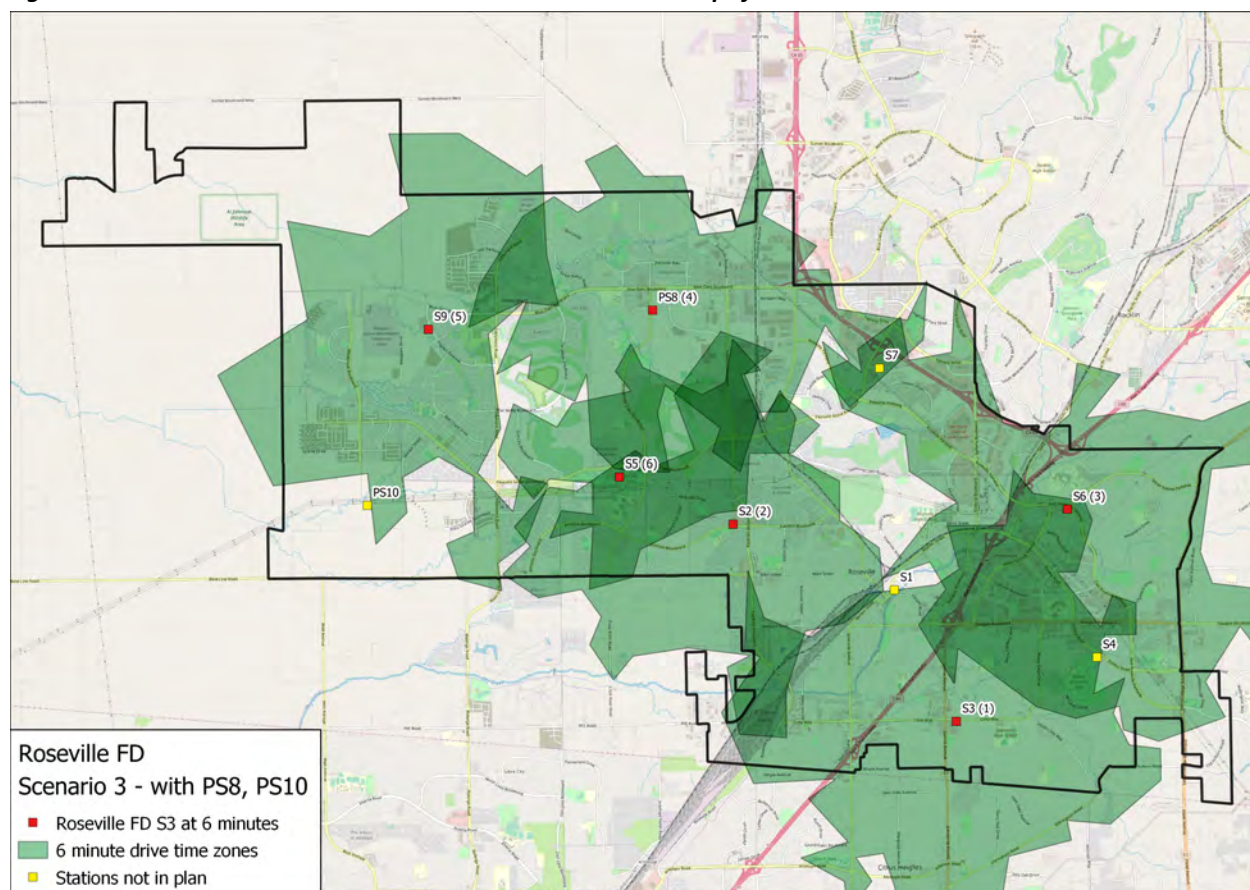
## 6-Minute Travel Time

Results suggest that with all 10 RFD fire stations, 95.64% of the incidents could be responded to within 6 minutes or less travel time. This represents approximately a 7% improvement over the current configuration, but nearly 2% less than the configuration with Station 8 and the relocation of Station 5.

**Table 21: Marginal Fire Station Contribution for 6-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 6,457           | 6,457         | 38.27%          |
| 2    | S2      | 2,953           | 9,410         | 55.78%          |
| 3    | S6      | 2,696           | 12,106        | 71.76%          |
| 4    | S8      | 2,001           | 14,107        | 83.62%          |
| 5    | S9      | 724             | 14,831        | 87.91%          |
| 6    | S5      | 475             | 15,306        | 90.72%          |
| 7    | S7      | 406             | 15,712        | 93.13%          |
| 8    | S1      | 277             | 15,989        | 94.77%          |
| 9    | S10     | 93              | 16,082        | 95.32%          |
| 10   | S4      | 54              | 16,136        | 95.64%          |

**Figure 20: Current Fire Stations and Stations 8 and 10 Bleed Maps for 6-Minute Travel Time**



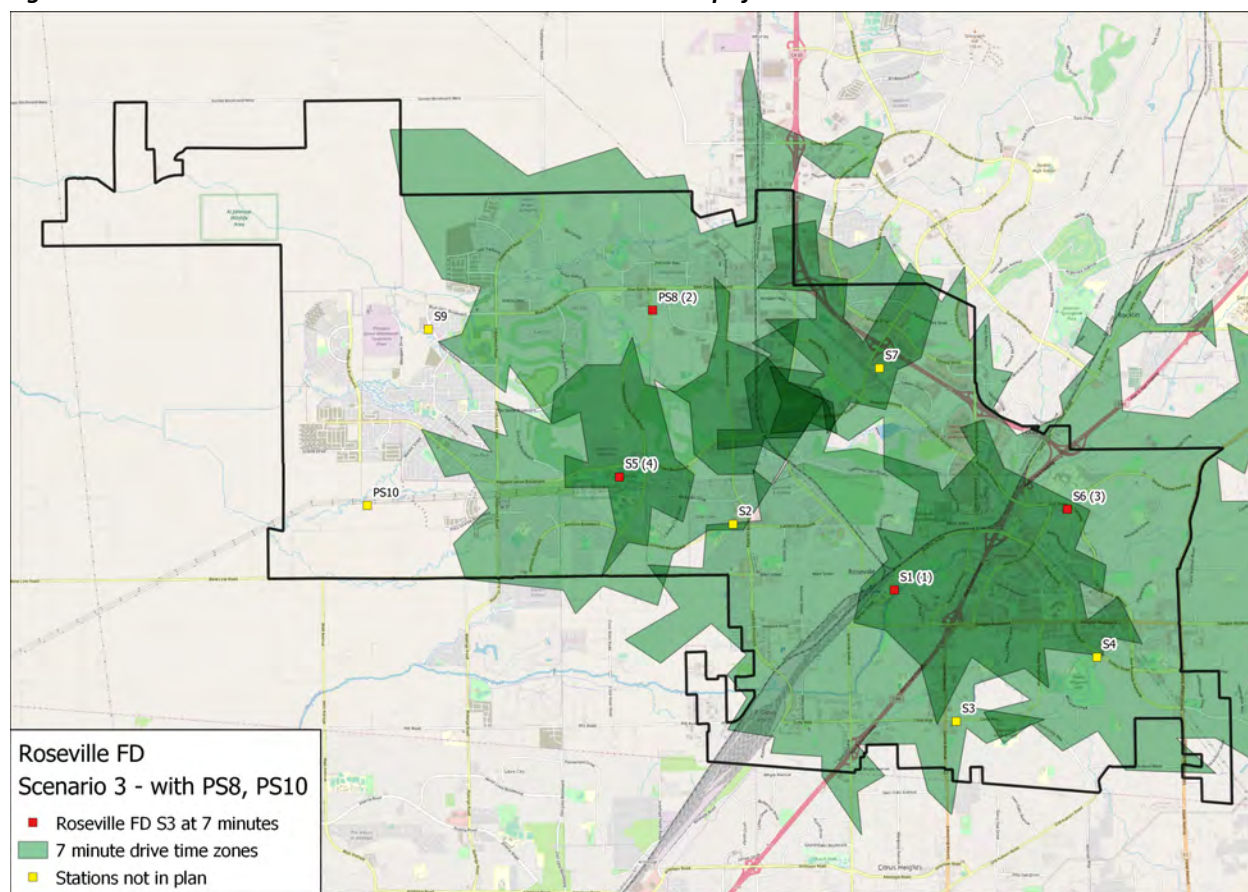
## 7-Minute Travel Time

Results suggest that with all 10 RFD fire stations, 98.77% of the incidents could be responded to within 7 minutes or less travel time. This represents an approximate improvement of 3% over the current eight station configuration.

**Table 22: Marginal Fire Station Contribution for 7-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S1      | 8,106           | 8,106         | 48.05%          |
| 2    | S8      | 3,510           | 11,616        | 68.85%          |
| 3    | S6      | 2,485           | 14,101        | 83.58%          |
| 4    | S5      | 1,464           | 15,565        | 92.26%          |
| 5    | S9      | 529             | 16,094        | 95.39%          |
| 6    | S3      | 464             | 16,558        | 98.14%          |
| 7    | S4      | 41              | 16,599        | 98.39%          |
| 8    | S2      | 40              | 16,639        | 98.62%          |
| 9    | S7      | 21              | 16,660        | 98.75%          |
| 10   | S10     | 4               | 16,664        | 98.77%          |

**Figure 21: Current Fire Stations and Stations 8 and 10 Bleed Maps for 7-Minute Travel Time**





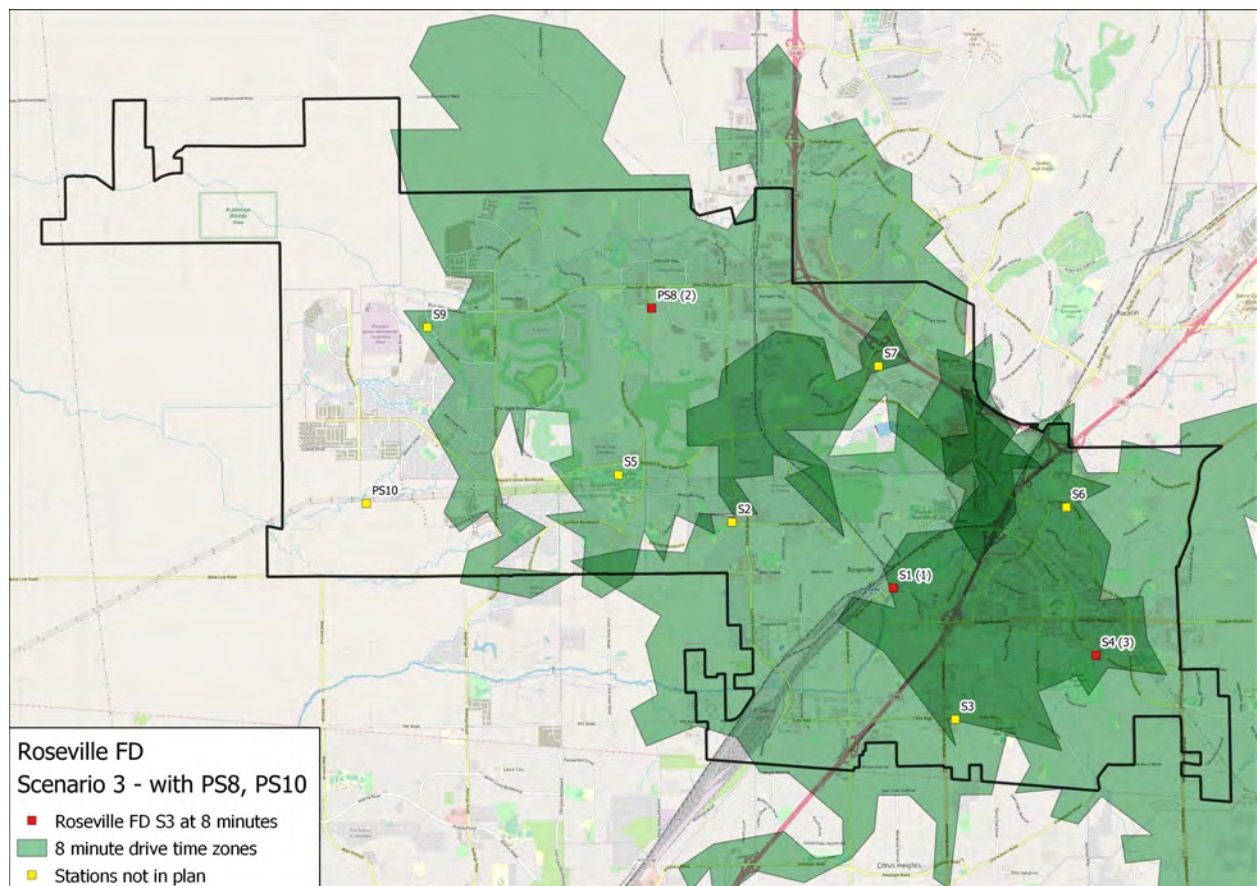
## 8-Minute Travel Time

Results suggest that with all 10 fire stations, 99.05% of the incidents could be responded to within 8 minutes or less travel time. This represents an approximate 2% improvement over the current eight fire stations configuration.

**Table 23: Marginal Fire Station Contribution for 8-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S1      | 10,505          | 10,505        | 62.27%          |
| 2    | S8      | 4,107           | 14,612        | 86.61%          |
| 3    | S4      | 1,058           | 15,670        | 92.88%          |
| 4    | S5      | 754             | 16,424        | 97.35%          |
| 5    | S10     | 154             | 16,578        | 98.26%          |
| 6    | S6      | 86              | 16,664        | 98.77%          |
| 7    | S3      | 34              | 16,698        | 98.97%          |
| 8    | S7      | 8               | 16,706        | 99.02%          |
| 9    | S2      | 5               | 16,711        | 99.05%          |

**Figure 22: Current Fire Stations and Stations 8 and 10 Bleed Maps for 8-Minute Travel Time**



## Scenario 4

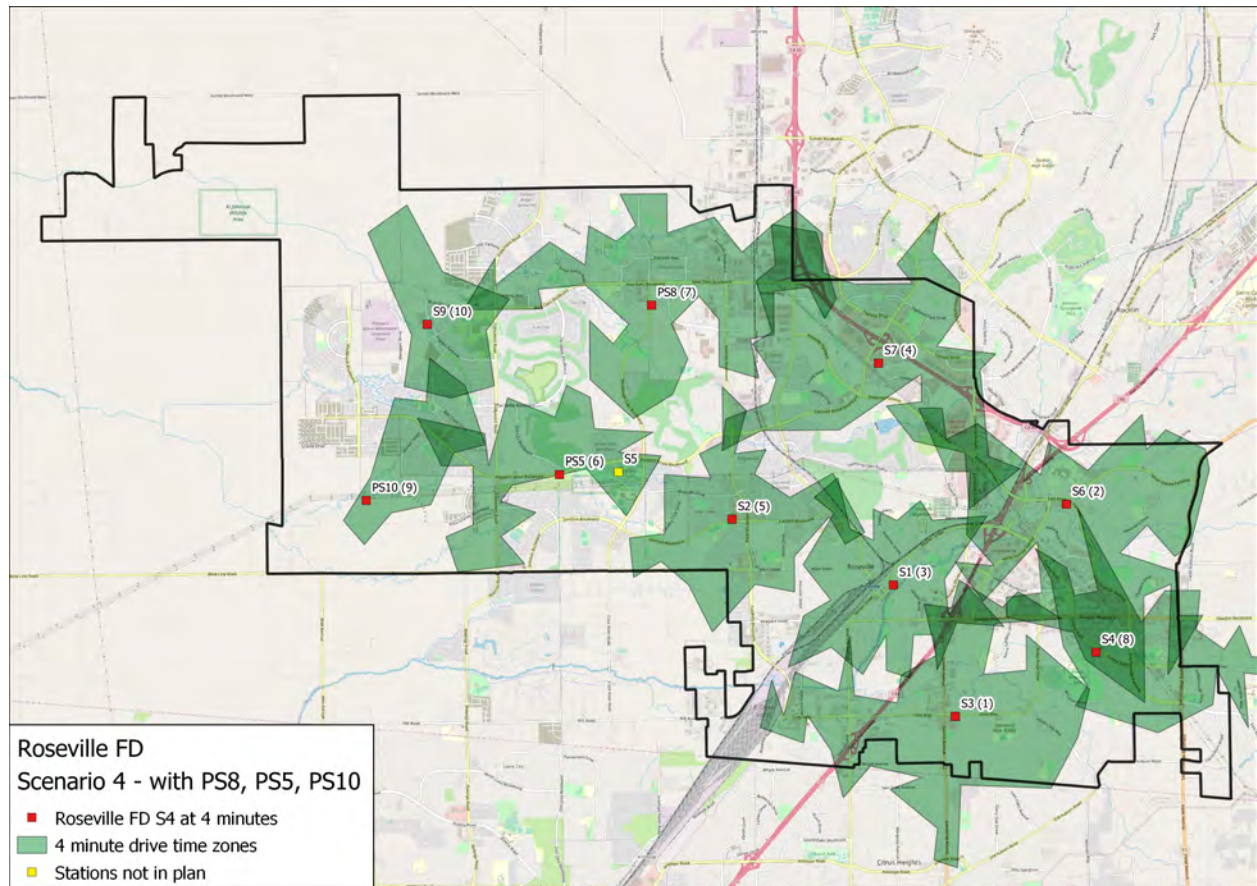
### *4-Minute Travel Time*

Results suggest that with all 10 RFD fire stations, 74.86% of the incidents could be responded to within 4 minutes or less travel time. This is approximately a 9% improvement over the current configuration.

**Table 24: Marginal Fire Station Contribution for 4-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 3,481           | 3,481         | 20.63%          |
| 2    | S6      | 2,319           | 5,800         | 34.38%          |
| 3    | S1      | 1,606           | 7,406         | 43.90%          |
| 4    | S7      | 1,527           | 8,933         | 52.95%          |
| 5    | S2      | 1,146           | 10,079        | 59.74%          |
| 6    | S5N     | 932             | 11,011        | 65.27%          |
| 7    | S8      | 905             | 11,916        | 70.63%          |
| 8    | S4      | 440             | 12,356        | 73.24%          |
| 9    | S10     | 157             | 12,513        | 74.17%          |
| 10   | S9      | 117             | 12,630        | 74.86%          |

**Figure 23: Current Fire Stations with Stations 8 and 10 and Relocated 5 Bleed Maps for 4-Minute Travel Time**



### 5-Minute Travel Time

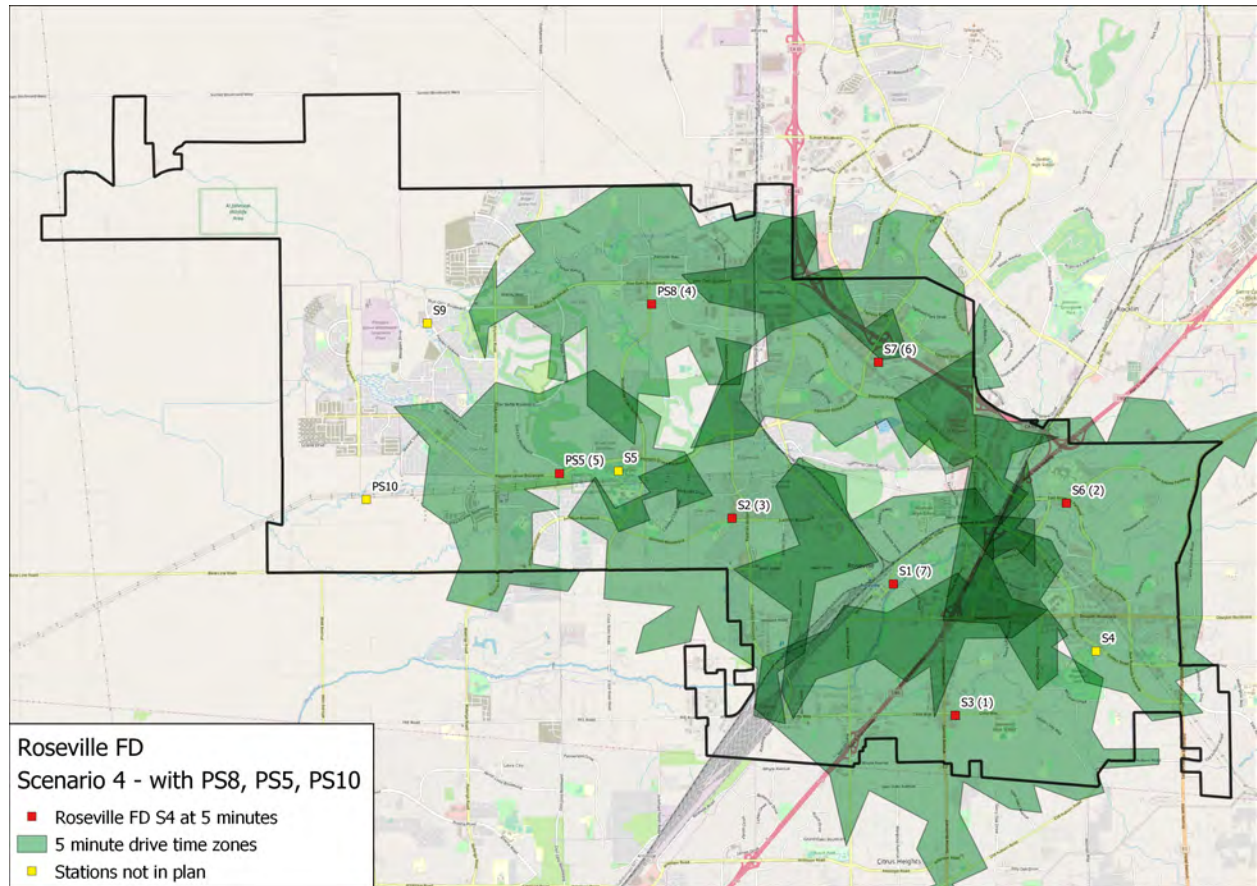
Results suggest that with all 10 RFD fire stations, 92.71% of the incidents could be responded to within 5 minutes or less travel time. This is approximately a 11% improvement over the current configuration.

**Table 25: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S5N     | 1,397           | 13,325        | 78.98%          |
| 6    | S7      | 967             | 14,292        | 84.71%          |
| 7    | S1      | 944             | 15,236        | 90.31%          |
| 8    | S9      | 274             | 15,510        | 91.93%          |
| 9    | S4      | 106             | 15,616        | 92.56%          |
| 10   | S10     | 25              | 15,641        | 92.71%          |



**Figure 24: Current Fire Stations with Stations 8 and 10 and Relocated 5 Bleed Maps for 5-Minute Travel Time**



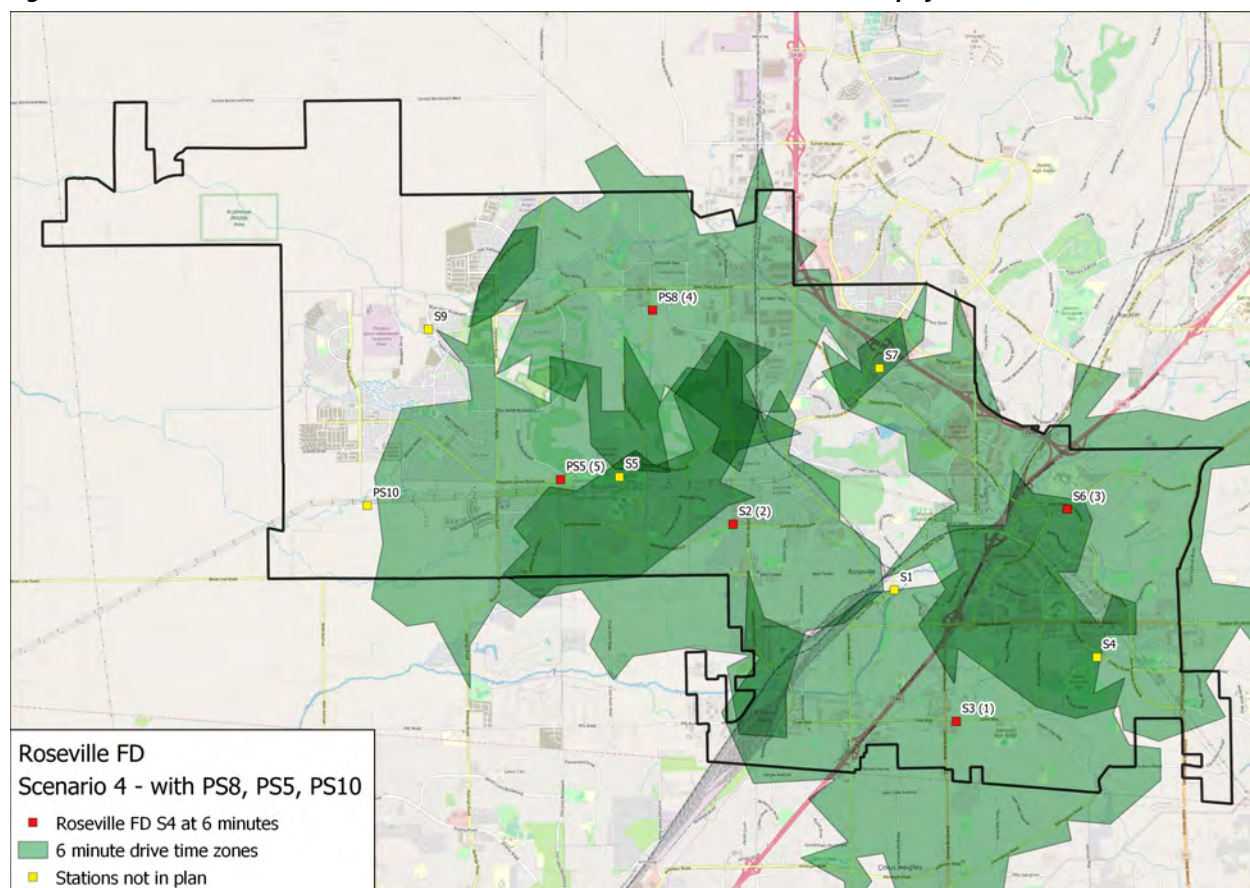
## 6-Minute Travel Time

Results suggest that with all 10 RFD fire stations, 97.09% of the incidents could be responded to within 6 minutes or less travel time. This represents approximately a 9% improvement over the current configuration.

**Table 26: Marginal Fire Station Contribution for 6-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 6,457           | 6,457         | 38.27%          |
| 2    | S2      | 2,953           | 9,410         | 55.78%          |
| 3    | S6      | 2,696           | 12,106        | 71.76%          |
| 4    | S8      | 2,001           | 14,107        | 83.62%          |
| 5    | S5N     | 1,185           | 15,292        | 90.64%          |
| 6    | S7      | 423             | 15,715        | 93.15%          |
| 7    | S9      | 334             | 16,049        | 95.13%          |
| 8    | S1      | 277             | 16,326        | 96.77%          |
| 9    | S4      | 54              | 16,380        | 97.09%          |

**Figure 25: Current Fire Stations and Stations 8 and 10 and Relocated 5 Bleed Maps for 6-Minute Travel Time**



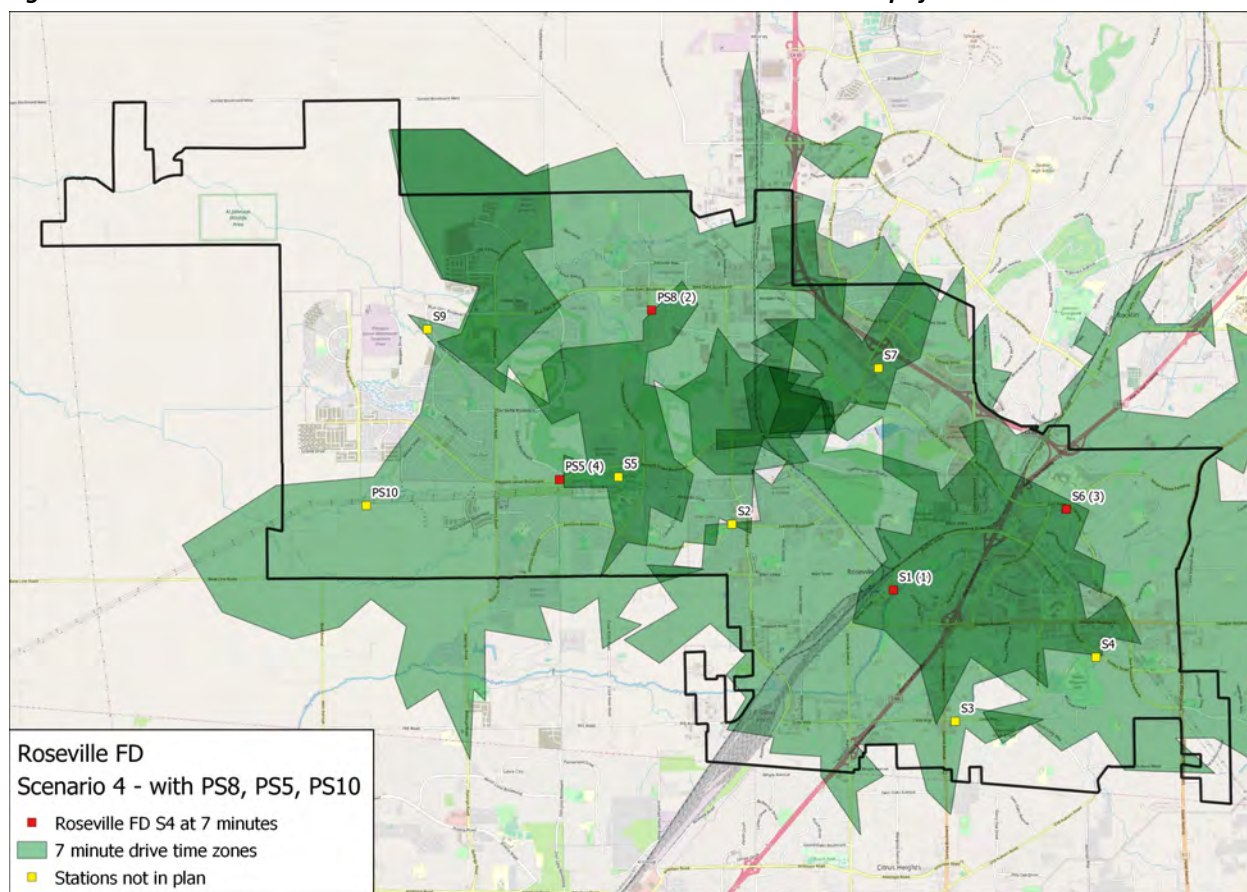
## 7-Minute Travel Time

Results suggest that with all 10 RFD fire stations, 98.99% of the incidents could be responded to within 7 minutes or less travel time. This represents an approximate improvement of 4% over the current eight station configuration.

**Table 27: Marginal Fire Station Contribution for 7-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S1      | 8,106           | 8,106         | 48.05%          |
| 2    | S8      | 3,510           | 11,616        | 68.85%          |
| 3    | S6      | 2,485           | 14,101        | 83.58%          |
| 4    | S5N     | 1,666           | 15,767        | 93.46%          |
| 5    | S3      | 464             | 16,231        | 96.21%          |
| 6    | S2      | 224             | 16,455        | 97.53%          |
| 7    | S9      | 183             | 16,638        | 98.62%          |
| 8    | S4      | 41              | 16,679        | 98.86%          |
| 9    | S7      | 20              | 16,699        | 98.98%          |
| 10   | S10     | 1               | 16,700        | 98.99%          |

**Figure 26: Current Fire Stations and Stations 8 and 10 and Relocated 5 Bleed Maps for 7-Minute Travel Time**





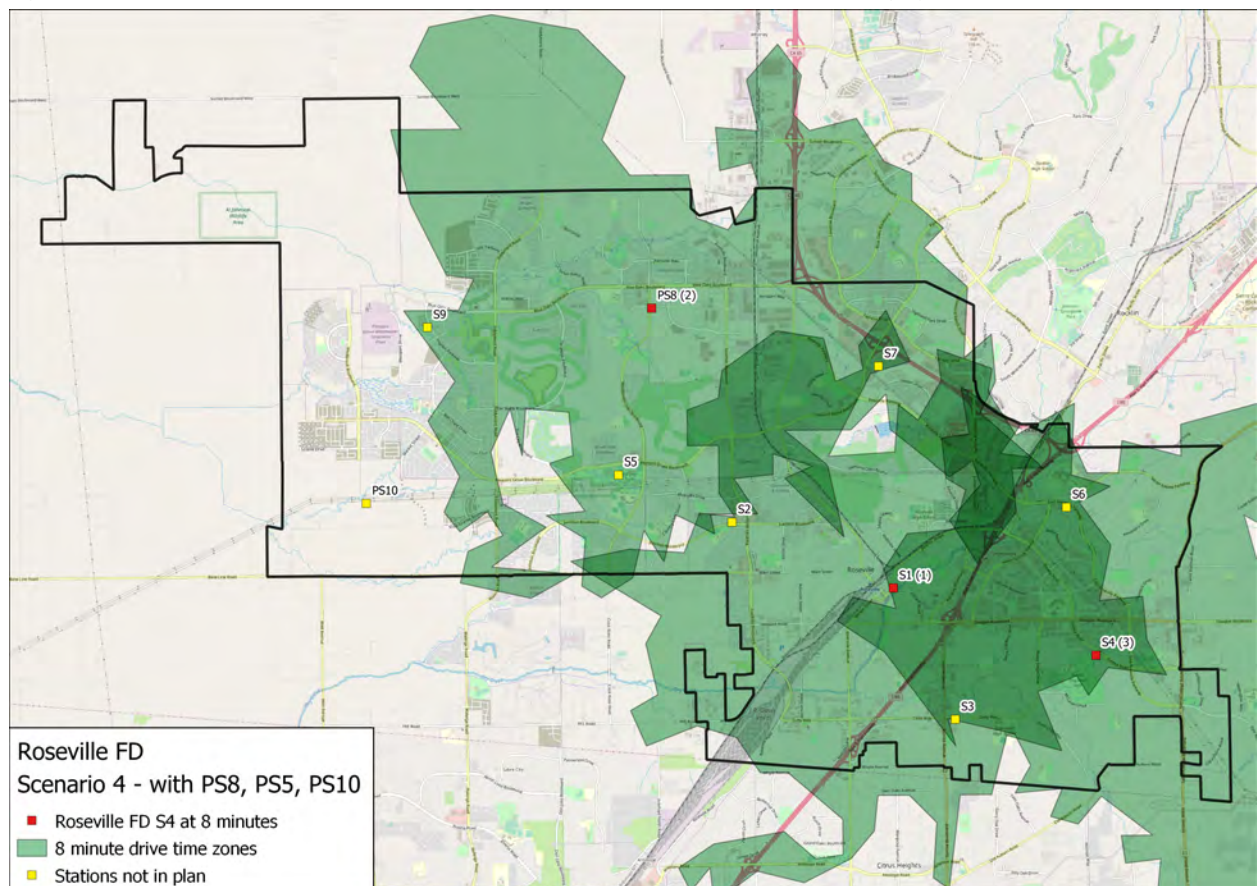
## 8-Minute Travel Time

Results suggest that with all 10 fire stations, 99.24% of the incidents could be responded to within 8 minutes or less travel time. This represents an approximate 2% improvement over the current eight fire stations configuration.

**Table 28: Marginal Fire Station Contribution for 8-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S1      | 10,505          | 10,505        | 62.27%          |
| 2    | S8      | 4,107           | 14,612        | 86.61%          |
| 3    | S4      | 1,058           | 15,670        | 92.88%          |
| 4    | S5N     | 828             | 16,498        | 97.79%          |
| 5    | S9      | 112             | 16,610        | 98.45%          |
| 6    | S6      | 89              | 16,699        | 98.98%          |
| 7    | S3      | 34              | 16,733        | 99.18%          |
| 8    | S7      | 8               | 16,741        | 99.23%          |
| 9    | S2      | 2               | 16,743        | 99.24%          |

**Figure 27: Current Fire Stations and Stations 8 and 10 and Relocated 5 Bleed Maps for 8-Minute Travel Time**



## Summary of Alternative Station Configurations

**Table 29: Summary of Alternative Station Configurations**

| Performance<br>(Minutes) | Current<br>Config. | Scenario<br>1 | Scenario<br>2 | Scenario<br>3 | Scenario<br>4 |
|--------------------------|--------------------|---------------|---------------|---------------|---------------|
| 4                        | 64.87%             | 70.20%        | 74.04%        | 71.26%        | 74.86%        |
| 5                        | 80.71%             | 87.85%        | 92.56%        | 88.64%        | 92.71%        |
| 6                        | 87.57%             | 95.09%        | 97.09%        | 95.64%        | 97.09%        |
| 7                        | 95.44%             | 98.75%        | 98.98%        | 98.77%        | 98.99%        |
| 8                        | 97.88%             | 99.05%        | 99.24%        | 99.05%        | 99.24%        |

The analyses of the several alternatives reveal that Scenario 2 (Station 8 and Relocate Station 5) has the greatest return on investment. With very little variability, it requires only one additional station and the relocation of one station rather than two additional stations.

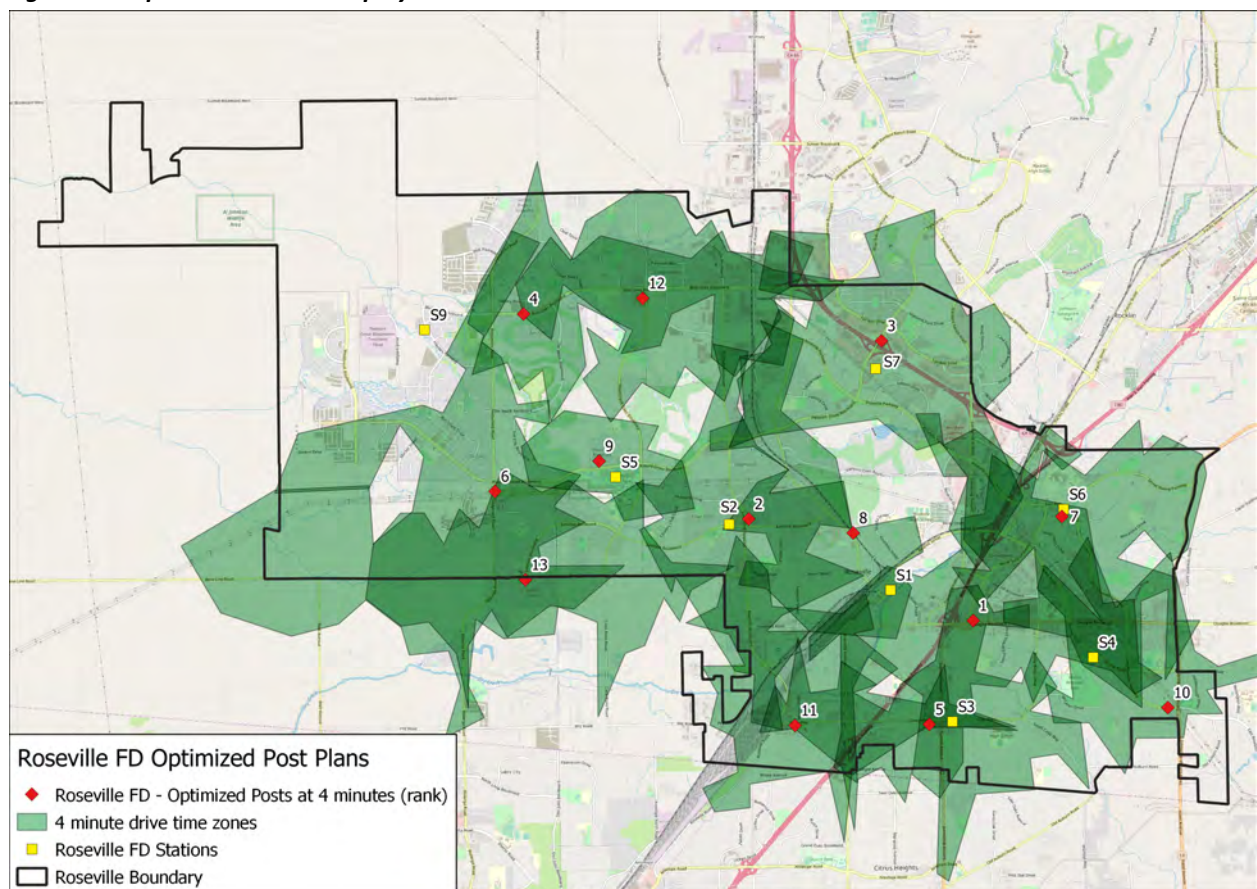
## Optimized Station Distribution Plans

Optimized locations were created for the department's consideration. Optimized plans utilize a “white board” approach where all existing locations are disregarded and we allow the data to indicate the best station locations. It is understood that stations are placed for a variety of reasons and that few agencies would have the flexibility in land availability, purchase price, capital investment, and political considerations to build a brand new deployment model. However, these analyses are beneficial for validating existing stations where applicable and identifying potential areas of future need for either new stations or station relocations.

### Optimized 4-Minute Travel Time

Analyses were completed to develop an optimized station distribution model for a 4-minute travel time. This evaluation suggests that an optimized 13-station model can provide an estimated 90.90% risk coverage within 4 minutes or less travel time.

**Figure 28: Optimized Station Deployment Plan - 4-Minute Travel Time**

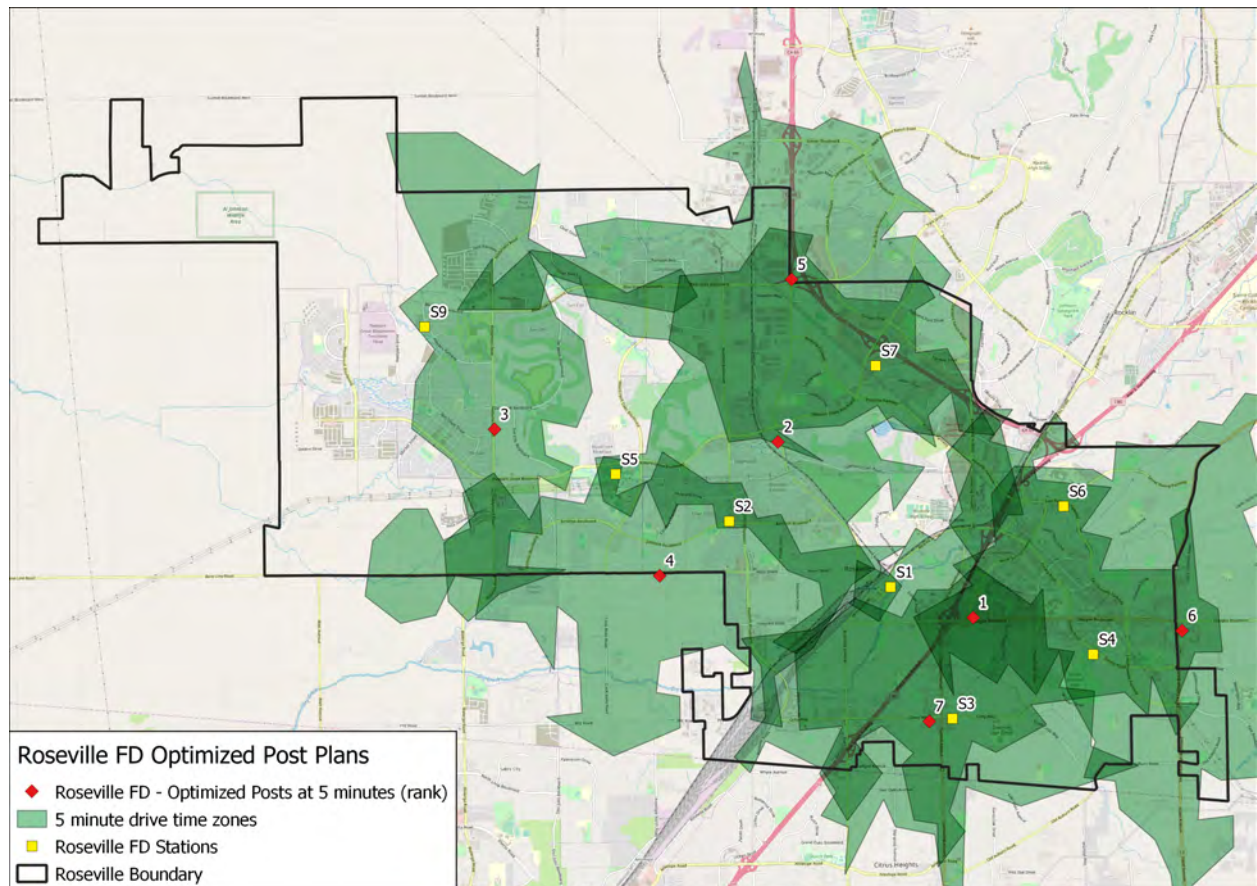




## Optimized 5-Minute Travel Time

Analyses were completed to develop an optimized station distribution model for a 5-minute travel time. This evaluation suggests that an optimized 7-station model can provide an estimated 90.63% risk coverage within 5 minutes or less travel time.

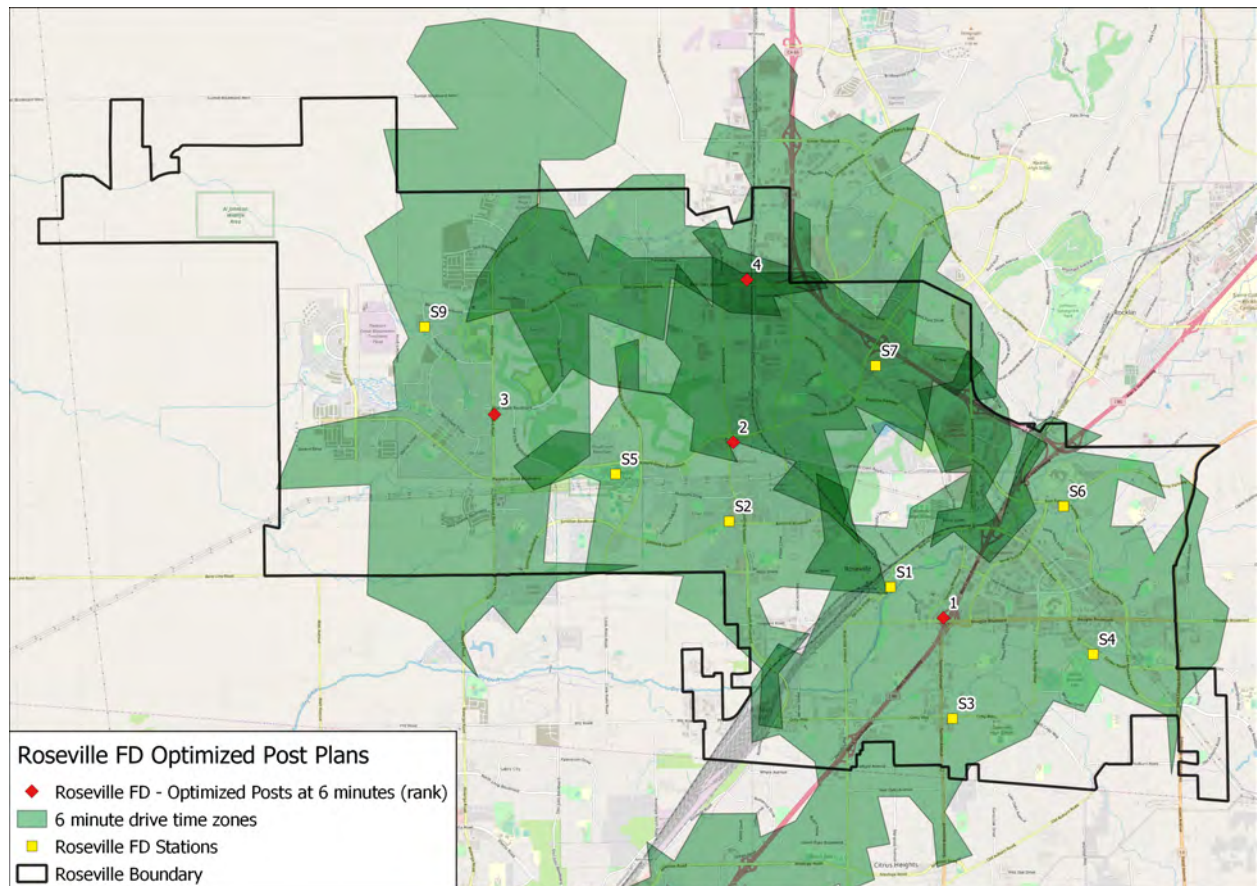
**Figure 29: Optimized Station Deployment Plan - 5-Minute Travel Time**



## Optimized 6-Minute Travel Time

Analyses were completed to develop an optimized station distribution model for a 6-minute travel time. This evaluation suggests that an optimized 4-station model can provide an estimated 91.17% risk coverage within 6 minutes or less travel time.

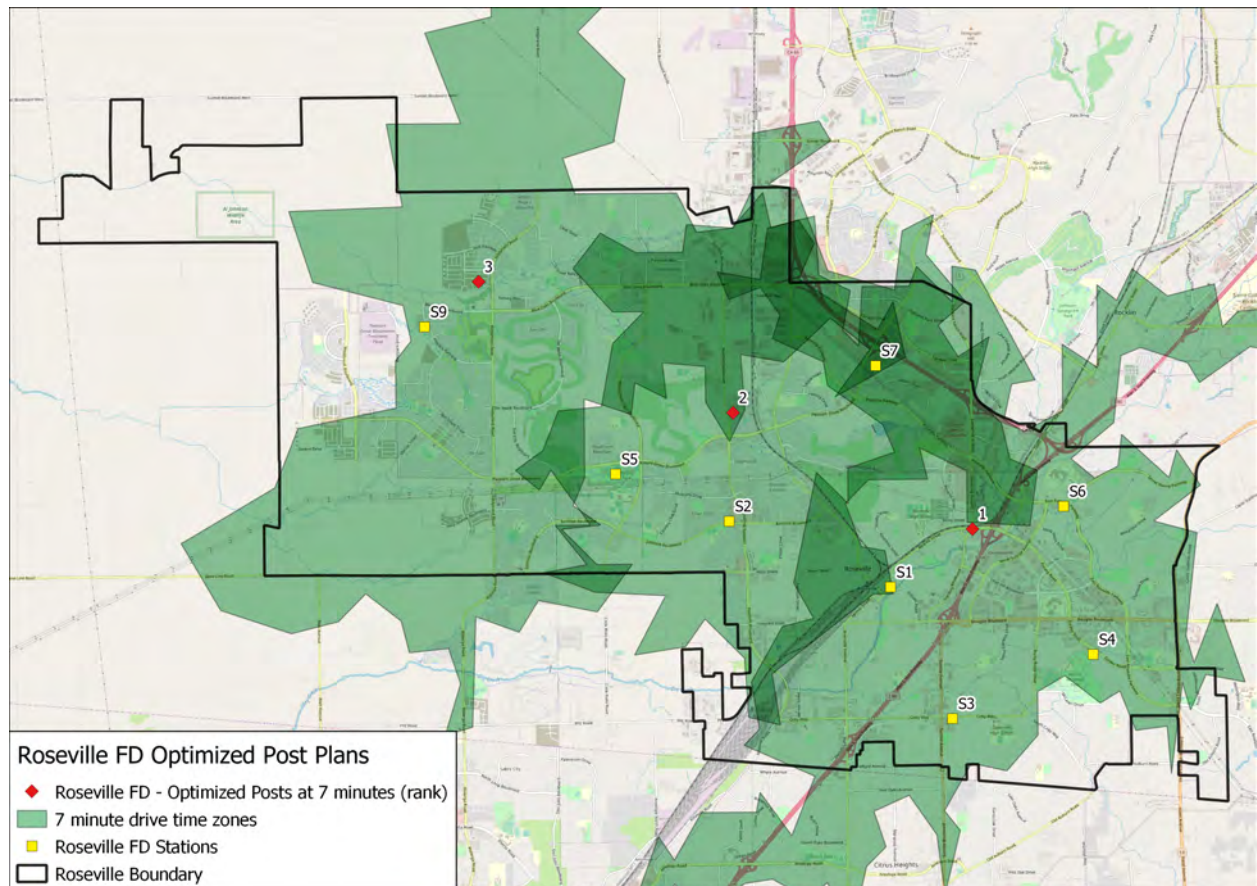
**Figure 30: Optimized Station Deployment Plan - 6-Minute Travel Time**



## Optimized 7-Minute Travel Time

Analyses were completed to develop an optimized station distribution model for a 7-minute travel time. This evaluation suggests that an optimized 3-station model can provide an estimated 94.55% risk coverage within 7 minutes or less travel time.

**Figure 31: Optimized Station Deployment Plan - 7-Minute Travel Time**

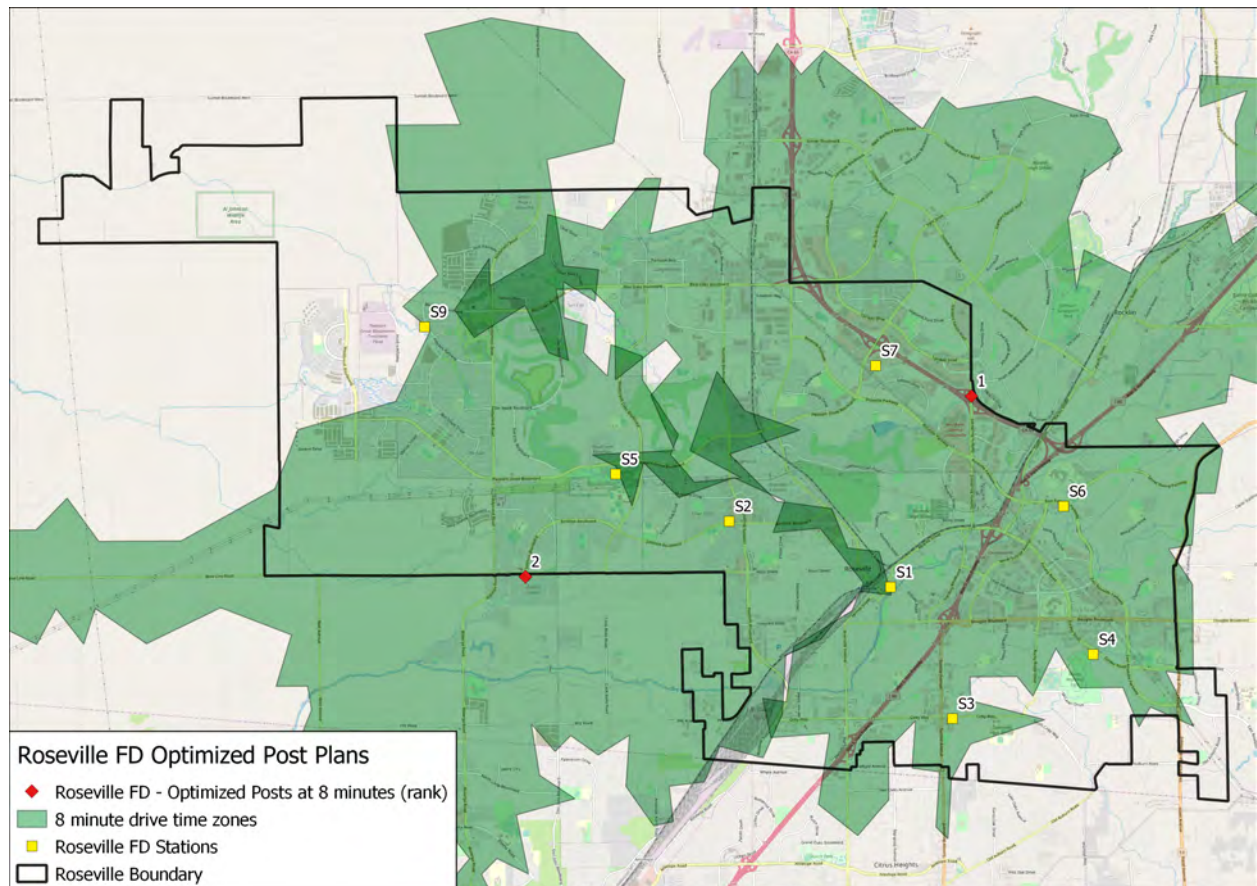




## Optimized 8-Minute Travel Time

Analyses were completed to develop an optimized station distribution model for an 8-minute travel time. This evaluation suggests that an optimized 2-station model can provide an estimated 92.43% risk coverage within 8 minutes or less travel time.

**Figure 32: Optimized Station Deployment Plan - 8-Minute Travel Time**



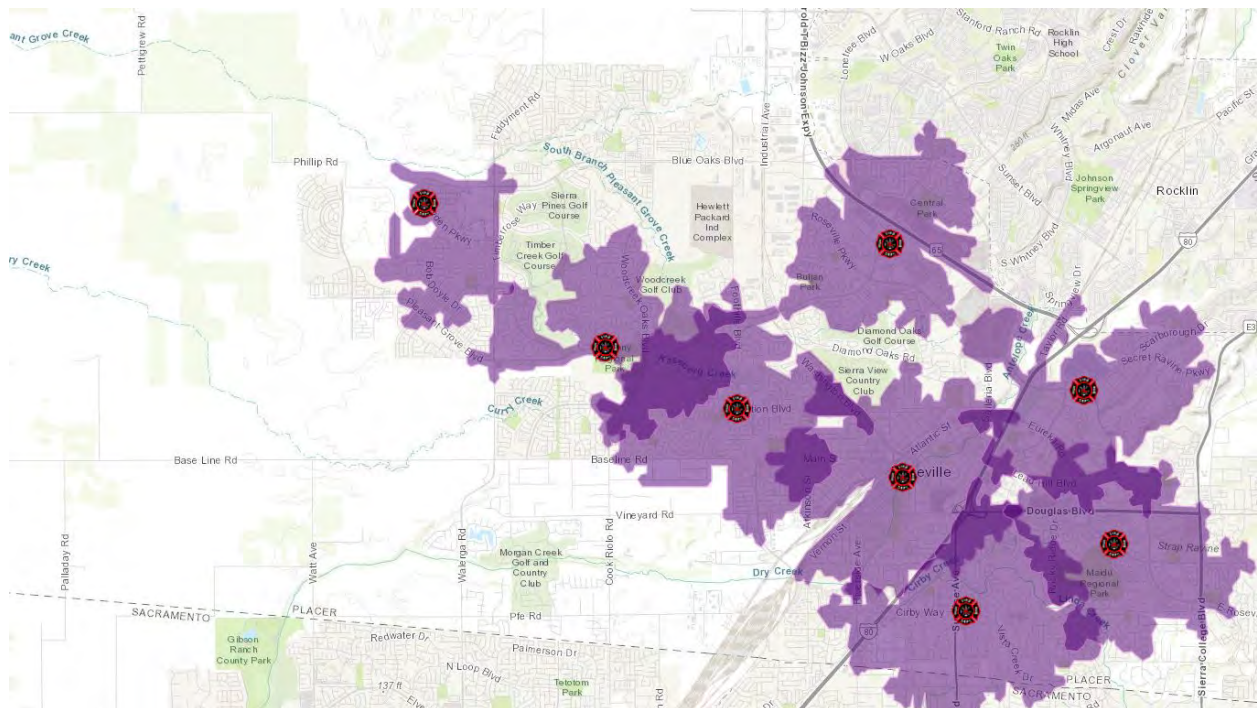
## Geographic Coverage without Consideration for Call Distribution

While there are multiple deployment strategies that may be adopted, two clear policy positions emerge in communities. First, position stations that are best prepared to meet the community's historical distribution of calls or demand for services. The advantage to this approach is that it is a more efficient model to address meeting 90% of the risk within the desired performance. This is a very stable outlook for communities that are established and are growing in density or in-fill rather than through significant annexations or urban growth.

A second strategy is to provide station response coverage purely on a geographic lens without any consideration for how calls are distributed throughout the community. The following analyses utilized distance without consideration of the relative impedance and/or the robustness of the road network. For example, when time is the unit of measure, a station's units could travel a farther distance on a highway than through a school zone, but this approach caps the coverage area at 1.5, 2.5, or 5 miles regardless of available travel speeds. This strategy more closely follows the recommendations of insurance rating services. Therefore, these analyses examined current and hypothetical coverage areas by utilizing 1.5-mile engine polygons, 2.5-mile ladder truck polygons, and 5-mile station locations, respectively.

### Engine Coverage

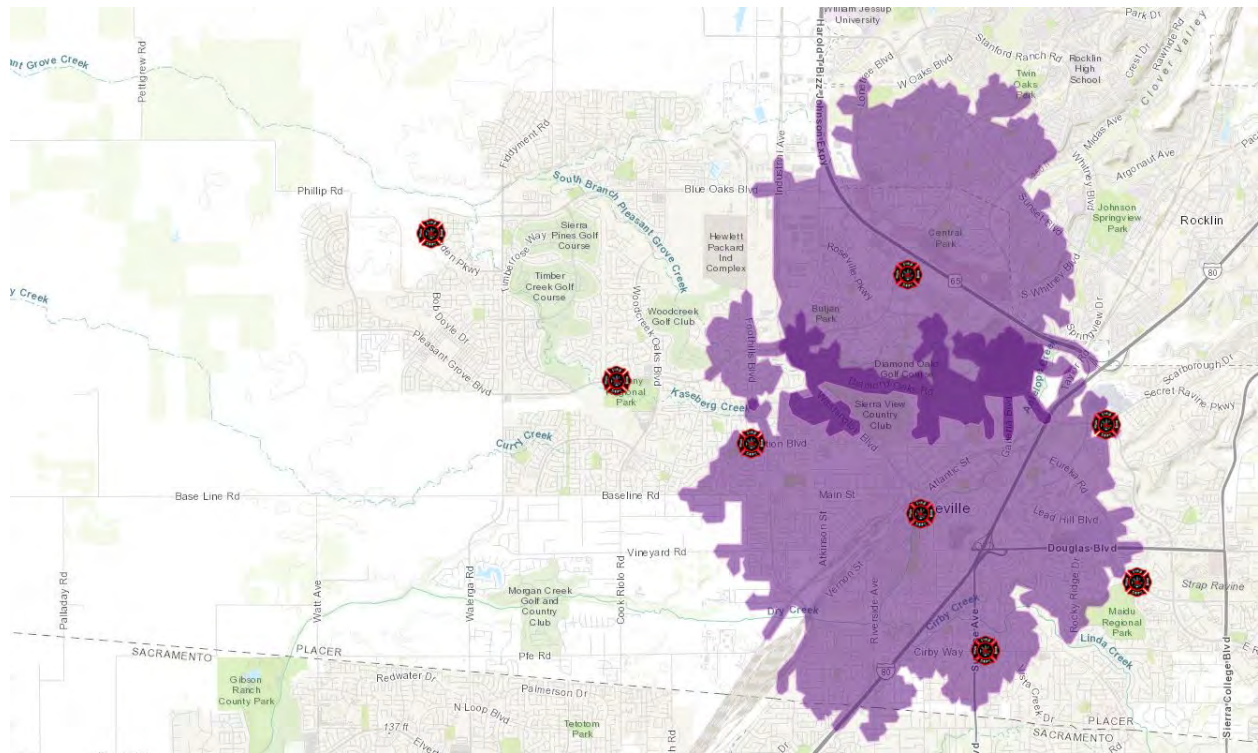
**Figure 33: 1.5-Mile Engine Polygons – Current Engine Locations at All Stations**



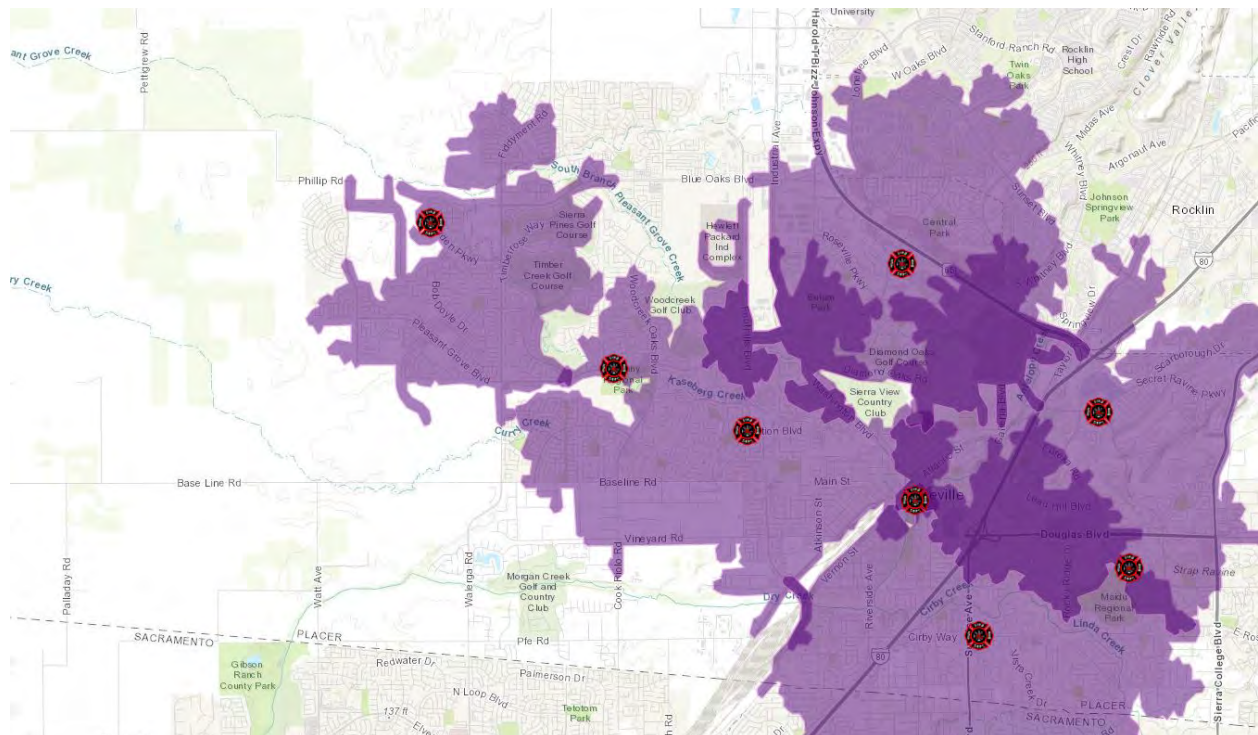


## Ladder Truck Coverage

**Figure 34: 2.5-Mile Ladder Truck Polygons – Current Ladder Truck Locations at Stations 1 and 7**



**Figure 35: 2.5-Mile Ladder Truck Polygons – Hypothetical Ladder Truck Locations at Stations 2, 3, 6, 7, and 9**



## EFFECTIVE RESPONSE FORCE MAPPING

Similar to previous discussion, there are two prevailing recommendations for the time to assemble an effective response force for structure fires. First, NFPA 1710 suggests that the Effective Response Force (ERF) should arrive in eight (8) minutes travel time or less. Second, the CFAI provides a baseline travel time performance objective of 10 minutes and 24 seconds 90% of the time or less as well as a 13-minute travel time ERF for suburban areas and 18-minutes for rural areas. Therefore, 8, 10, 13, and 17-minute travel times were created to demonstrate the relative coverage throughout the jurisdiction.

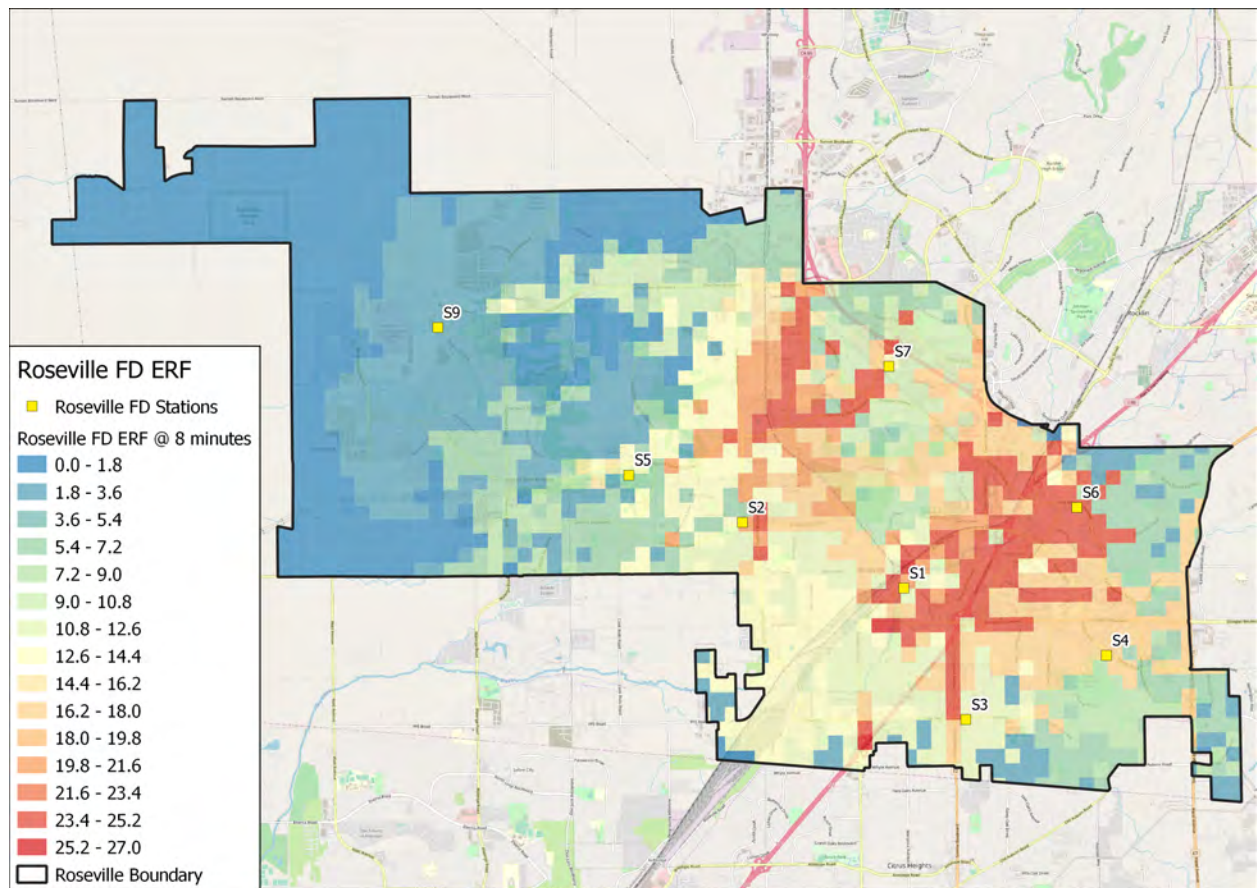
The following analyses evaluated each scenario with 4-person staffing for an effective response force of 16 personnel. Under the current configuration (8 stations), the department can cover nearly 22% of the jurisdiction can assemble 16 personnel within 8 minutes. Approximately, 50% of the community can be covered within 10 minutes with 16 personnel. Approximately, 75% of the community can be covered within 13 minutes with 16 personnel.

**Table 30: Comparisons of Effective Response Force Configurations**

| Travel Time Objective | Current |
|-----------------------|---------|
| 8-Minute              | 21.88%  |
| 10-Minute             | 49.03%  |
| 13-Minute             | 74.81%  |
| 17-Minute             | 86.72%  |

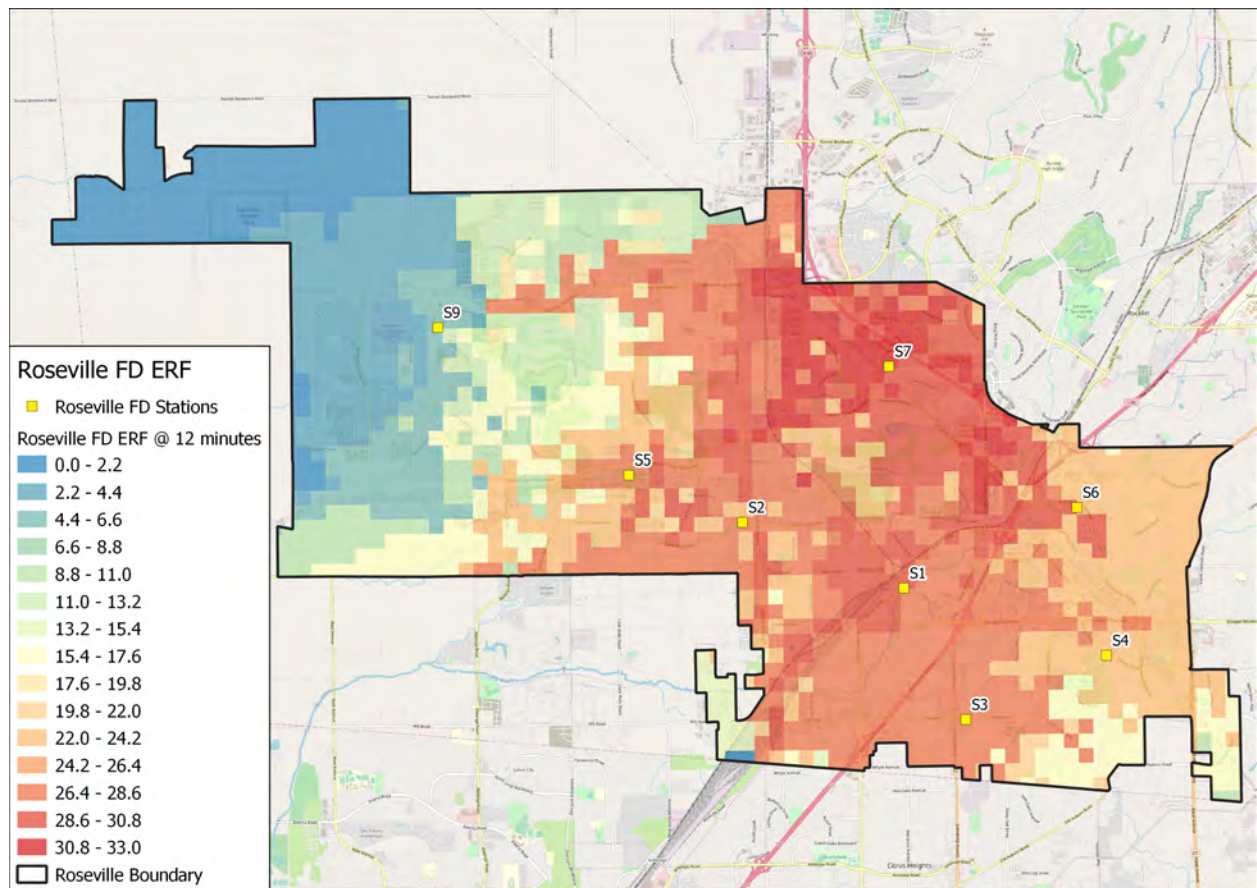
Overall, the ERF coverage is more robust in the center of the jurisdiction where the greatest historical demand exists. The areas in the east and west of the city are challenged since they do not benefit from concentric response zones.

**Figure 36: 8-Minute ERF – All Current Stations**

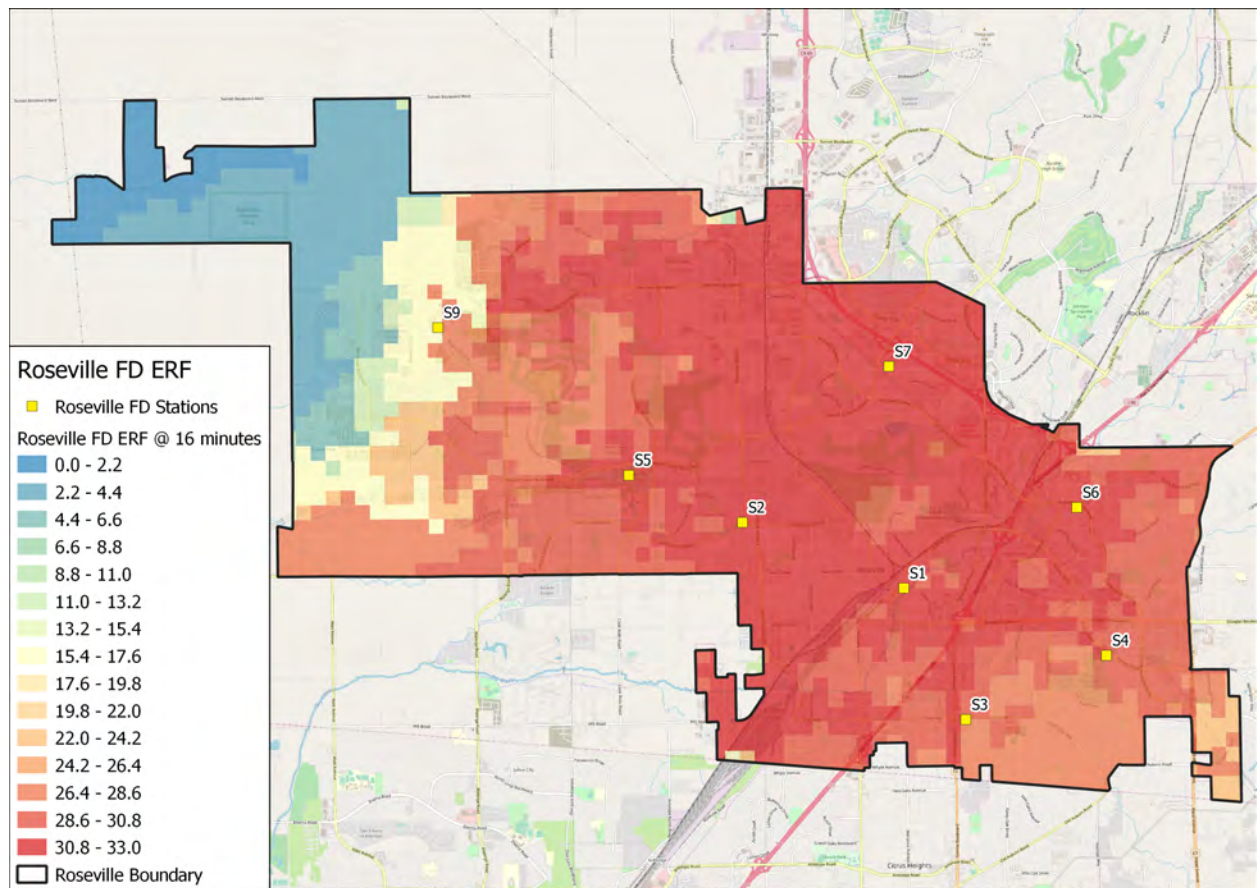




**Figure 37: 12-Minute ERF from All Current Stations**



**Figure 38: 16-Minute ERF from All Current Stations**

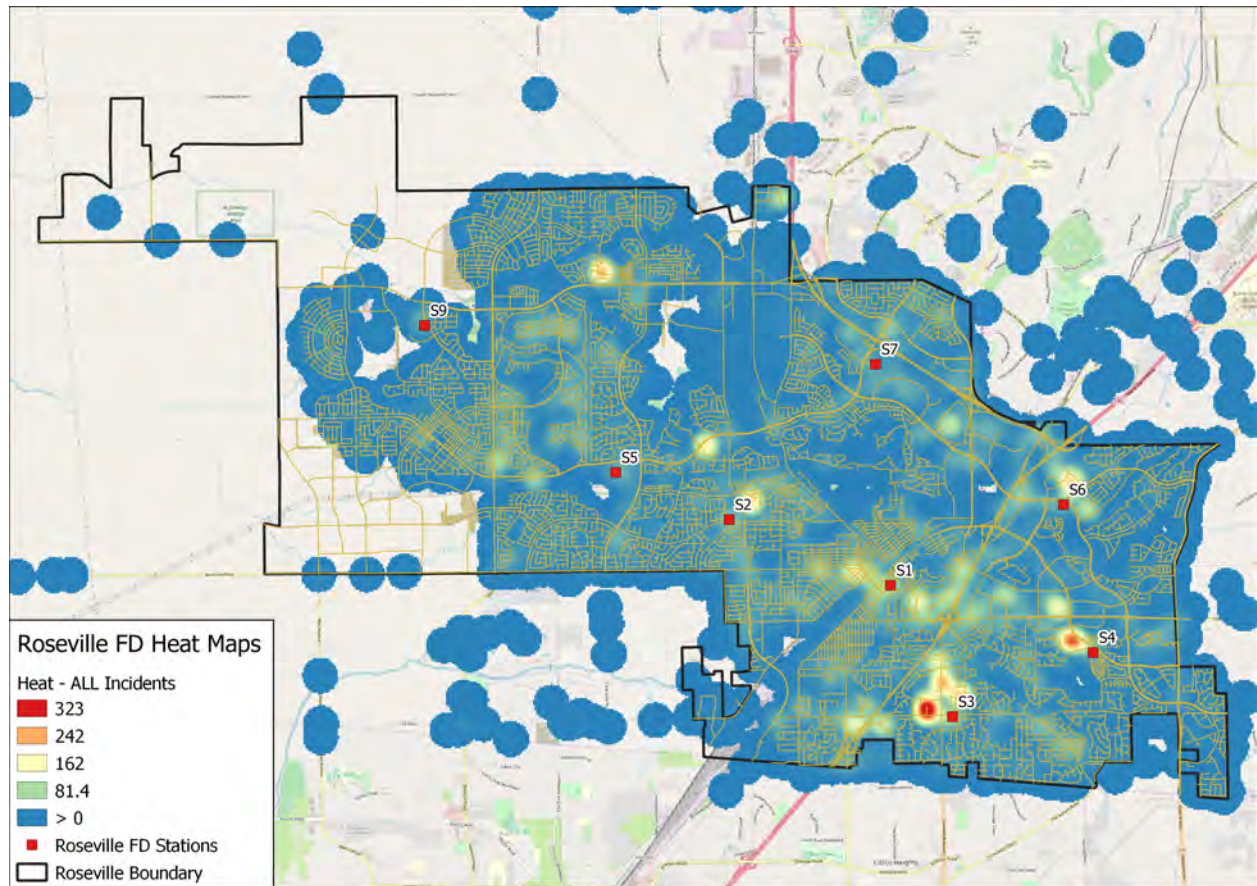


# DISTRIBUTION OF RISK ACROSS THE JURISDICTION

## Distribution of Demand Overall and by Program Areas

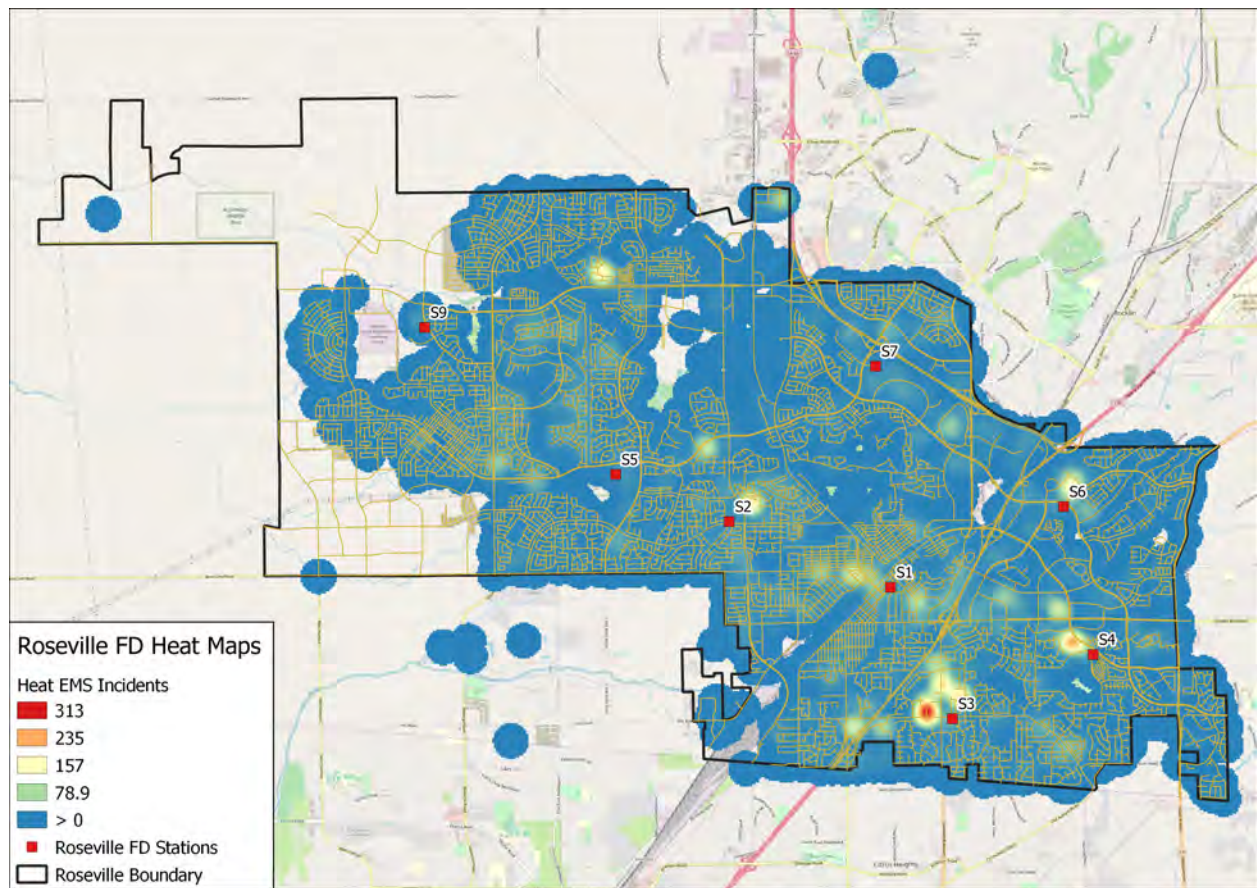
Heat maps were created to identify the concentration of the historic demand for services overall and by program area (i.e., EMS, fire, and rescue). The blue areas have the lowest concentration of demand and the dark red areas have the highest concentration of demand.

**Figure 39: Heat Map for All Incidents**

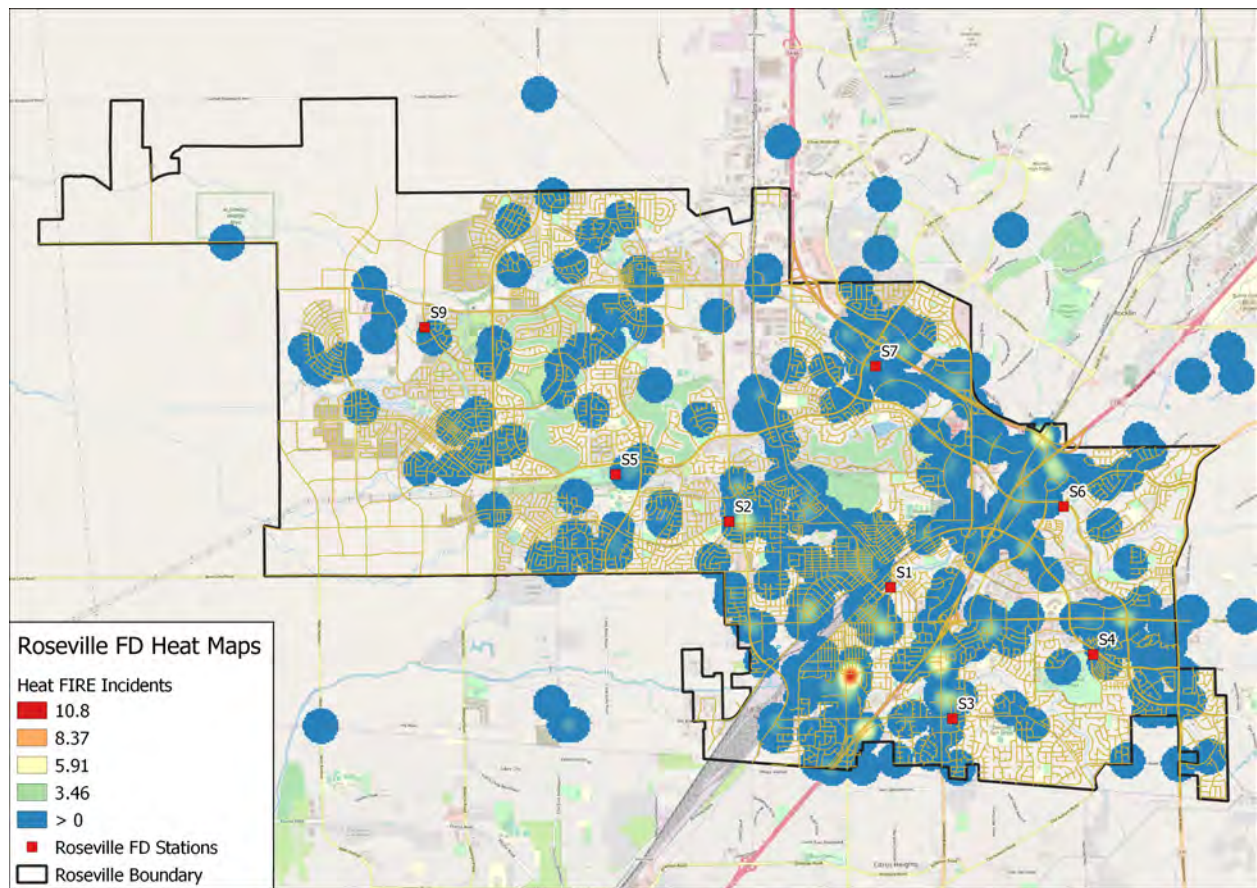




**Figure 40: Heat Map for EMS Related Incidents**

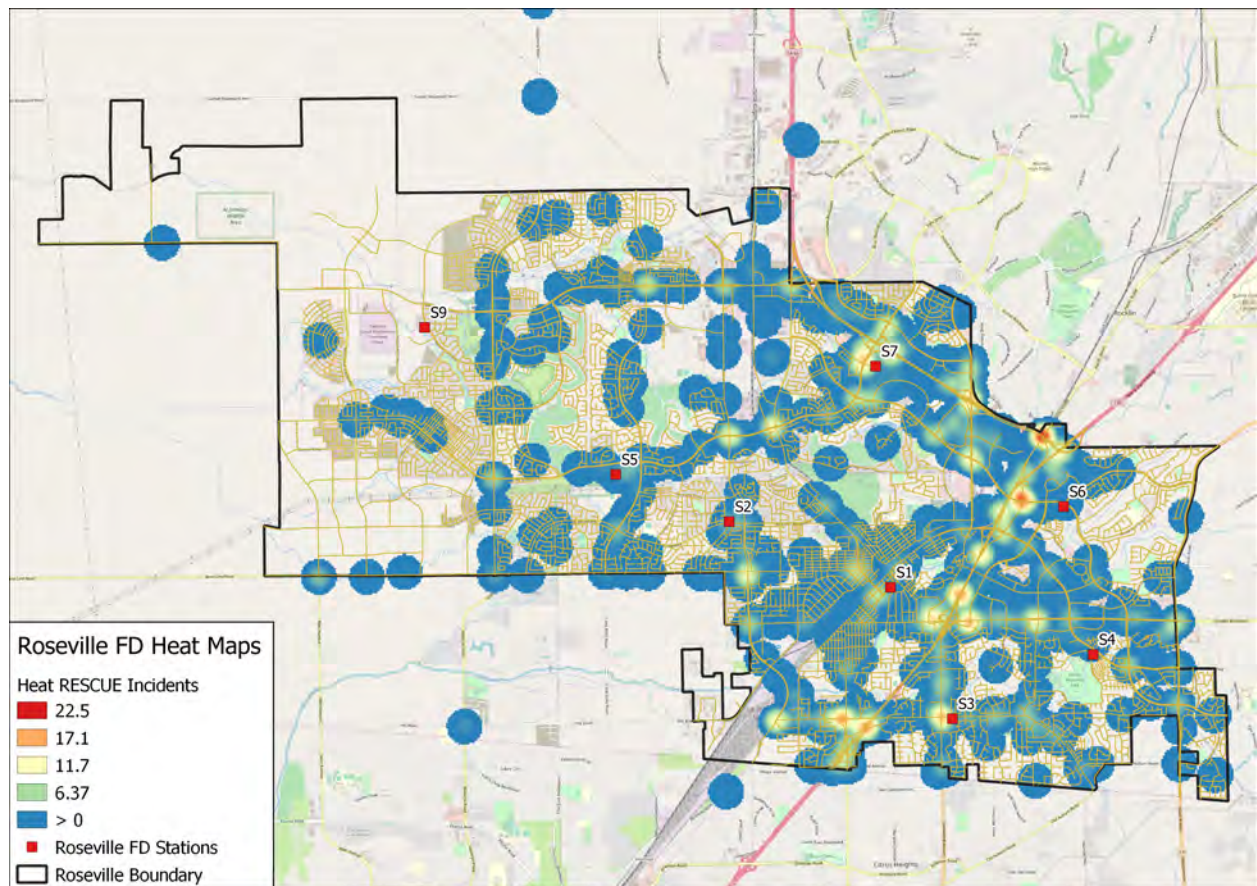


**Figure 41: Heat Map for Fire Related Incidents**



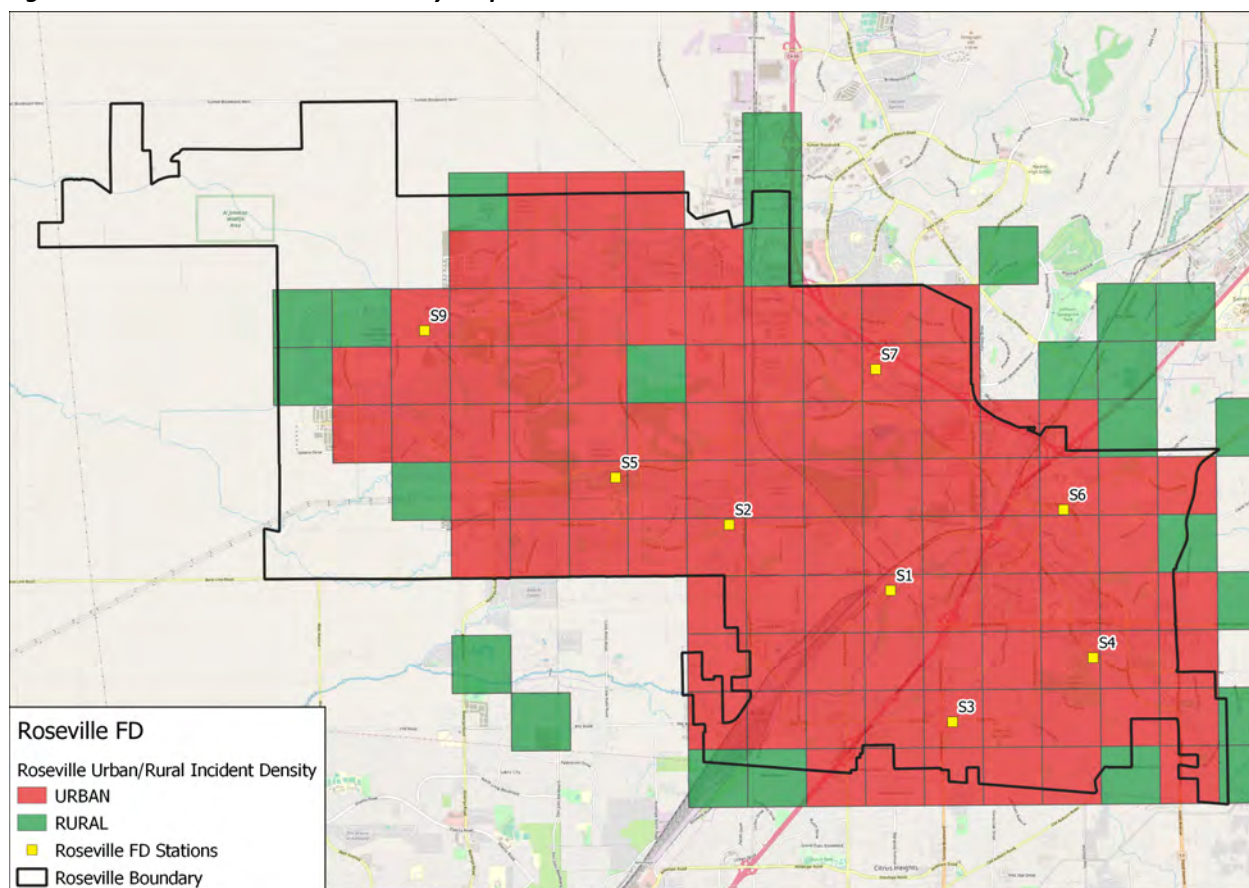


**Figure 42: Heat Map for Rescue Related Incidents**



Finally, we calculated call density based on the relative concentration of incidents based on approximately 0.5-mile geographic areas as well as the adjacent 0.5-mile areas. The results demonstrate an urban and rural designation based on call density for services and not based on population. The red areas are designated as urban service areas and the green areas are designated as rural service areas. Any area that is not colored has less than one call every six months in the 0.5-mile area and the adjacent areas.

**Figure 43: Urban and Rural Call Density Map with Current Stations**



## **Long-Term Sustainability of the Models Presented**

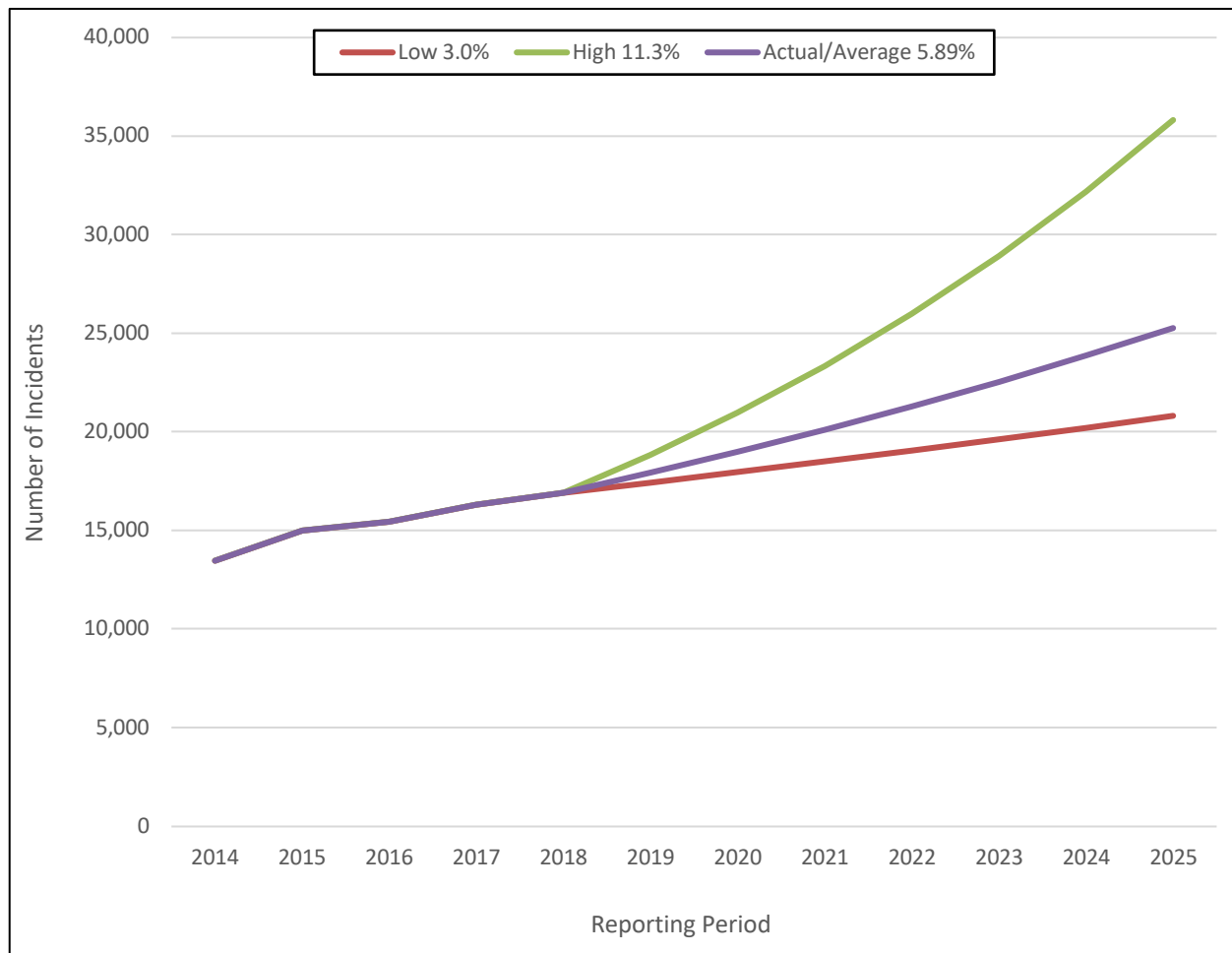
It is important to understand that the distribution models are restricted to the geographic limitations of the jurisdiction and the historical demand for services. Therefore, the number of stations is descriptive of the number of fixed facilities required from which to deploy resources. These analyses do not specifically describe the concentration of resources required at each fire station facility to adequately handle the demand for services. For example, some stations may require two or more units in order to handle the demand for services.

With respect to the long-term sustainability of the deployment models presented here, the models will remain accurate for as long as the jurisdiction's overall coverage area has not expanded. In other words, if the city's square mileage remains, then the deployment strategy will be sustainable indefinitely with respect to the coverage area. As other variables such as population density or socioeconomic status change over time, there may be a need for a higher concentration of resources necessary to meet the growing demand for services, but not additional stations. The most prominent reason that the geographic distribution model would need to be updated is for changes in traffic impedance that significantly limit the historical average travel speed. Monitoring travel time performance, system reliability, and call concurrency will provide timely feedback for changes in the environment that could impact the distribution model.

## Projected Growth

The available data set was restricted to five calendar years (i.e., 2014 to 2018) with an average annual growth rate of approximately 5.89%. The following straight-line projection should be used with caution due to the wide variability across years. However, in all cases, data must be reviewed annually to ensure timely updates to projections.

**Figure 44: Projected Growth in Call Volume**

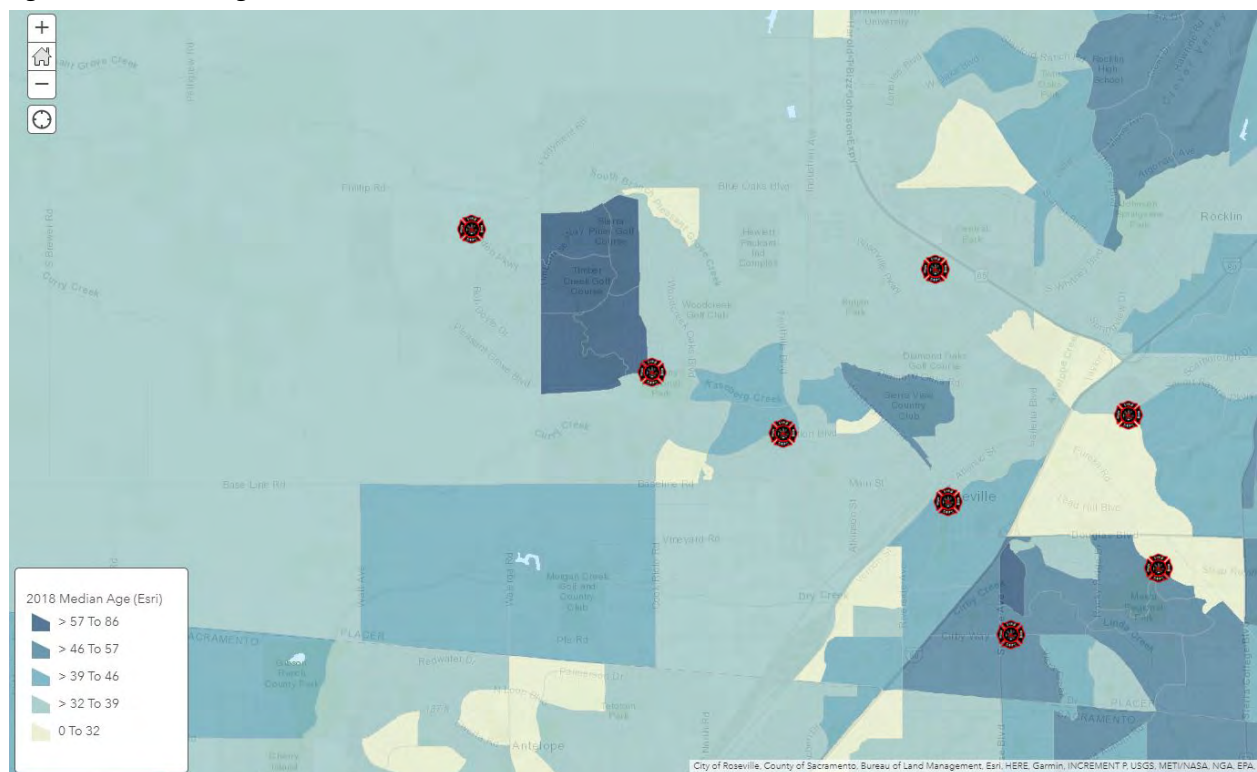


Assuming that future demands may not be reasonably distributed across the various stations in the system, the system may ultimately require a redistribution of workload and ultimately reinvestment in resources to meet the growing demand. While the system should be evaluated continuously for performance and desired outcomes, the department should specifically re-evaluate workload and performance indicators for every 1,000-call increase to ensure system stability.

## Population Characteristics

Generally, older populations and very young populations are considered to be most vulnerable to the frequency and incidents of fire. In addition, older populations historically utilize EMS services with greater frequency. It is important to understand, what field crews often recognize intuitively, that the distribution of population risks is not uniform across the jurisdiction. According to these data, the majority of the jurisdiction is less than 57 years of age. Median age for the areas shaded in the darkest blue west and northwest of Station 5 ranges from 73.2 to 79.6 years, and median age for the area shaded in the darkest blue north of Station 3 is 61.1 years.

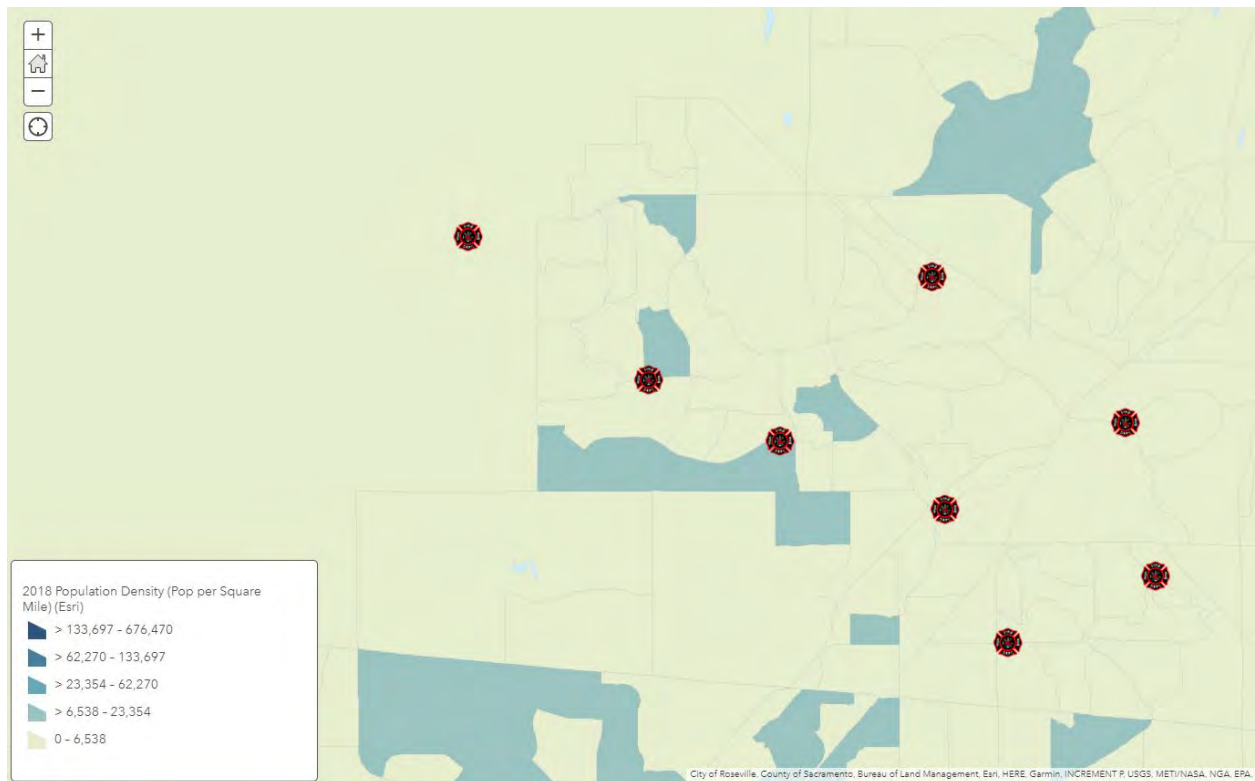
**Figure 45: Median Age - 2018**





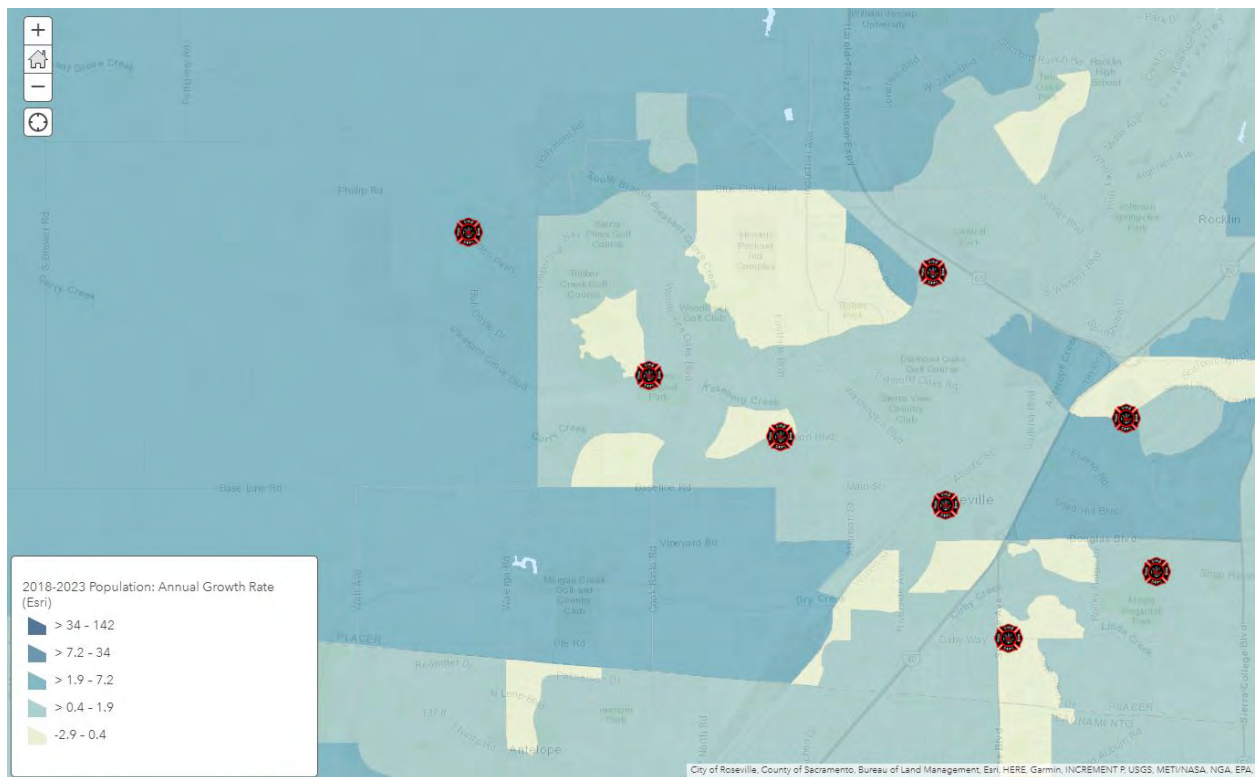
The majority of the census block areas have densities of 0 to 6,538 people per square mile, with some clusters of > 6,538 to 23,354 people per square mile in portions of the jurisdiction.

**Figure 46: Population Density by Census Block - 2018**



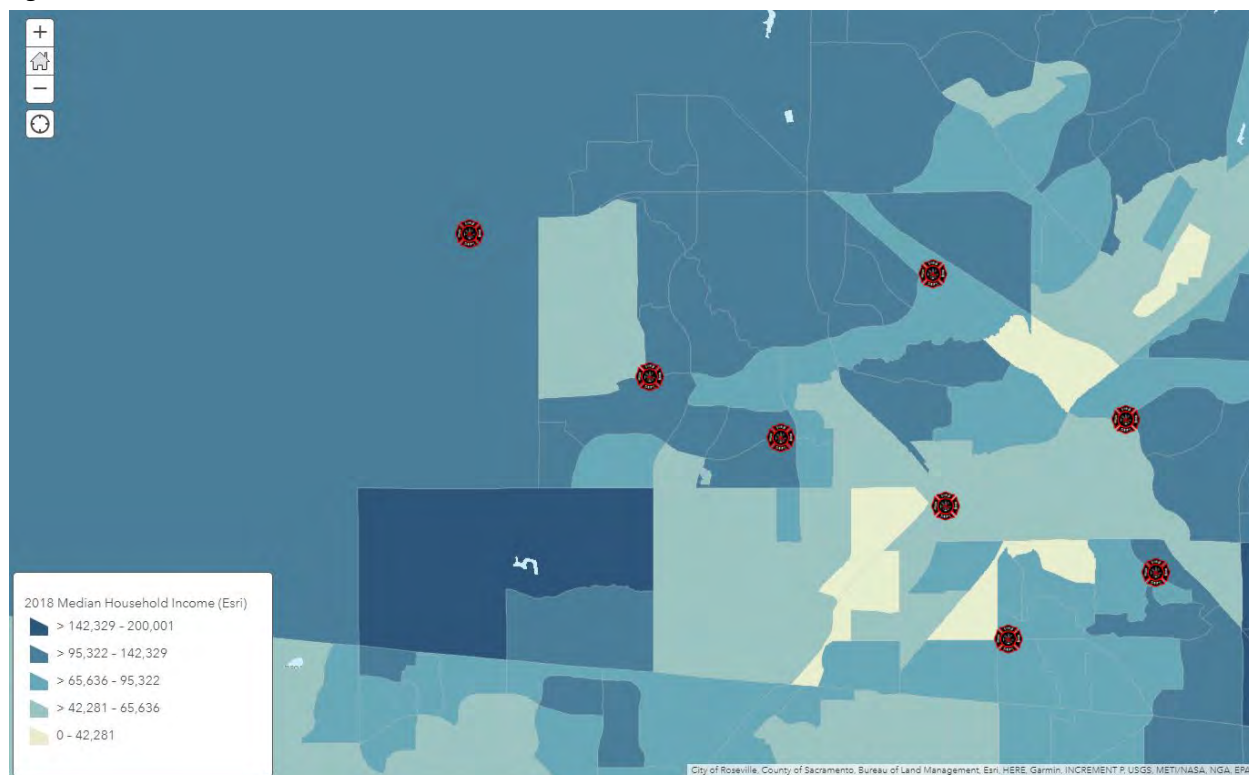
The population change is predicted at -2.9% to 7.2% for the majority of census block areas.

**Figure 47: Annual Population Change - 2018-2023**



Finally, population alone is not the sole variable that influences demand for services, as socioeconomic and demographic factors have greater influence over demand. Median household income was evaluated to determine the degree to which the community had underprivileged populations. According to the US Census Bureau, the 2017 national median household income is reported at \$61,372. Median household income values for the off-white shaded areas are as follows: northeast of Station 6, \$35,433; northwest of Station 6, \$40,557; west of Station 1, \$35,695; southwest of Station 1, \$29,806; west-northwest of Station 3, \$32,255; and north-northeast of Station 3, \$42,009.

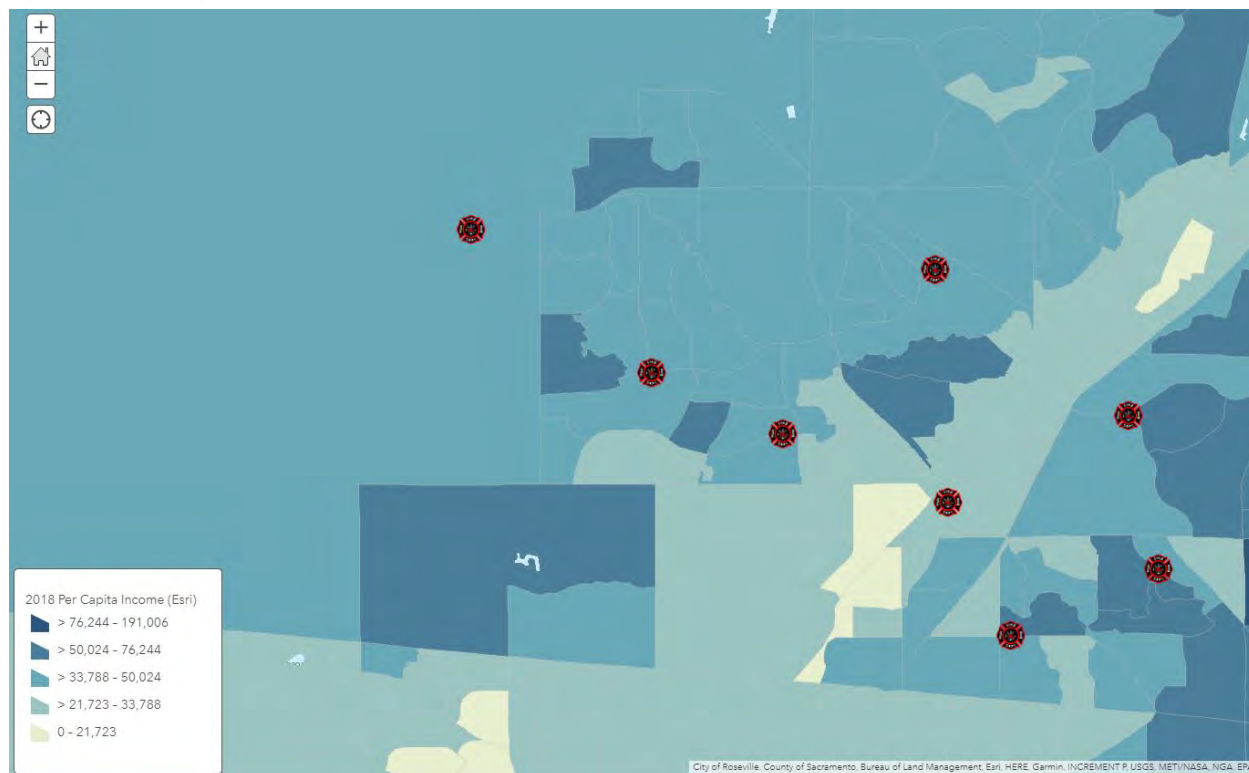
**Figure 48: Median Household Income – 2018**



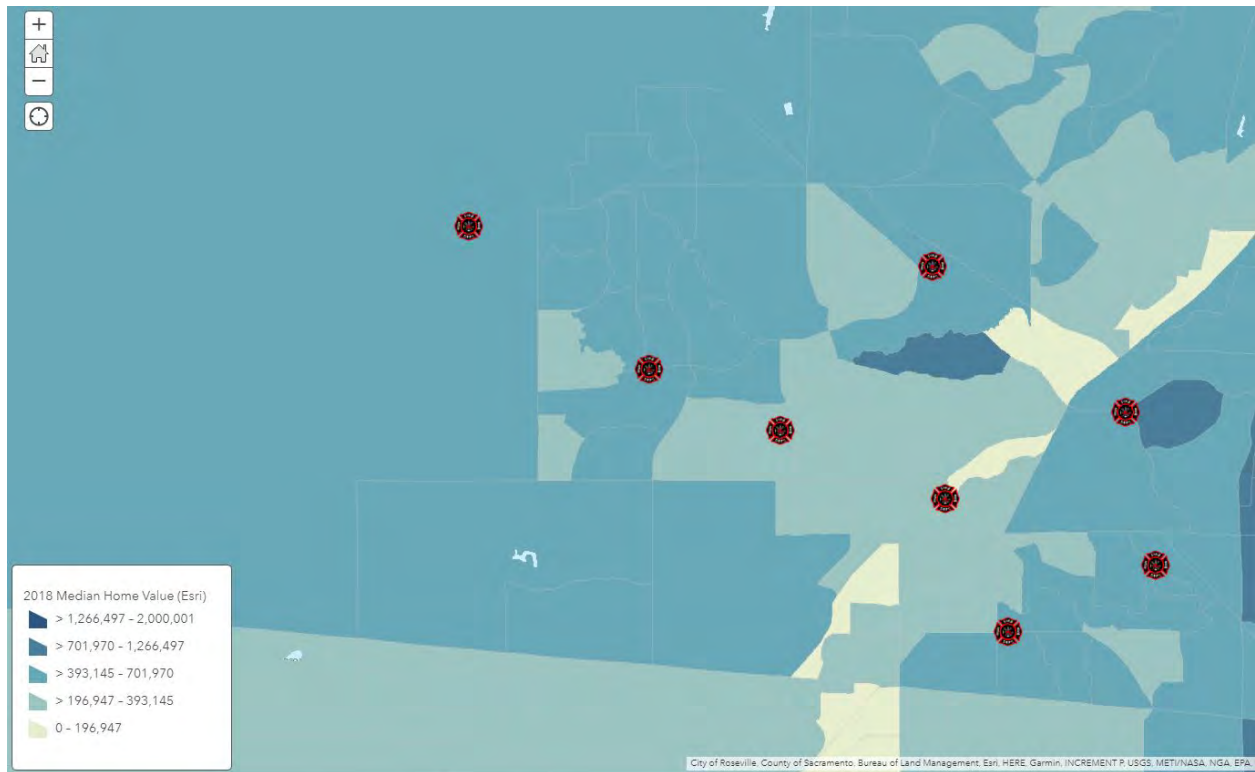


The map below and maps on subsequent pages additionally depict per capita income, median home value, average household size, and unemployment rate, respectively. Per capita income for the off-white shaded areas in the map below are as follows: northeast of Station 6, \$19,000; west of Station 6, \$16,903; and southwest of Station 1, \$15,995.

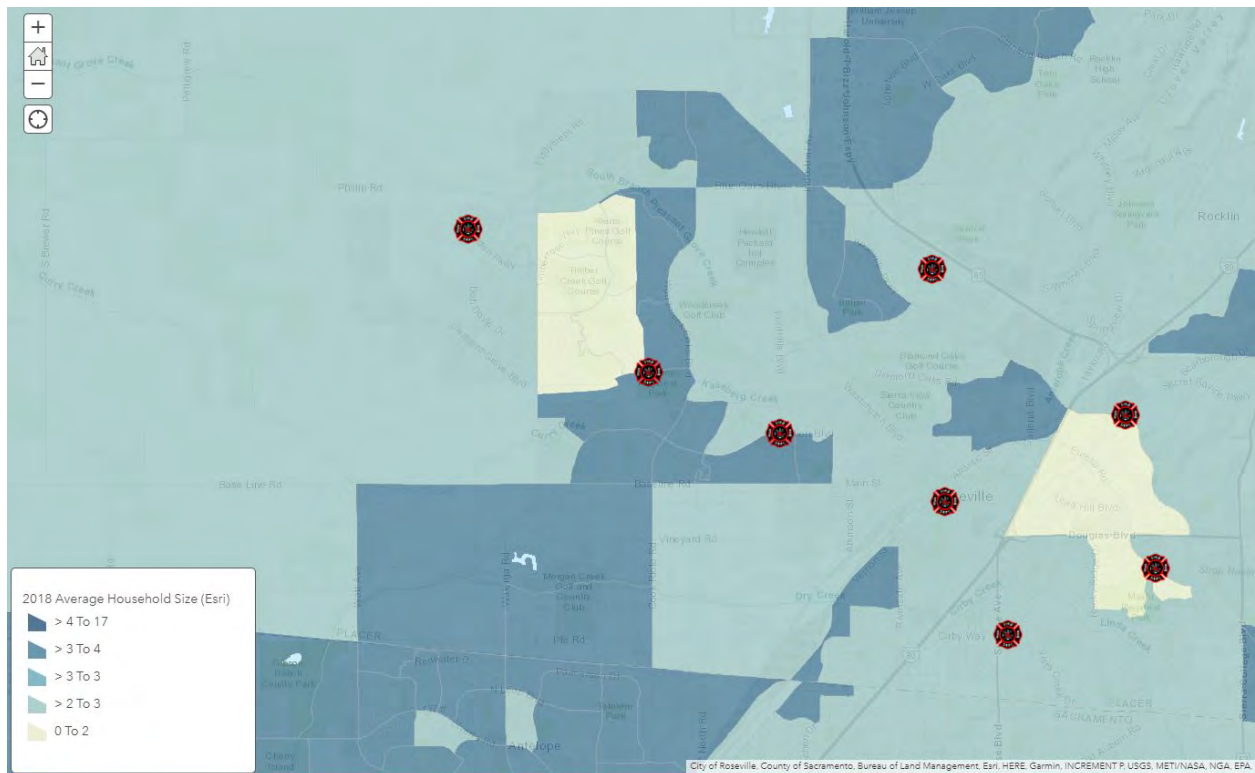
**Figure 49: Per Capita Income - 2018**



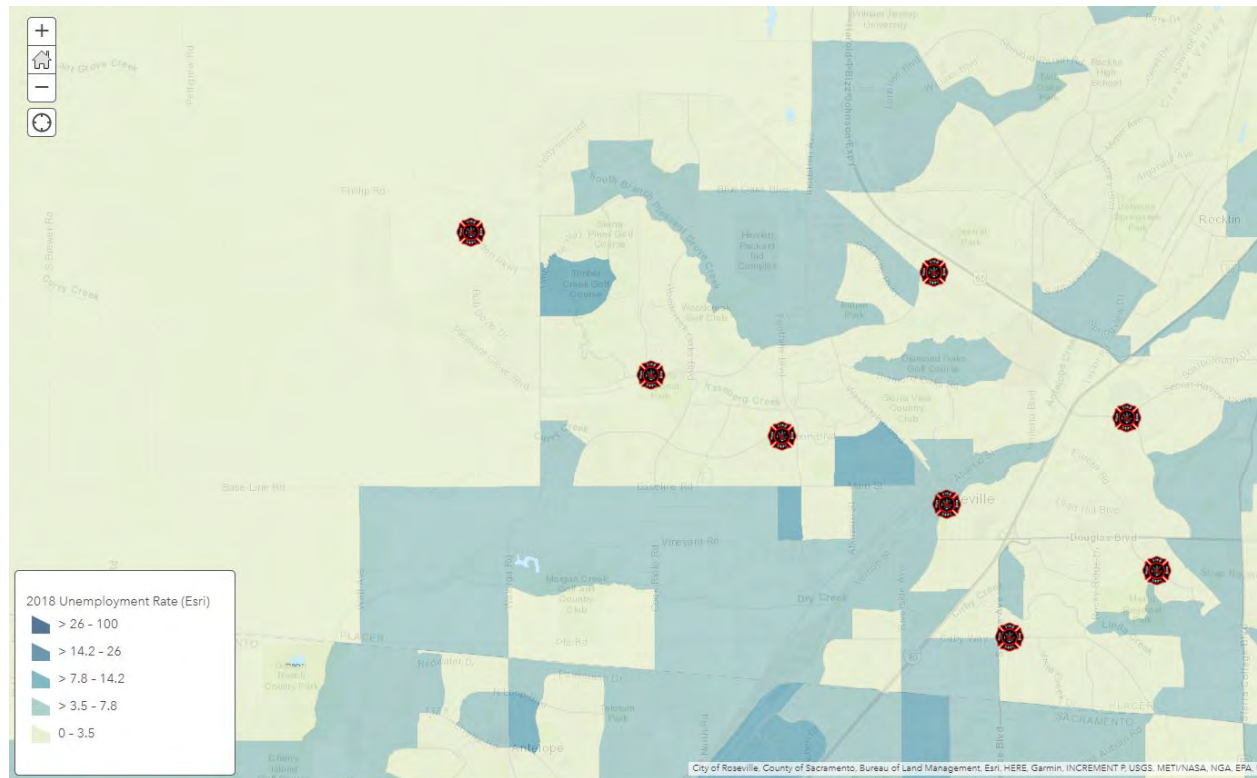
**Figure 50: Median Home Value - 2018**



**Figure 51: Average Household Size - 2018**



**Figure 52: Unemployment Rate - 2018**



# RISK ANALYSES

## Occupancy Level Risk

Occupancy risk was evaluated across the jurisdiction utilizing data provided by the Insurance Services Office (ISO) that independently rates buildings within the community.

The occupancy level risk assessment process utilized the following variables:

- Needed Fire Flow
- Presence of a Sprinkler Systems
- Construction Classification Type
- Building Combustion Classification
- Number of Stories
- Total Square Footage

The risk ratings were moderated if the building had an automatic sprinkler system. Ultimately, a risk-rating matrix was developed that categorized 1,060 occupancies within the jurisdiction into high, moderate, and low risks.

Due to the relatively higher demands for personnel and apparatus required for fire events that have occupancy classifications deemed high risk, these risks garnished the highest ratings. Conversely, the presence of an automatic sprinkler system elicited a moderating value. In this manner, the fact that 96% of the fires are controlled with sprinkler activation is included into the matrix for a more realistic risk factor rating. The results of the risk assessment process categorized the 1,060 occupancies into 23 high-risk structures, 869 moderate structures, and 168 low risk structures.

Geospatial analyses were completed to map the locations of each of the commercial occupancies included in the risk matrix process and specifically overlaid within each of the fire station locations. This analysis lends validity to the risk assessment matrix and the process utilized by the Department as the concentration of risks is correlated with the historical demand for fire related services. The results of the geospatial analyses of all, high, moderate, and low risk structures are presented below as Figures 53-55, respectively. From a broad perspective, this provides validation to the risk assessment process developed with the Department as well as the necessary deployment strategy to cover the historical demand for services.

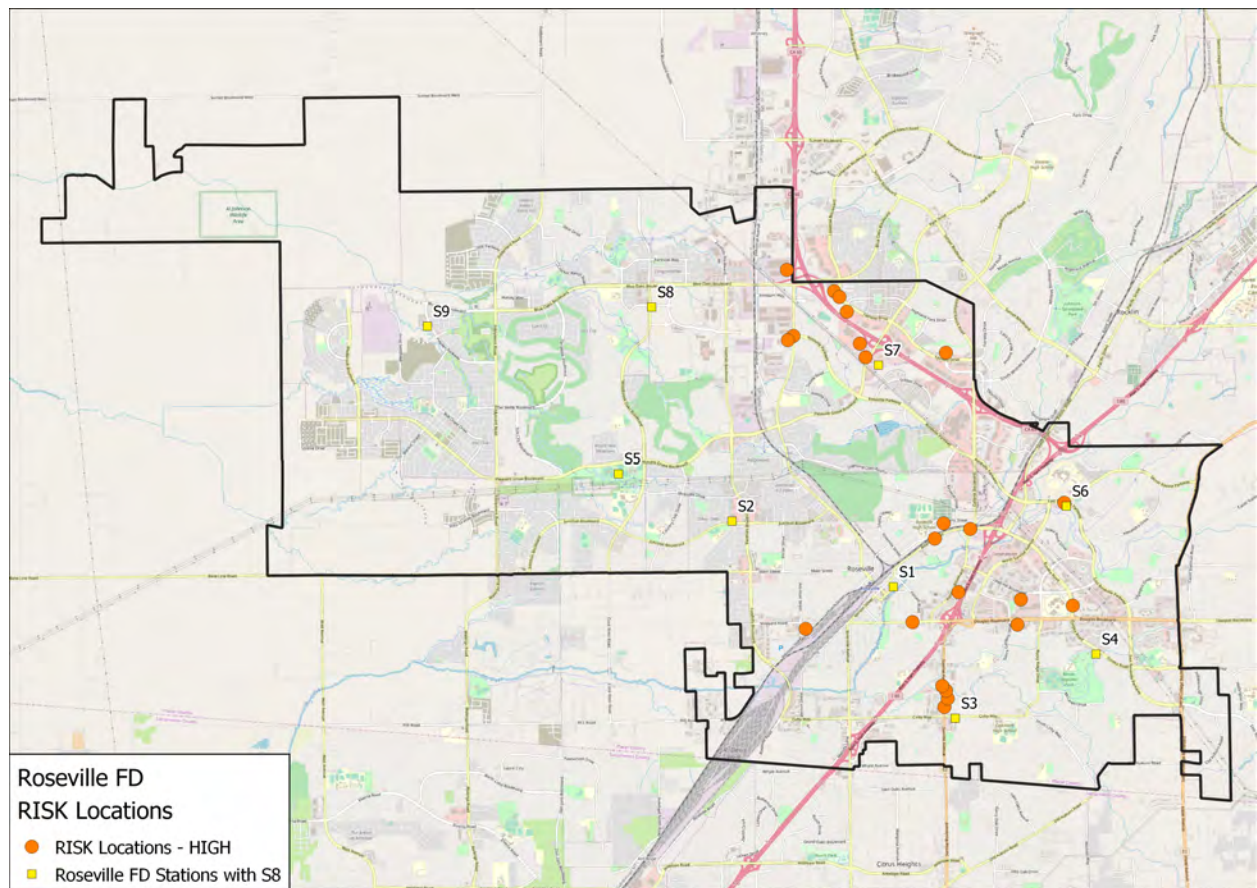
The mapping provided also includes the proposed station location for Station 8 for reference only. Utilizing these data, Station 8 would have the 3<sup>rd</sup> lowest amount of measured risk with Stations 5 and 9 having the least, respectively.

**Table 31: Occupancy Level Risk Matrix**

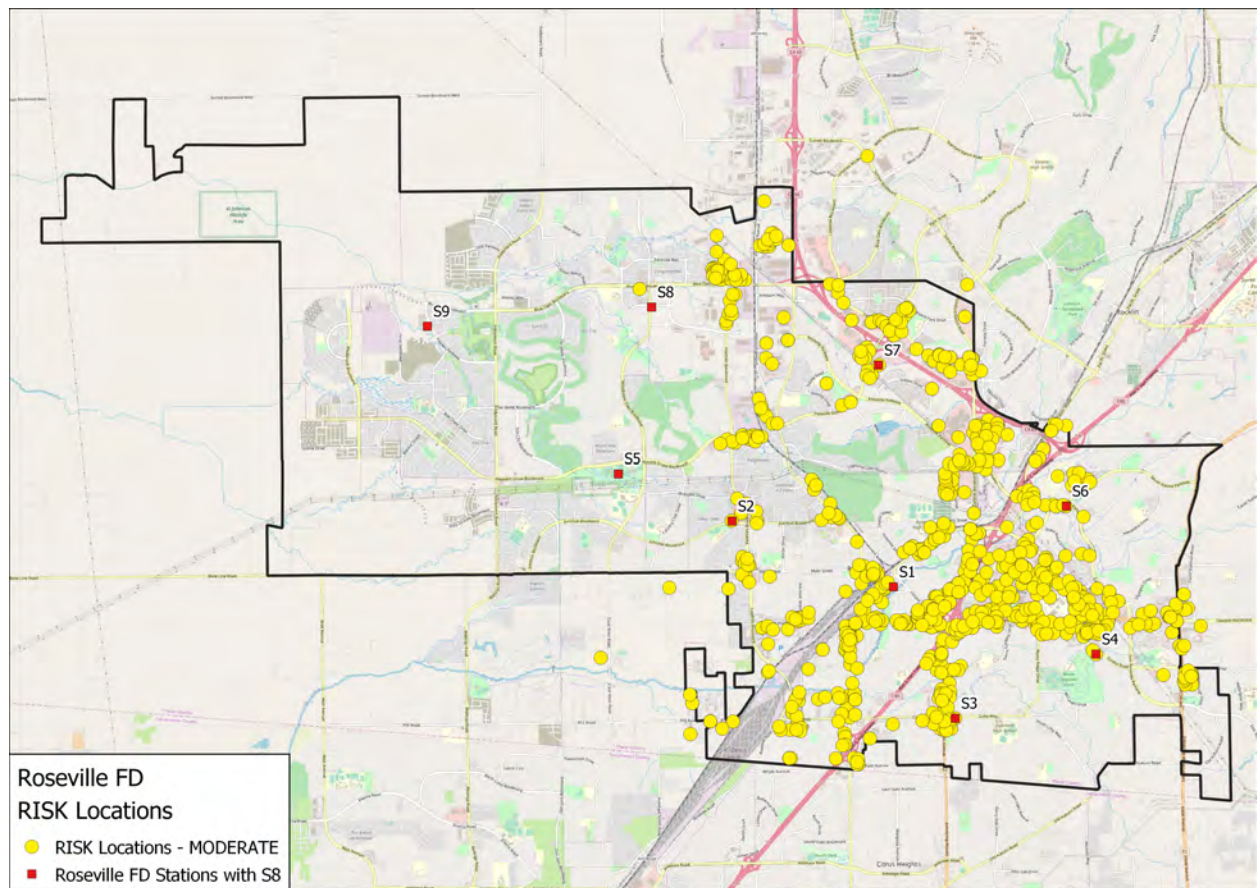
| Risk Class      | Fire Flow |                      | Number of Stories |             | Square Footage |                      | Construction Class |                                                           | Building Combustion Class |                                 | Full Credit Sprinkler System<br>(Yes/No) | Total Risk Score |
|-----------------|-----------|----------------------|-------------------|-------------|----------------|----------------------|--------------------|-----------------------------------------------------------|---------------------------|---------------------------------|------------------------------------------|------------------|
|                 | Value     | Scale                | Value             | Scale       | Value          | Scale                | Value              | Scale                                                     | Value                     | Scale                           | Value                                    | Scale            |
| <b>High</b>     | 3         | ≥ 1500 gpm           | 5                 | ≥ 4         | 5              | ≥ 100k GPM           | 5                  | Combustible or Frame                                      | 5                         | Quick<br>Free and Rapid Burning | -10/0                                    | ≥ 16             |
| <b>Moderate</b> | 2         | > 499 and < 1500 gpm | 3                 | > 1 and < 4 | 3              | > 10k gpm < 100k GPM | 3                  | Joisted Masonry                                           | 3                         | Combustible                     | -10/0                                    | >6 and <16       |
| <b>Low</b>      | 1         | ≤ 499 gpm            | 1                 | 1           | 1              | < 10k GPM            | 1                  | Non-Combustible Masonry<br>Non-Combustible Fire Resistive | 1                         | Slow<br>Non/Limited Combustible | -10/0                                    | ≤ 6              |



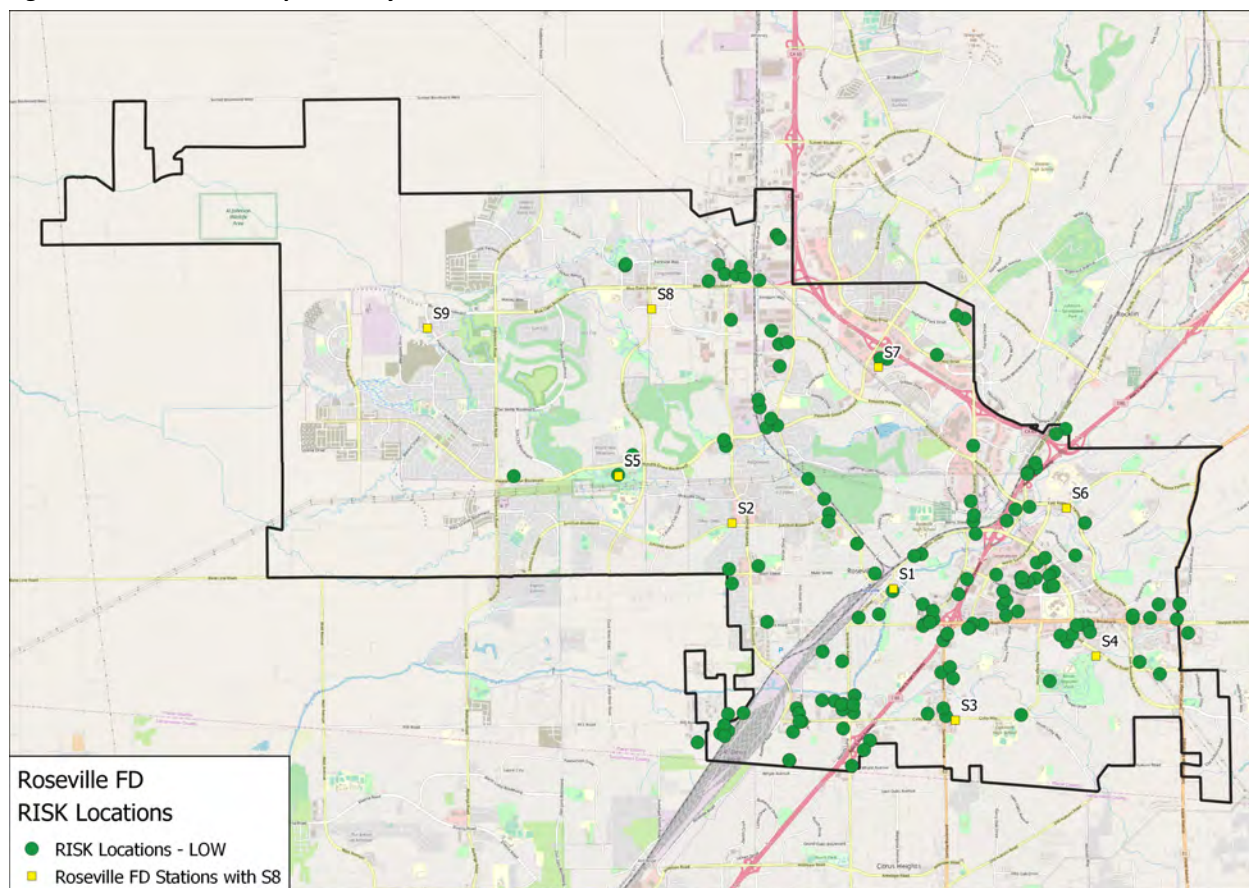
**Figure 53: High Risk Occupancies by Station Demand Zone**



**Figure 54: Moderate Risk Occupancies by Station Demand Zone**



**Figure 55: Low Risk Occupancies by Station Demand Zone**



## Concentration of Risks by Station Demand Zone

Analyses were conducted to describe and measure the relative concentration of risks in each of the fire station demand zones. Therefore, a station demand zone risk matrix was developed to quantitatively evaluate the relative risk by including measures for the frequency of moderate and high risk occupancies in each fire demand zone that are directly correlated to the necessity of higher concentrations of resources. In addition, several measures were used that both serves the distribution aspect of the risk evaluation, but also contributes to the need for higher concentrations of resources. For example, a higher call volume may serve to drive the need for additional resources to cover the community's demand.

The variables included in the risk matrix are the demand for services for each station demand zone, the number of high and moderate-risk occupancies, and the impact of simultaneous events in each station demand zone. All measures were weighted equally, however, two variables have surrogate relationships with historical community demands and one variable is dedicated to prospective occupancy risk. Community demands were rated more heavily in an effort to provide a realistic balance between the potential risk and historical experience. The risk tool and the scoring template are provided below.



**Table 32: Station Demand Zone Risk Concentration Matrix**

| Station Demand Zone | Community Demand | Call Concurrency | High/Moderate Risk Occupancies | Total risk Score | Risk Rating |
|---------------------|------------------|------------------|--------------------------------|------------------|-------------|
| 1                   | 6                | 3                | 5                              | 26.92            | Moderate    |
| 2                   | 4                | 2                | 1                              | 6.48             | Low         |
| 3                   | 5                | 4                | 4                              | 22.98            | Moderate    |
| 4                   | 4                | 3                | 2                              | 11.05            | Low         |
| 5                   | 4                | 3                | 1                              | 9.19             | Low         |
| 6                   | 4                | 2                | 4                              | 13.86            | Low         |
| 7                   | 5                | 3                | 4                              | 19.61            | Moderate    |
| 9                   | 4                | 2                | 1                              | 6.48             | Low         |

Overall, the risk assessment identified that the majority of station demand zones are of low risk (stations 2, 4, 5, 6, and 9) and three moderate risk stations (stations 1, 3, and 7).

**Table 33: Summary of Station Fire Demand Zone Risk Concentration Matrix**

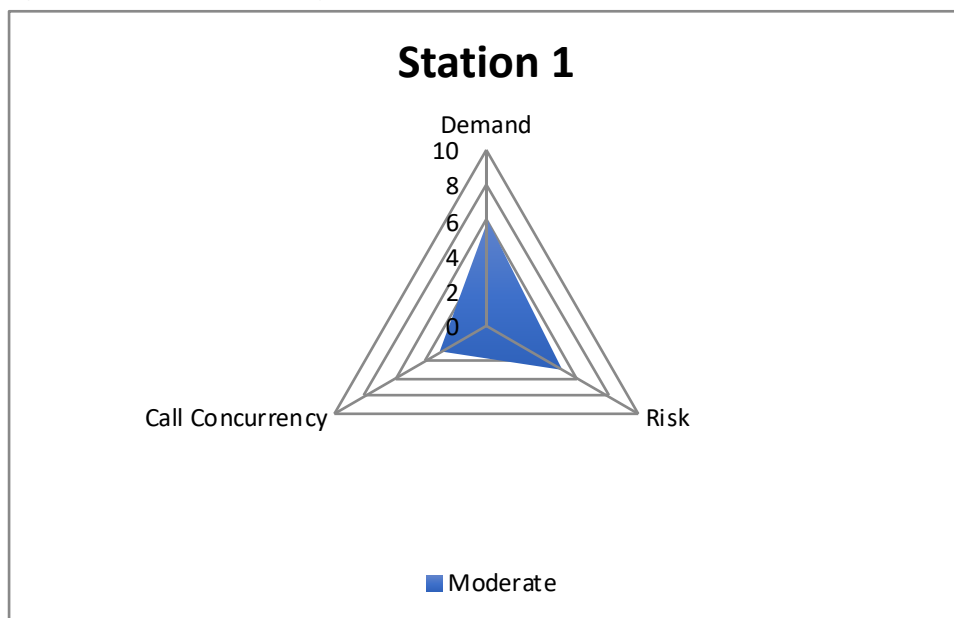
| Risk Class | Community Demand (D) |                     | Call Concurrency (C) |                 | High/Moderate Risk Occupancies (R) |                     | Total Risk Score                            |
|------------|----------------------|---------------------|----------------------|-----------------|------------------------------------|---------------------|---------------------------------------------|
|            | Value                | Scale (Calls)       | Value                | Scale (%)       | Value                              | Scale (Occupancies) | $\sqrt{\frac{(CD)^2 + (CR)^2 + (RD)^2}{2}}$ |
| Maximum    | ≥10                  | ≥5,400              | ≥10                  | ≥ 31.5          | ≥10                                | ≥450                | ≥72                                         |
| High       | 7 – 9                | ≥ 3,600 and < 5,400 | 7 – 9                | ≥ 21 and < 31.5 | 7 to 9                             | ≥ 300 and <449      | ≥ 39.35 and < 72                            |
| Moderate   | 4 to 6               | ≥ 1,800 and < 3,600 | 4 to 6               | ≥ 10.5 and < 21 | 4 to 6                             | ≥ 150 and < 300     | ≥ 16.49 and < 39.35                         |
| Low        | 1 to 3               | < 1,800             | 1 to 3               | < 10.5          | 1 to 3                             | < 150               | < 16.49                                     |

\* Definitions for Occupancy Risk Type were provided as part of the full risk assessment previously.

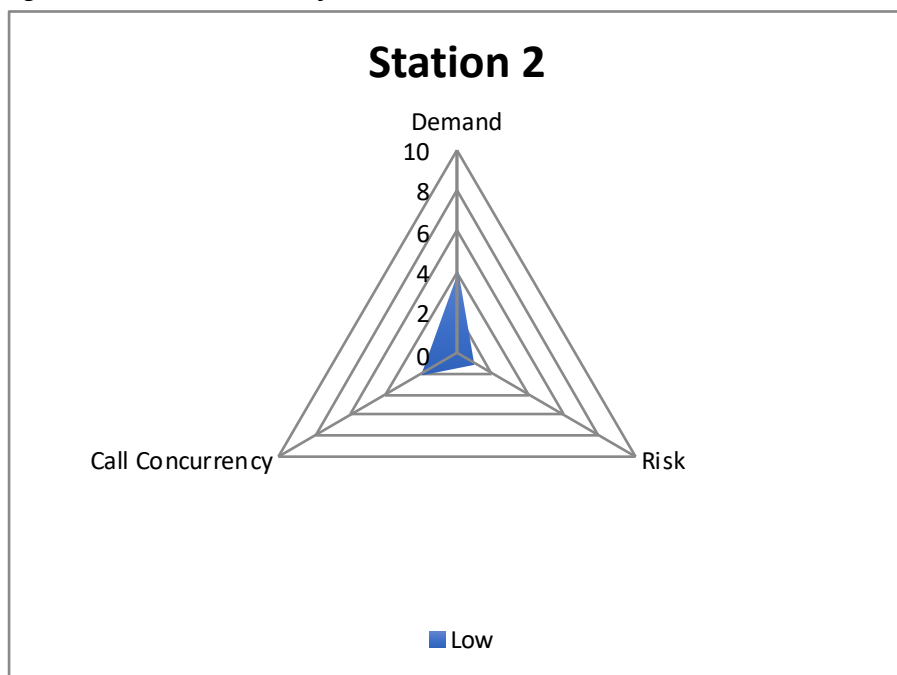
These analyses result in a three-dimensional model that illustrates the representativeness of each of the variables as they contribute to each station's risk profile. For example, one station may score heavily in potential risk and have moderate or low demand for services and another station may have little potential risk but have high demand and call concurrency that drives the necessity for a greater concentration of resources.

Graphic representations of the three axis risk matrices are provided below. When reviewing these radar figures, the larger the shaded area, the greater the risk. In addition, each axis is labeled so that the reader can determine the relationship between the risk drivers for each station area.

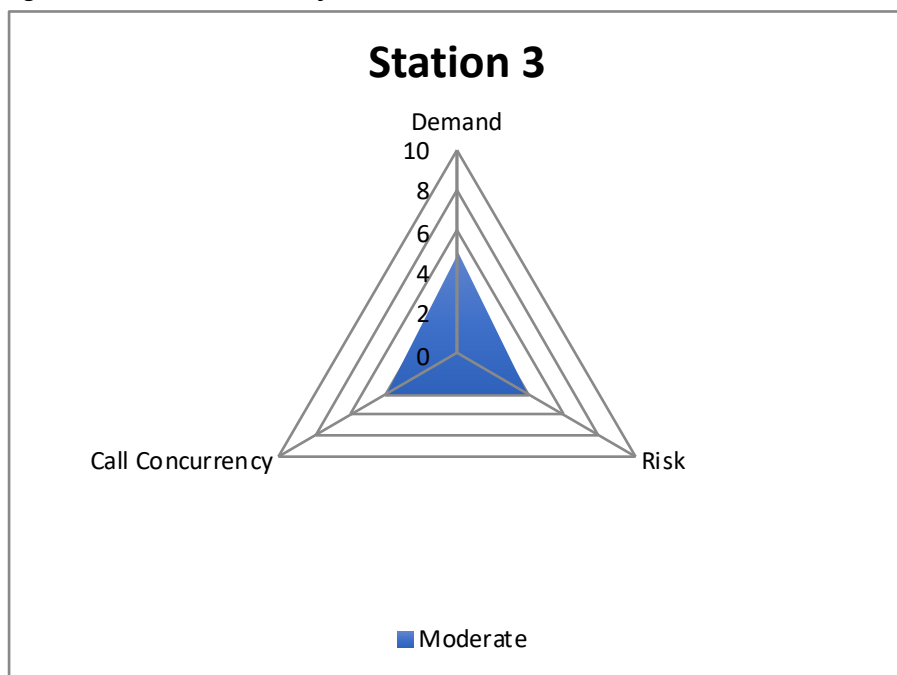
**Figure 56: Station 1 Risk Profile**



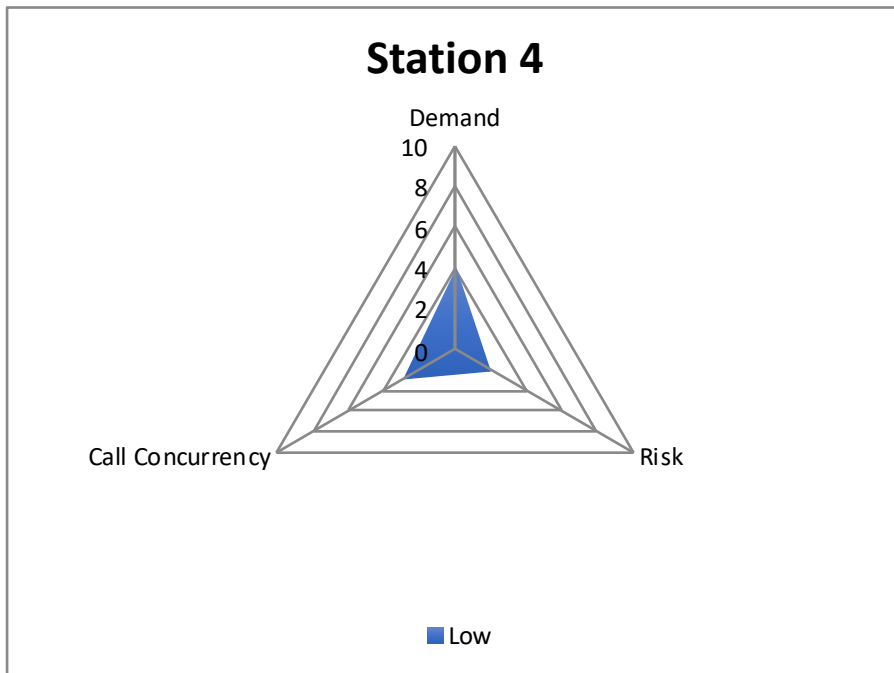
**Figure 57: Station 2 Risk Profile**



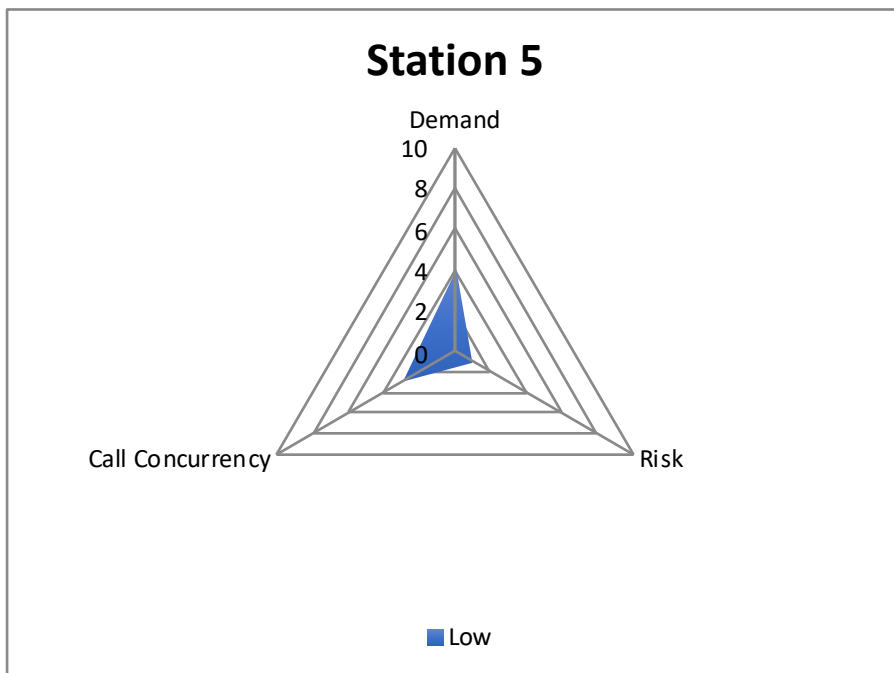
**Figure 58: Station 3 Risk Profile**



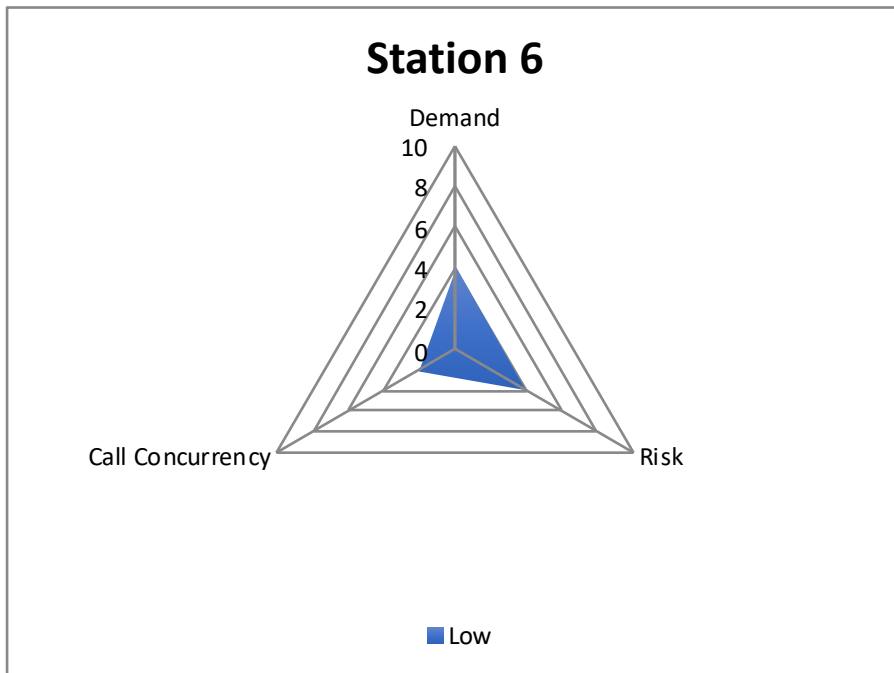
**Figure 59: Station 4 Risk Profile**



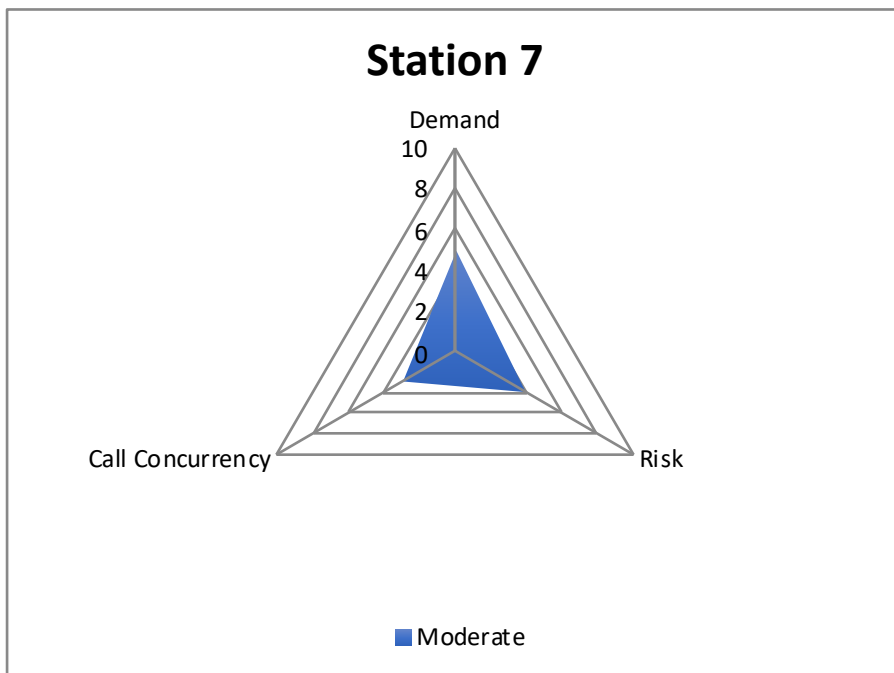
**Figure 60: Station 5 Risk Profile**



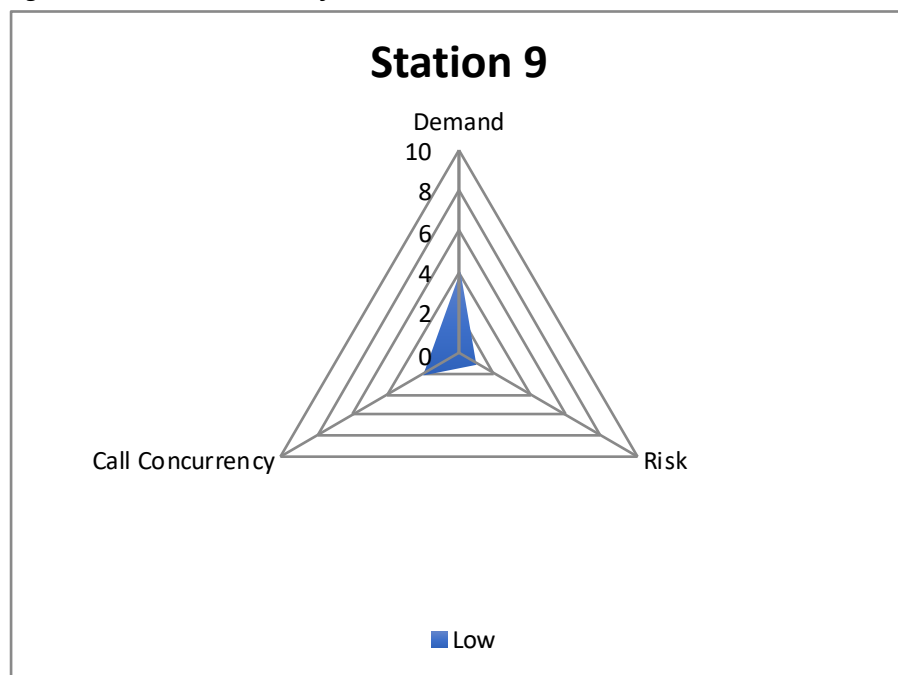
**Figure 61: Station 6 Risk Profile**



**Figure 62: Station 7 Risk Profile**



**Figure 63: Station 9 Risk Profile**



## Hazardous Materials Risks

Occupancy level data for hazardous materials sites were geocoded by station response area.

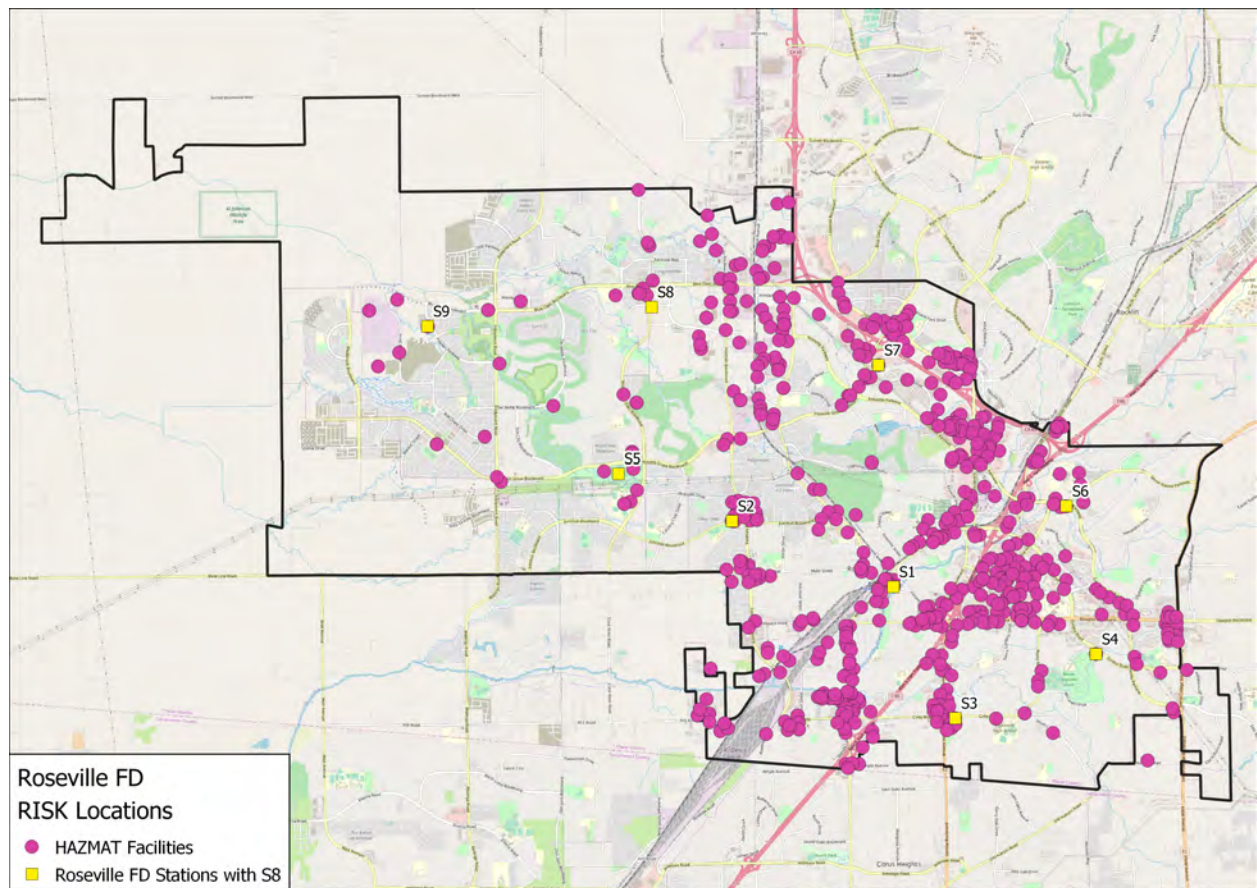
Overall, the great number of hazardous materials occupancies were located in Station 7s area at 186, followed by Station 3 at 135, and Station 1 at 109. Overall results by station area are provided below in tabular form.

**Table 34: Summary Count of Hazardous Materials Sites by Station Area**

| Current Stations   | Stations   |           |            |           |           |            |            |           | Grand Total |
|--------------------|------------|-----------|------------|-----------|-----------|------------|------------|-----------|-------------|
| Type               | S1         | S2        | S3         | S4        | S5        | S6         | S7         | S9        |             |
| HAZMAT             | 109        | 68        | 135        | 31        | 14        | 115        | 186        | 19        | 677         |
| <b>Grand Total</b> | <b>109</b> | <b>68</b> | <b>135</b> | <b>31</b> | <b>14</b> | <b>115</b> | <b>186</b> | <b>19</b> | <b>677</b>  |

In addition, all hazardous materials locations were plotted on a map that includes all station locations plus Station 8. If Station 8 is included, Stations 2, 5, 7, and 9 reduce their respective number of hazmat sites and Station 8 would have 69 locations within its jurisdiction. The mapping is provided below.

**Figure 64: Hazardous Materials Sites by Station Area**







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February 2020

## Final Data Analysis



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Roseville, California

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## CONSULTANT REPORT

# ROSEVILLE FIRE DEPARTMENT DATA ANALYSIS

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# METHODOLOGY

We obtained Roseville Fire Department (RFD) 2016-2018 CAD and 2014-2018 RMS data files spanning January 1, 2016 to December 31, 2018 and January 1, 2014 to December 31, 2018, respectively. All reporting periods were based on the calendar year from January 1 to December 31. As such, we present five full reporting periods of RFD baseline workload and response time performance data, where available and applicable, in the last section of this report.

We utilize two distinct measures in this report—call volume and workload. Number of requests for service are defined as “incidents” or “calls” (i.e., call volume). Call volume reflects the number of times a distinct incident was created involving one or more RFD units, and/or calls received in RFD’s jurisdiction. “Responses” are the number of times that an individual unit (or units) responded to a call (i.e., workload).

Audits of the data files were first conducted to identify any anomalies for attention and reconciliation prior to data analysis (see Tables 50 through 52 in the Appendix). Prior to the identification of call volume, duplicate incident numbers appearing in the RMS call-level data file were addressed as noted in the Appendix. Records related to units outside of RFD were excluded prior to the identification of RFD’s response workload. Additional exclusion criteria were applied to records prior to the analysis of busy and performance time metrics (e.g., dispatch time; turnout time). Entries with performance times of <0 minutes and 0 minutes, and entries with extremely high performance times (i.e., outliers) were also excluded. The application of these exclusion criteria for busy and performance time data may have resulted in reductions of call and response volume for each reporting period; these adjusted sample sizes are noted in the report where applicable.

Responses were classified based on call status and the role of the responding unit. Call status as emergency (lights and sirens) was obtained from the RMS call-level data file (i.e., variable “Emergency\_PRIORITYRESPONSEFLAG”). Units identified by RFD as primary front-line units included Battalion Chief units B1, B2, and B9; brush trucks BR5, BR6, and BR9, engines E1, E2, E3, E4, E5, E5B, E6, E6B, E7, E8, E9, and E9B; grass units G2 and G2; hazmat unit HM1; rescue unit R7; and trucks T1 and T7. The majority of analyses related to performance (e.g., travel time) were restricted based on these classifications to include only primary front-line units responding to emergency (lights and sirens) calls, and are identified in the report where applicable. Not all units had responses reported for each calendar year available in the RMS data files.

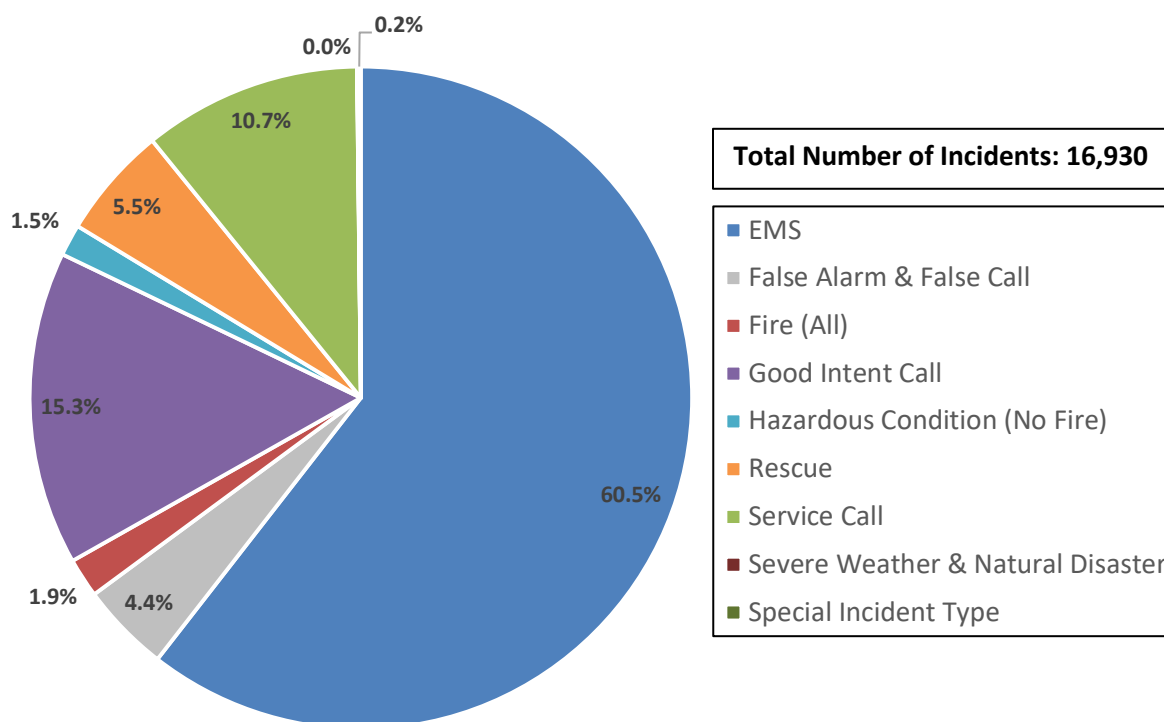
Any reduced sample sizes due to missing data are noted in the report where applicable. Classifications of responses into call categories and program areas appear in Table 53 in the Appendix.

# COMMUNITY RESPONSE HISTORY

During the 2018 reporting period (i.e., January 1, 2018 to December 31, 2018; hereinafter referred to as 2018), RFD received a total of 16,930 unique requests for service (Figure 1; Table 1). Incidents reflect requests for service within RFD's demand zones, as well as from other agencies outside of RFD's demand zones through automatic and mutual aid. EMS related requests totaled 10,247, accounting for 60.5% of the total call volume, and fire related requests totaled 325, accounting for 1.9% of the total call volume.

Incidents by call category as well as by agency demand zone (i.e., Roseville, Livotti, and other jurisdictions combined) appear in Table 44 in the Appendix. Classifications of incident types from the data file into program and call category are presented in Table 53 in the Appendix.

**Figure 1: Percentage of Total Incidents by Program**



**Table 1: Number of Incidents by Call Category**

| Call Category <sup>1</sup>                   | Number of Calls | Average Calls per Day | Call Percentage |
|----------------------------------------------|-----------------|-----------------------|-----------------|
| <b>EMS</b>                                   | <b>10,247</b>   | <b>28.1</b>           | <b>60.5</b>     |
| <b>False Alarm &amp; False Call</b>          | <b>739</b>      | <b>2.0</b>            | <b>4.4</b>      |
| Fire (Not Building or Wildland)              | 92              | 0.3                   | 0.5             |
| Building Fire                                | 130             | 0.4                   | 0.8             |
| Wildland Fire                                | 103             | 0.3                   | 0.6             |
| <b>Fire (All)</b>                            | <b>325</b>      | <b>0.9</b>            | <b>1.9</b>      |
| <b>Good Intent Call</b>                      | <b>2,594</b>    | <b>7.1</b>            | <b>15.3</b>     |
| <b>Hazardous Conditions (No Fire)</b>        | <b>261</b>      | <b>0.7</b>            | <b>1.5</b>      |
| <b>Rescue</b>                                | <b>928</b>      | <b>2.5</b>            | <b>5.5</b>      |
| <b>Service Call</b>                          | <b>1,804</b>    | <b>4.9</b>            | <b>10.7</b>     |
| <b>Severe Weather &amp; Natural Disaster</b> | <b>3</b>        | <b>0.0</b>            | <b>0.0</b>      |
| <b>Special Incident Type</b>                 | <b>29</b>       | <b>0.1</b>            | <b>0.2</b>      |
| <b>Total</b>                                 | <b>16,930</b>   | <b>46.4</b>           | <b>100.0</b>    |

<sup>1</sup>Classifications of incident types from the data file into call category are presented in the Appendix.



Combined, all RFD units made 20,847 responses, and were busy on calls (i.e., from dispatch to clear time) for a total of 6,624.4 hours in 2018 (Table 2). Overall, average busy minutes per response was 19.3 minutes during 2018, but varied based on call type. The number of individual unit responses will also contribute to understanding total department workload, as 2,408 of 16,908 calls (14.2%) resulted in multiple RFD units responding.

**Table 2: Number of Calls, Number of Responses, and Total Busy Time by Call Category**

| Call Category                                | Number of Calls <sup>1</sup> | Number of Responses <sup>2</sup> | Average Responses per Call | Responses with Time Data <sup>3</sup> | Total Busy Hours | Average Busy Minutes per Response | Percentage of Total Busy Hours |
|----------------------------------------------|------------------------------|----------------------------------|----------------------------|---------------------------------------|------------------|-----------------------------------|--------------------------------|
| <b>EMS</b>                                   | <b>10,244</b>                | <b>11,101</b>                    | <b>1.1</b>                 | <b>10,976</b>                         | <b>3,671.3</b>   | <b>20.1</b>                       | <b>55.4</b>                    |
| <b>False Alarm &amp; False Call</b>          | <b>739</b>                   | <b>1,024</b>                     | <b>1.4</b>                 | <b>1,008</b>                          | <b>261.5</b>     | <b>15.6</b>                       | <b>3.9</b>                     |
| Fire (Not Building or Wildland)              | 92                           | 235                              | 2.6                        | 233                                   | 90.5             | 23.3                              | 1.4                            |
| Building Fire                                | 130                          | 511                              | 3.9                        | 506                                   | 357.7            | 42.4                              | 5.4                            |
| Wildland Fire                                | 103                          | 365                              | 3.5                        | 359                                   | 261.3            | 43.7                              | 3.9                            |
| <b>Fire (All)</b>                            | <b>325</b>                   | <b>1,111</b>                     | <b>3.4</b>                 | <b>1,098</b>                          | <b>709.5</b>     | <b>38.8</b>                       | <b>10.7</b>                    |
| <b>Good Intent Call</b>                      | <b>2,583</b>                 | <b>3,235</b>                     | <b>1.3</b>                 | <b>3,190</b>                          | <b>459.4</b>     | <b>8.6</b>                        | <b>6.9</b>                     |
| <b>Hazardous Conditions (No Fire)</b>        | <b>261</b>                   | <b>625</b>                       | <b>2.4</b>                 | <b>601</b>                            | <b>279.5</b>     | <b>27.9</b>                       | <b>4.2</b>                     |
| <b>Rescue</b>                                | <b>925</b>                   | <b>1,528</b>                     | <b>1.7</b>                 | <b>1,499</b>                          | <b>544.9</b>     | <b>21.8</b>                       | <b>8.2</b>                     |
| <b>Service Call</b>                          | <b>1,799</b>                 | <b>2,182</b>                     | <b>1.2</b>                 | <b>2,133</b>                          | <b>690.0</b>     | <b>19.4</b>                       | <b>10.4</b>                    |
| <b>Severe Weather &amp; Natural Disaster</b> | <b>3</b>                     | <b>5</b>                         | <b>1.7</b>                 | <b>5</b>                              | <b>3.3</b>       | <b>39.8</b>                       | <b>0.1</b>                     |
| <b>Special Incident Type</b>                 | <b>29</b>                    | <b>36</b>                        | <b>1.2</b>                 | <b>36</b>                             | <b>5.0</b>       | <b>8.4</b>                        | <b>0.1</b>                     |
| <b>Total</b>                                 | <b>16,908</b>                | <b>20,847</b>                    | <b>1.2</b>                 | <b>20,546</b>                         | <b>6,624.4</b>   | <b>19.3</b>                       | <b>100.0</b>                   |

<sup>1</sup>“Number of Calls” reflects an adjusted number of unique incidents to correspond with responses made by RFD units.

<sup>2</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>3</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

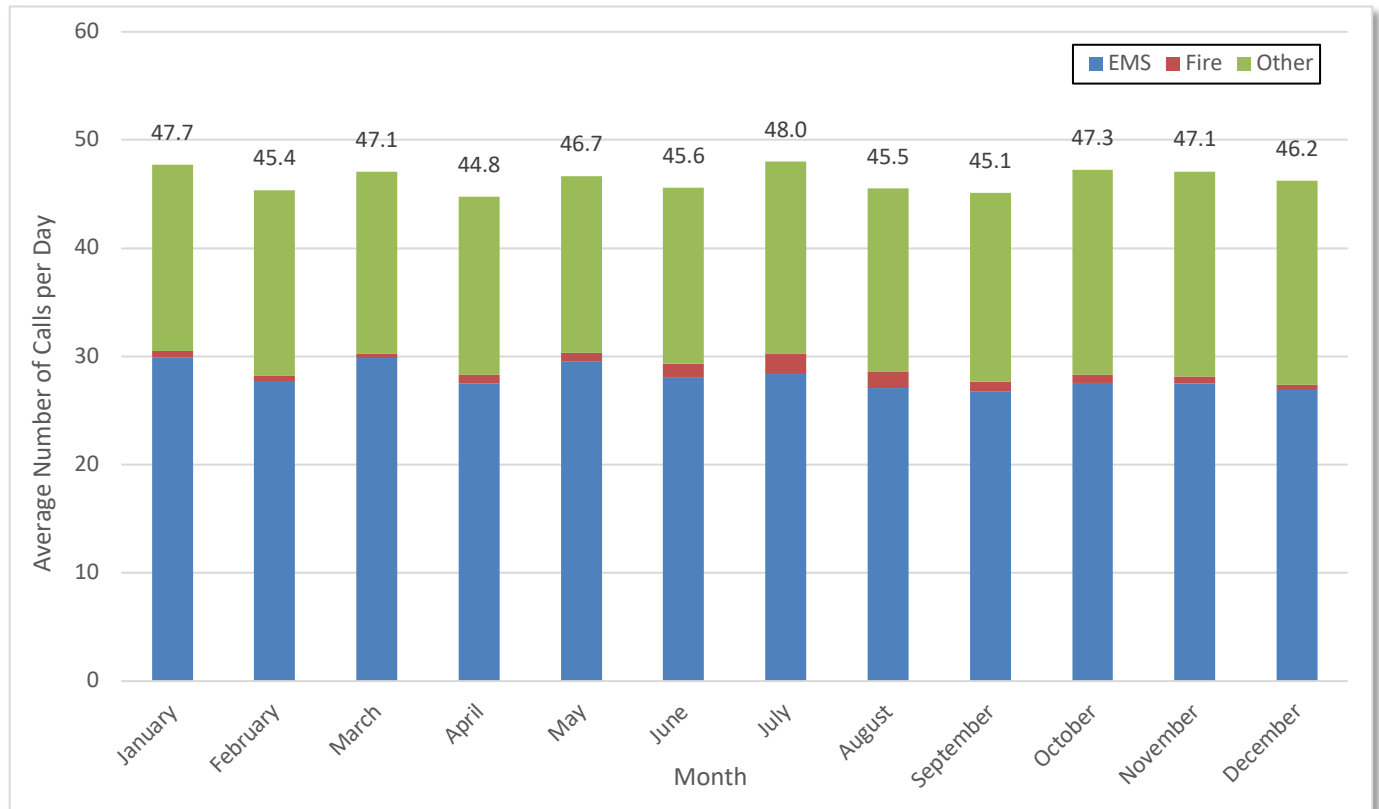
Temporal analyses were conducted to evaluate patterns in community demands. These analyses are based on the 16,930 incidents received by RFD, and examine the frequency of requests for service by month, day of week, and hour of day. Month, day of week, and hour of day were derived from “REVISED\_INCIDENT\_DATE” dates and times in the data file. In the following analyses, calls that were not classified as “EMS” or “Fire” were grouped into an “Other” category for presentation purposes.

Overall, average requests per month ranged from a low of 44.8 calls per day in April to a high of 48.0 calls per day in July (Table 3; Figure 2). The three months with the most requests for service in descending order were: July (48.0 per day), January (47.7 per day), and October (47.3 per day). The three months with the fewest requests for service in ascending order were: April (44.8 per day), September (45.1 per day), and February (45.4 per day).

**Table 3: Overall: Total Calls and Average Calls per Day by Month**

| Month        | Number of Calls | Average Calls per Day | Call Percentage |
|--------------|-----------------|-----------------------|-----------------|
| January      | 1,479           | 47.7                  | 8.7             |
| February     | 1,270           | 45.4                  | 7.5             |
| March        | 1,459           | 47.1                  | 8.6             |
| April        | 1,343           | 44.8                  | 7.9             |
| May          | 1,447           | 46.7                  | 8.5             |
| June         | 1,367           | 45.6                  | 8.1             |
| July         | 1,489           | 48.0                  | 8.8             |
| August       | 1,411           | 45.5                  | 8.3             |
| September    | 1,354           | 45.1                  | 8.0             |
| October      | 1,465           | 47.3                  | 8.7             |
| November     | 1,413           | 47.1                  | 8.3             |
| December     | 1,433           | 46.2                  | 8.5             |
| <b>Total</b> | <b>16,930</b>   | <b>46.4</b>           | <b>100.0</b>    |

**Figure 2: Overall: Average Calls per Day by Month**



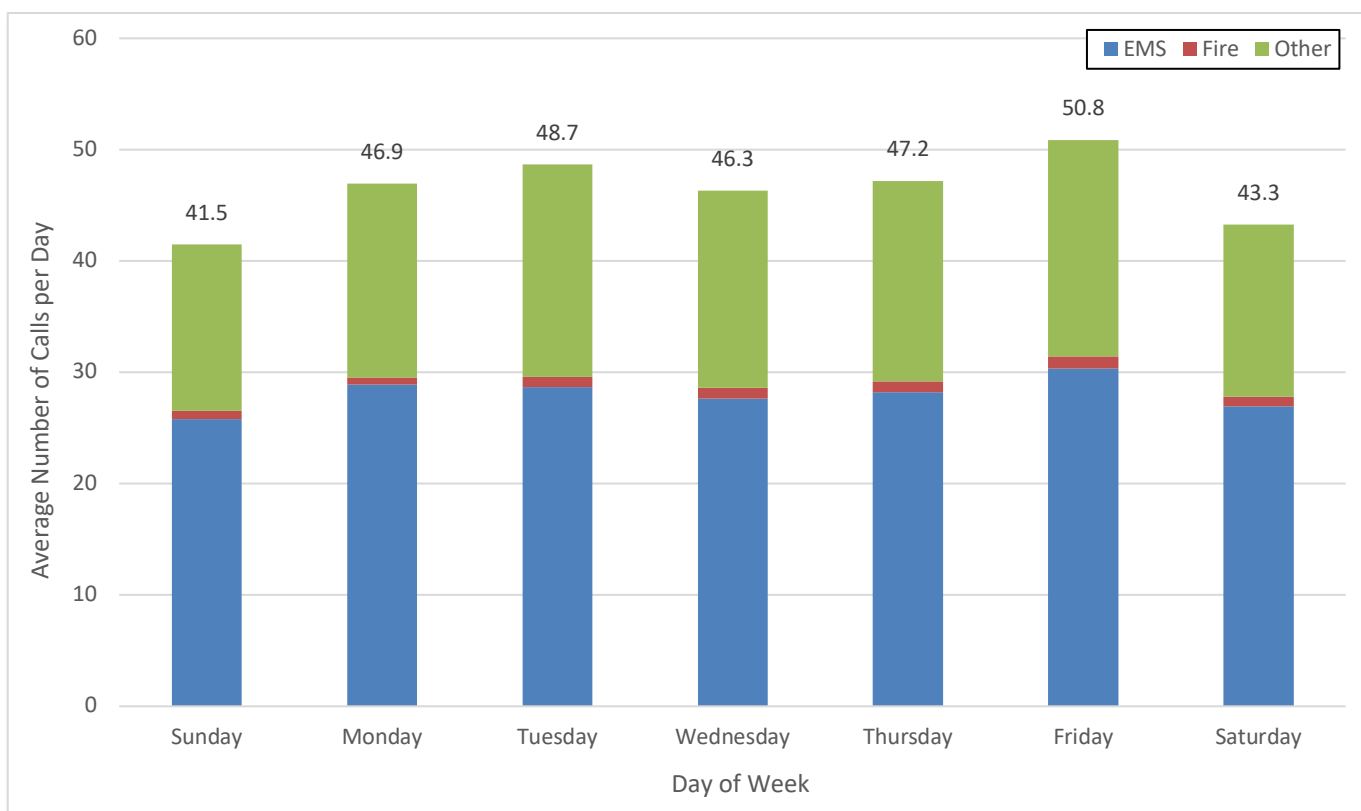
Similar analyses were conducted for requests by day of week (Table 4; Figure 3; 53 Mondays in 2018; 52 of all other days of the week). The lowest average number of calls per day occurred on Sunday (41.5 per day), and the highest average number of calls per day occurred on Friday (50.8 per day).

**Table 4: Overall: Total Calls and Average Calls per Day by Day of Week**

| Day of Week         | Number of Calls | Average Calls per Day | Call Percentage |
|---------------------|-----------------|-----------------------|-----------------|
| Sunday              | 2,157           | 41.5                  | 12.7            |
| Monday <sup>1</sup> | 2,487           | 46.9                  | 14.7            |
| Tuesday             | 2,530           | 48.7                  | 14.9            |
| Wednesday           | 2,409           | 46.3                  | 14.2            |
| Thursday            | 2,453           | 47.2                  | 14.5            |
| Friday              | 2,644           | 50.8                  | 15.6            |
| Saturday            | 2,250           | 43.3                  | 13.3            |
| <b>Total</b>        | <b>16,930</b>   | <b>46.4</b>           | <b>100.0</b>    |

<sup>1</sup>There were 53 Mondays during 2018, and 52 of all other days of the week during 2018.

**Figure 3: Overall: Average Calls per Day by Day of Week**



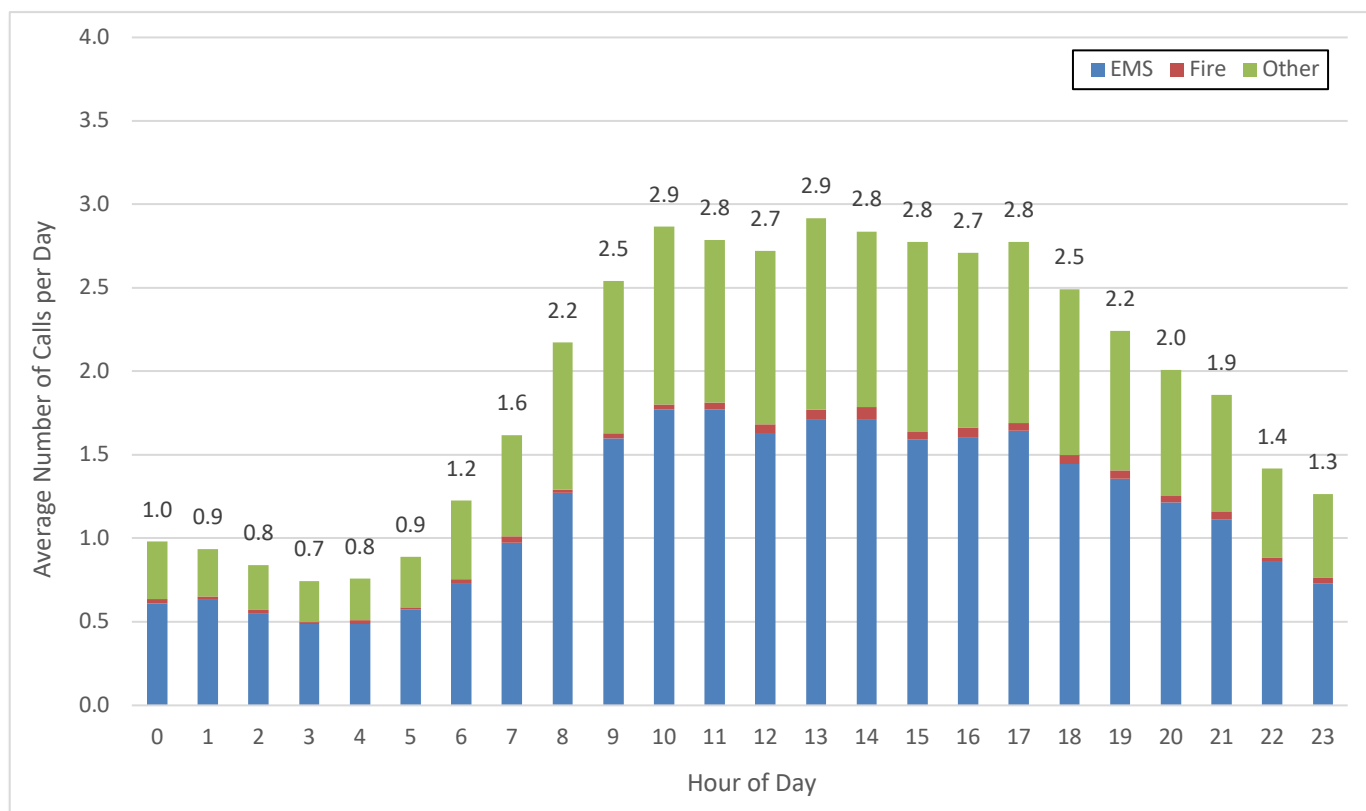
Overall demands were also evaluated by hour of day (Table 5; Figure 4). Variability exists in the time of day that requests for services were received. Peak demand occurred at 1300 (2.9 calls per day). The hours of the day with the lowest average number of calls per day (ranging from 0.7-0.9 per day) were between 0100 and 0500.

**Table 5: Overall: Total Calls and Average Calls per Day by Hour of Day**

| Hour of Day  | Number of Calls | Average Calls per Day | Call Percentage |
|--------------|-----------------|-----------------------|-----------------|
| 0            | 358             | 1.0                   | 2.1             |
| 1            | 341             | 0.9                   | 2.0             |
| 2            | 306             | 0.8                   | 1.8             |
| 3            | 272             | 0.7                   | 1.6             |
| 4            | 277             | 0.8                   | 1.6             |
| 5            | 325             | 0.9                   | 1.9             |
| 6            | 448             | 1.2                   | 2.6             |
| 7            | 591             | 1.6                   | 3.5             |
| 8            | 793             | 2.2                   | 4.7             |
| 9            | 927             | 2.5                   | 5.5             |
| 10           | 1,047           | 2.9                   | 6.2             |
| 11           | 1,017           | 2.8                   | 6.0             |
| 12           | 993             | 2.7                   | 5.9             |
| 13           | 1,065           | 2.9                   | 6.3             |
| 14           | 1,036           | 2.8                   | 6.1             |
| 15           | 1,013           | 2.8                   | 6.0             |
| 16           | 989             | 2.7                   | 5.8             |
| 17           | 1,013           | 2.8                   | 6.0             |
| 18           | 909             | 2.5                   | 5.4             |
| 19           | 818             | 2.2                   | 4.8             |
| 20           | 733             | 2.0                   | 4.3             |
| 21           | 679             | 1.9                   | 4.0             |
| 22           | 518             | 1.4                   | 3.1             |
| 23           | 462             | 1.3                   | 2.7             |
| <b>Total</b> | <b>16,930</b>   | <b>46.4</b>           | <b>100.0</b>    |

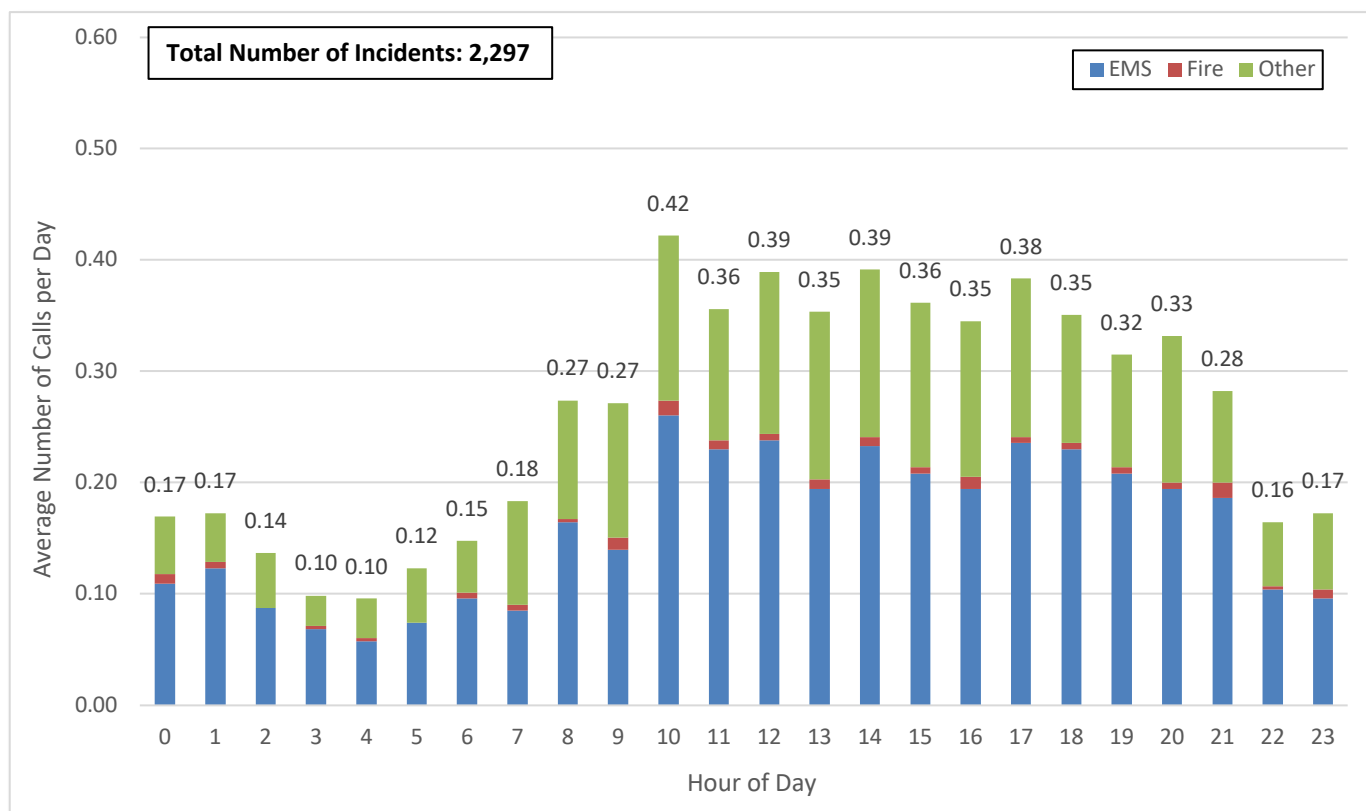
To provide a more granular understanding of the community's demand for services, this temporal analysis included the average number of calls per hour. In other words, when referring to Figure 4 below, the busiest hour is at 1300 with 1,065 calls occurring during that hour in 2018. The average number of calls per hour is a daily average for those 1,065 calls if they were distributed equally across the year (i.e.,  $1,065/365 = 2.9$ ). Therefore, the busiest hour per day would be at 1300 with an average hourly call volume of 2.9 calls per day. The second busiest hour occurred at 1000 with 1,047 calls during that hour in 2018, with an average hourly call volume of 2.9 calls per day. For ease of presentation, values displayed in Figure 4 have been rounded to one decimal place.

**Figure 4: Overall: Average Calls per Day by Hour of Day**

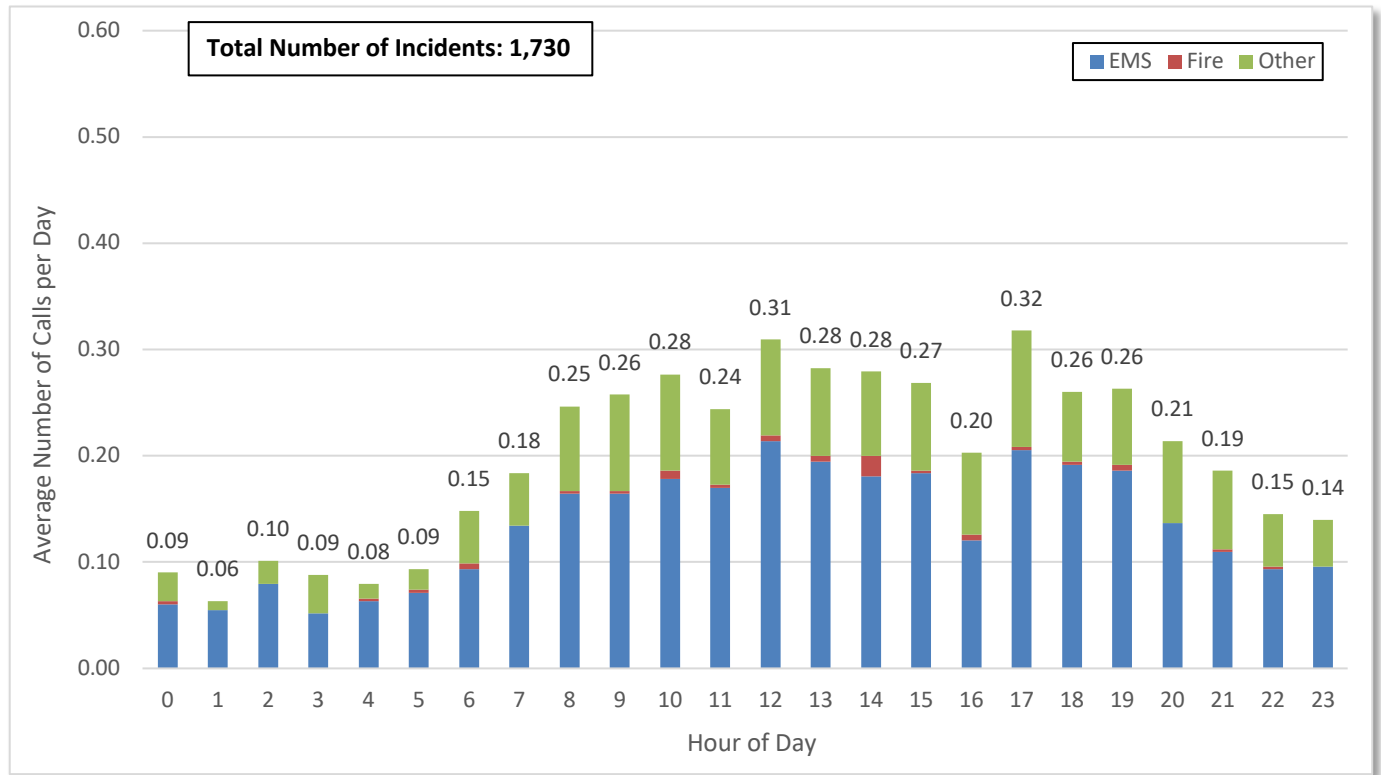


Temporal distributions related to hour of day were also created for the department's first due stations to better understand each location's unique demand for services (Figure 5 through Figure 12). First due station was obtained from the "StationLayer" variable available in the CAD data file. Entries reporting a "StationLayer" of "RSV10" were re-coded to reflect Station 9 as the first due station. Figures reflect 16,540 unique incidents, as 349 of the RMS-matched requests for service appearing in the CAD data file indicated "NULL" for the "StationLayer" variable (presumably because the majority of these calls occurred outside of the City of Roseville), and 41 requests for service appeared in the RMS data file with no corresponding incident reported in the CAD data file.

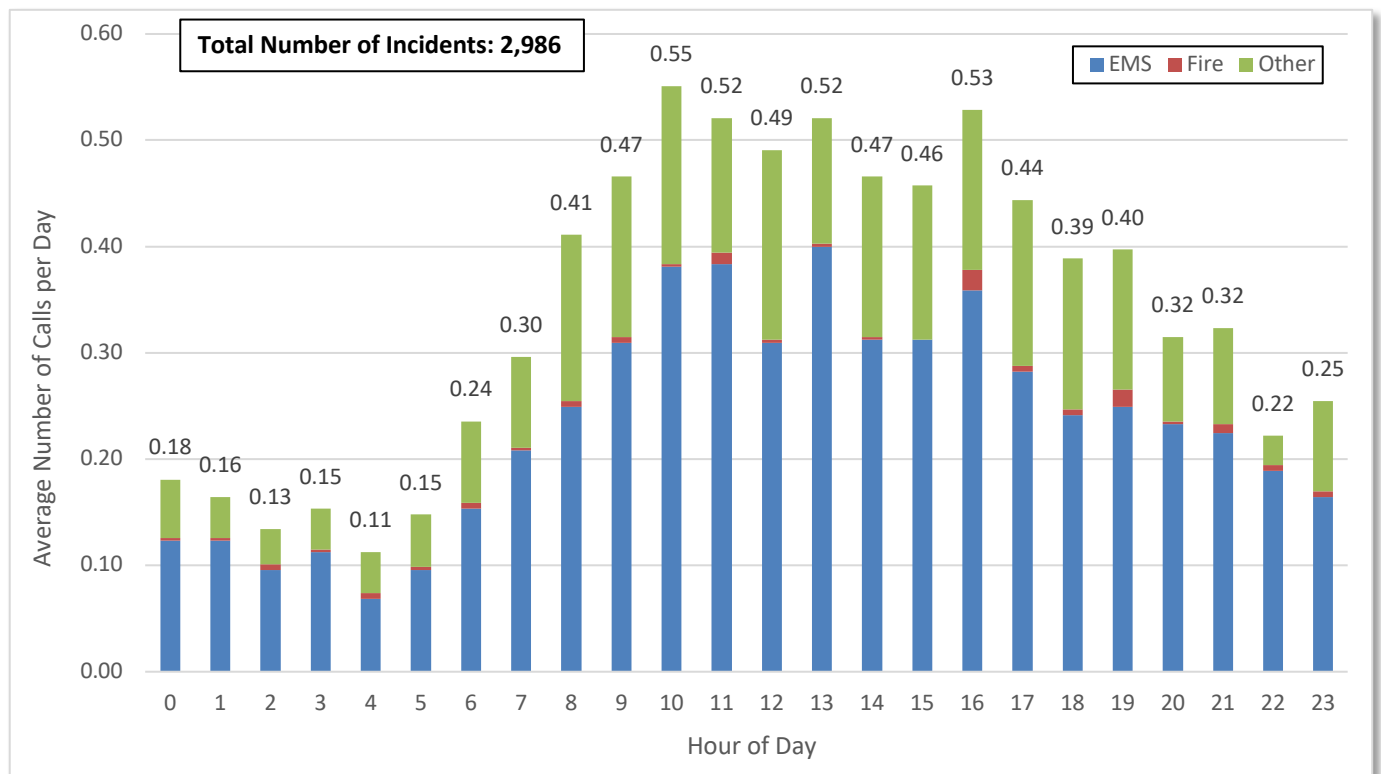
**Figure 5: Average Calls per Day by Hour of Day – Station 1**



**Figure 6: Average Calls per Day by Hour of Day – Station 2**

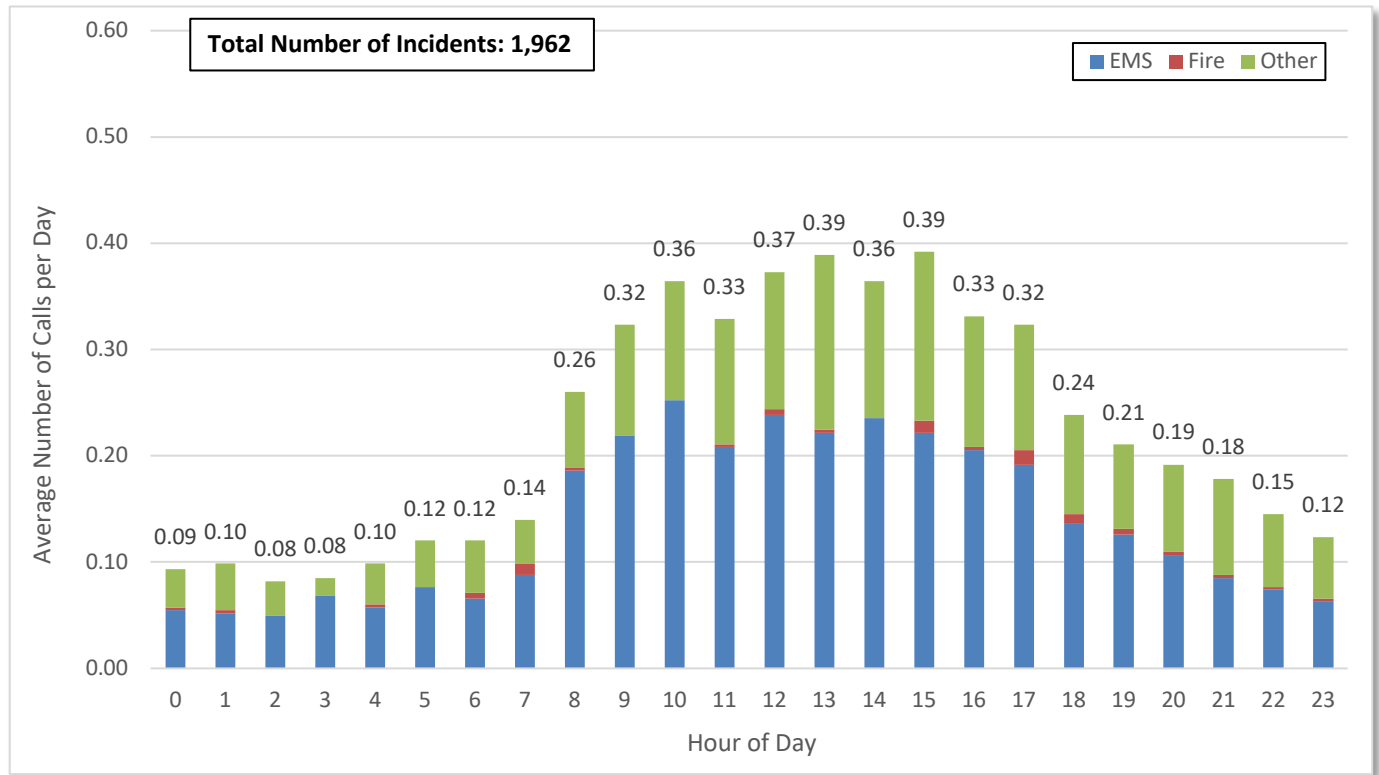


**Figure 7: Average Calls per Day by Hour of Day – Station 3**

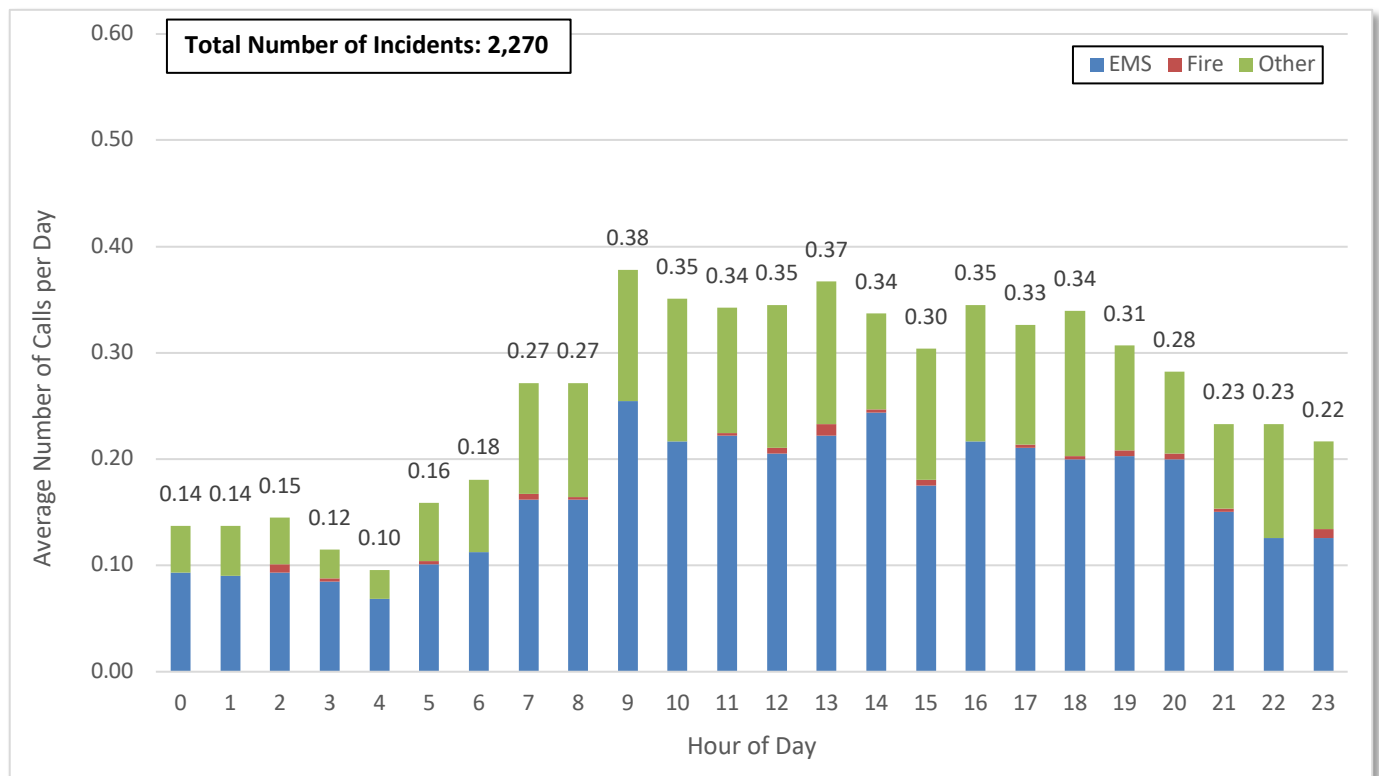




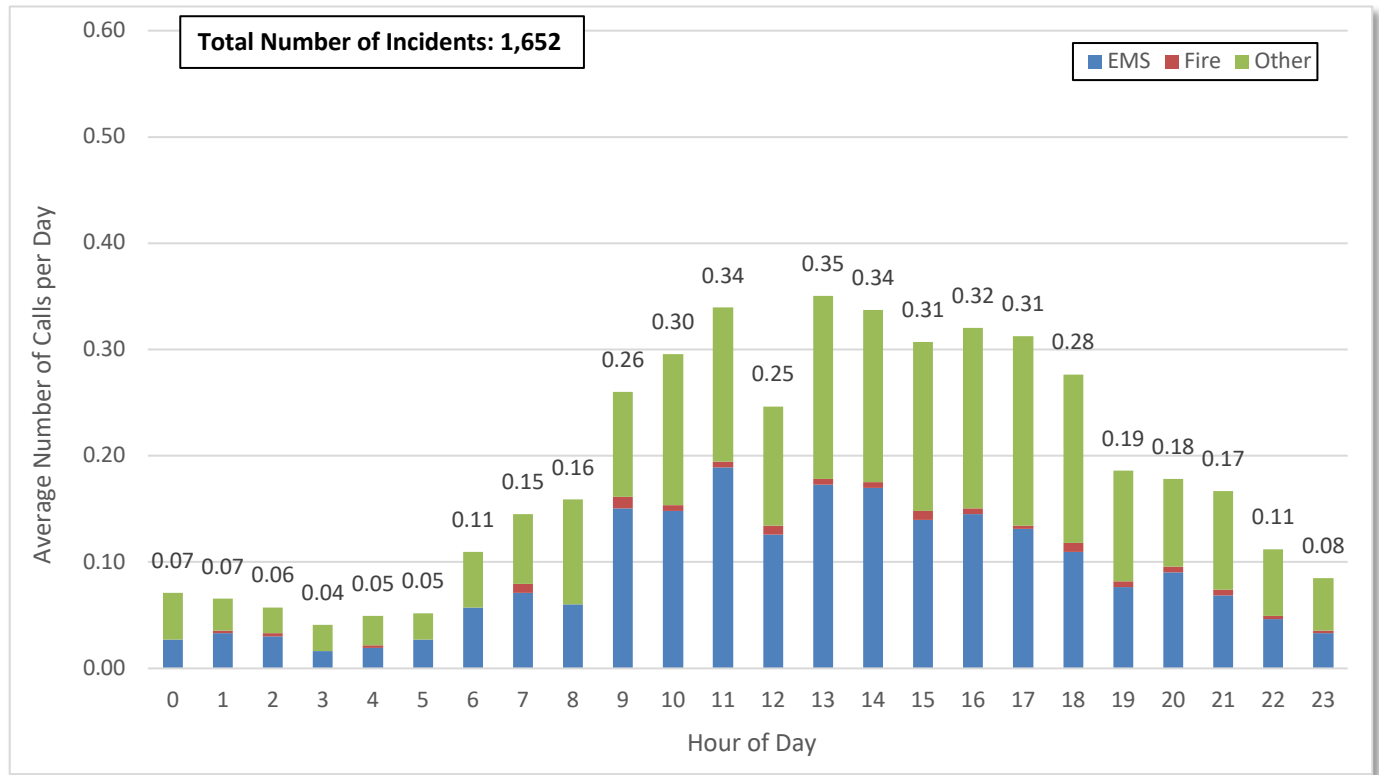
**Figure 8: Average Calls per Day by Hour of Day – Station 4**



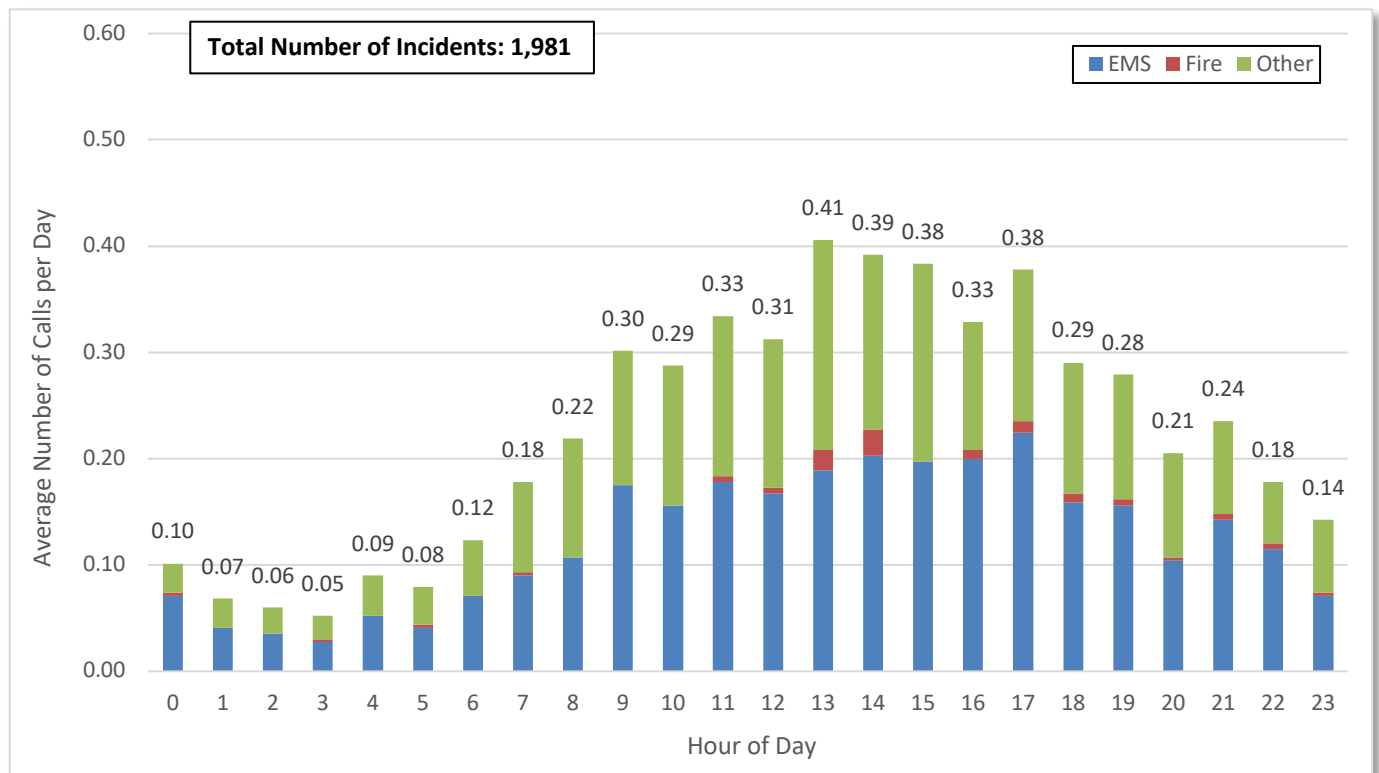
**Figure 9: Average Calls per Day by Hour of Day – Station 5**



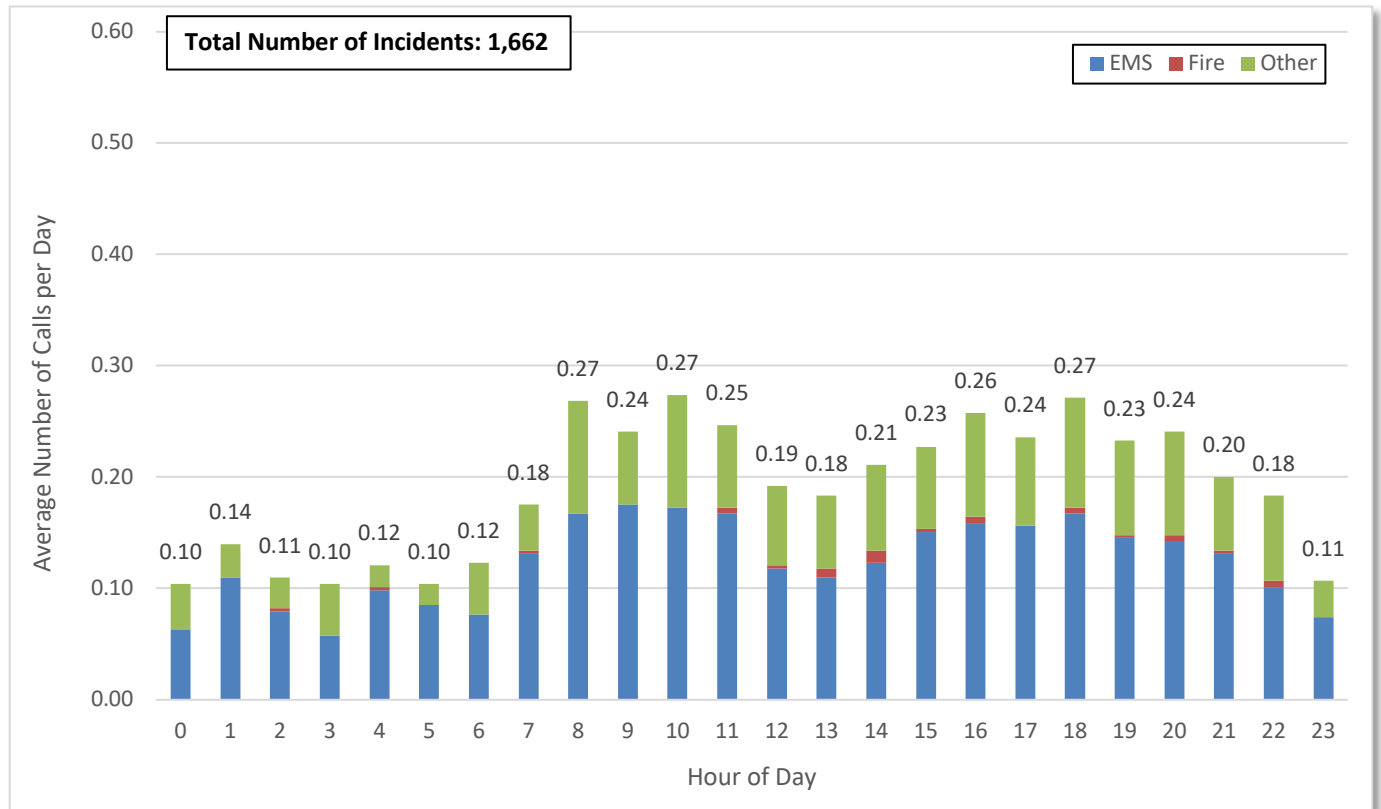
**Figure 10: Average Calls per Day by Hour of Day – Station 6**



**Figure 11: Average Calls per Day by Hour of Day – Station 7**



**Figure 12: Average Calls per Day by Hour of Day – Station 9**



Overall, RFD made 20,847 responses, and the total busy hours were 6,624.4 hours during 2018 (Table 2; Table 6). The station-level demand is more reflective for deployment decisions (Table 6), and the unit-level workload will help evaluate the utilization of physical apparatus, and assist with apparatus procurement or maintenance decisions (Table 7).

Station 1 was the busiest station based on number of calls responded to by units assigned to the station (3,446 calls; Table 6). Units assigned to Station 1 also made the greatest number of responses to calls across the department (4,544 responses) and had the greatest number of total busy hours during 2018 (1,370.0 hours).

E3, E5, and E1 were the busiest RFD units based on total busy hours (928.1 hours, 718.4 hours, and 655.0 hours, respectively; Table 7).

Busy time metrics related to units assigned to other agencies appear in Table 8, and busy time metrics associated with mutual aid and automatic aid codes appear in Table 9.

**Table 6: Overall Workload by Station**

| Station                | Number of Calls Responded to by Units Assigned to Station | Number of Responses Made by Units Assigned to Station <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response | Percentage of Total Busy Hours |
|------------------------|-----------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------|------------------|-----------------------------------|--------------------------------|
| Station 1              | 3,446                                                     | 4,544                                                              | 4,452                                 | 1,370.0          | 18.5                              | 20.7                           |
| Station 2              | 2,054                                                     | 2,057                                                              | 2,035                                 | 674.9            | 19.9                              | 10.2                           |
| Station 3              | 2,989                                                     | 2,989                                                              | 2,963                                 | 928.1            | 18.8                              | 14.0                           |
| Station 4              | 2,100                                                     | 2,100                                                              | 2,078                                 | 635.4            | 18.3                              | 9.6                            |
| Station 5              | 2,220                                                     | 2,225                                                              | 2,198                                 | 766.0            | 20.9                              | 11.6                           |
| Station 6              | 2,096                                                     | 2,108                                                              | 2,078                                 | 593.0            | 17.1                              | 9.0                            |
| Station 7              | 2,523                                                     | 2,950                                                              | 2,906                                 | 940.0            | 19.4                              | 14.2                           |
| Station 9              | 1,825                                                     | 1,831                                                              | 1,810                                 | 685.7            | 22.7                              | 10.4                           |
| RFD Admin              | 35                                                        | 38                                                                 | 24                                    | 30.5             | 76.1                              | 0.5                            |
| RFD Other <sup>3</sup> | 5                                                         | 5                                                                  | 2                                     | 0.8              | 23.9                              | 0.0                            |
| <b>Total</b>           | <b>--</b>                                                 | <b>20,847</b>                                                      | <b>20,546</b>                         | <b>6,624.4</b>   | <b>19.3</b>                       | <b>100.0</b>                   |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

<sup>3</sup>Reflects only the unit OES364, a state resource staffed by RFD for state or federal incidents; not otherwise typically staffed.

**Table 7: Overall Workload by Unit**

| Station   | Unit                 | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|-----------|----------------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| Station 1 | B1                   | Battalion Chief | 634                              | 628                                   | 272.4            | 26.0                              |
|           | E1                   | Engine          | 2,550                            | 2,497                                 | 655.0            | 15.7                              |
|           | HZ1                  | Hazmat          | 12                               | 0                                     | --               | --                                |
|           | T1                   | Truck           | 1,348                            | 1,327                                 | 442.6            | 20.0                              |
|           | <b>Station Total</b> |                 | <b>4,544</b>                     | <b>4,452</b>                          | <b>1,370.0</b>   | <b>18.5</b>                       |
| Station 2 | E2                   | Engine          | 2,021                            | 1,999                                 | 636.1            | 19.1                              |
|           | G2                   | Grass           | 36                               | 36                                    | 38.8             | 64.7                              |
|           | <b>Station Total</b> |                 | <b>2,057</b>                     | <b>2,035</b>                          | <b>674.9</b>     | <b>19.9</b>                       |
| Station 3 | E3                   | Engine          | 2,989                            | 2,963                                 | 928.1            | 18.8                              |
|           | <b>Station Total</b> |                 | <b>2,989</b>                     | <b>2,963</b>                          | <b>928.1</b>     | <b>18.8</b>                       |
| Station 4 | E4                   | Engine          | 2,069                            | 2,049                                 | 613.8            | 18.0                              |
|           | G4                   | Grass           | 31                               | 29                                    | 21.5             | 44.6                              |
|           | <b>Station Total</b> |                 | <b>2,100</b>                     | <b>2,078</b>                          | <b>635.4</b>     | <b>18.3</b>                       |
| Station 5 | BR5                  | Brush Truck     | 34                               | 33                                    | 43.9             | 79.8                              |
|           | E5                   | Engine          | 2,172                            | 2,146                                 | 718.4            | 20.1                              |
|           | E5B                  | Engine          | 3                                | 3                                     | 0.0              | 0.4                               |
|           | E8                   | Engine          | 16                               | 16                                    | 3.7              | 13.9                              |
|           | <b>Station Total</b> |                 | <b>2,225</b>                     | <b>2,198</b>                          | <b>766.0</b>     | <b>20.9</b>                       |
| Station 6 | BR6                  | Brush Truck     | 45                               | 43                                    | 42.2             | 58.9                              |
|           | E6                   | Engine          | 2,062                            | 2,035                                 | 550.8            | 16.2                              |
|           | E6B                  | Engine          | 1                                | 0                                     | --               | --                                |
|           | <b>Station Total</b> |                 | <b>2,108</b>                     | <b>2,078</b>                          | <b>593.0</b>     | <b>17.1</b>                       |
| Station 7 | E7                   | Engine          | 1,916                            | 1,897                                 | 618.4            | 19.6                              |
|           | R7                   | Rescue          | 16                               | 15                                    | 13.9             | 55.7                              |
|           | T7                   | Truck           | 1,017                            | 994                                   | 307.7            | 18.6                              |
|           | T7B                  | Truck           | 1                                | 0                                     | --               | --                                |
|           | <b>Station Total</b> |                 | <b>2,950</b>                     | <b>2,906</b>                          | <b>940.0</b>     | <b>19.4</b>                       |
| Station 9 | BR9                  | Brush Truck     | 39                               | 35                                    | 42.3             | 72.6                              |
|           | E9                   | Engine          | 1,792                            | 1,775                                 | 643.4            | 21.7                              |
|           | <b>Station Total</b> |                 | <b>1,831</b>                     | <b>1,810</b>                          | <b>685.7</b>     | <b>22.7</b>                       |
| RFD Admin | 1401                 | Chief Officer   | 2                                | 0                                     | --               | --                                |
|           | 1404                 | Chief Officer   | 1                                | 0                                     | --               | --                                |
|           | 1405                 | Chief Officer   | 1                                | 1                                     | 0.5              | 28.3                              |
|           | 1410                 | Chief Officer   | 5                                | 2                                     | 6.0              | 179.6                             |
|           | 1411                 | Chief Officer   | 1                                | 0                                     | --               | --                                |
|           | 1413                 | Chief Officer   | 1                                | 0                                     | --               | --                                |
|           | 1414                 | Chief Officer   | 5                                | 0                                     | --               | --                                |
|           | FPB                  | Fire Prevention | 1                                | 0                                     | --               | --                                |
|           | P2                   | Fire Prevention | 2                                | 2                                     | 0.7              | 20.5                              |

| Station          | Unit          | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|------------------|---------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| RFD Admin        | P3            | Fire Prevention | 4                                | 4                                     | 10.7             | 160.6                             |
|                  | P4            | Fire Prevention | 6                                | 6                                     | 4.1              | 40.8                              |
|                  | P5            | Fire Prevention | 3                                | 3                                     | 2.0              | 40.2                              |
|                  | P6            | Fire Prevention | 6                                | 6                                     | 6.5              | 65.1                              |
|                  | Station Total |                 | 38                               | 24                                    | 30.5             | 76.1                              |
| RFD Other        | OES364        | OES Engine      | 5                                | 2                                     | 0.8              | 23.9                              |
|                  | Station Total |                 | 5                                | 2                                     | 0.8              | 23.9                              |
| Department Total |               |                 | 20,847                           | 20,546                                | 6,624.4          | 19.3                              |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

**Table 8: Overall Workload by Unit – Outside Agencies**

| Agency               | Unit          | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|----------------------|---------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| AMR                  | All           | ALS Unit        | 13,170                           | 12,252                                | 2,194.4          | 10.7                              |
|                      | Station Total |                 | 13,170                           | 12,252                                | 2,194.4          | 10.7                              |
| Placer County        | E77           | Engine          | 4                                | 3                                     | 0.4              | 7.8                               |
|                      | E100          | Engine          | 20                               | 16                                    | 9.1              | 34.0                              |
|                      | Station Total |                 | 24                               | 19                                    | 9.5              | 29.9                              |
| Rocklin              | B24           | Battalion Chief | 68                               | 65                                    | 9.2              | 8.5                               |
|                      | E23           | Engine          | 85                               | 84                                    | 18.3             | 13.1                              |
|                      | E24           | Engine          | 6                                | 6                                     | 0.4              | 4.0                               |
|                      | E25           | Engine          | 2                                | 2                                     | 0.2              | 6.0                               |
|                      | T24           | Truck           | 26                               | 25                                    | 3.1              | 7.6                               |
|                      | Station Total |                 | 187                              | 182                                   | 31.3             | 10.3                              |
| South Placer         | B19           | Battalion Chief | 19                               | 18                                    | 2.7              | 8.8                               |
|                      | E15           | Engine          | 26                               | 24                                    | 3.3              | 8.3                               |
|                      | Station Total |                 | 45                               | 42                                    | 6.0              | 8.6                               |
| Outside Agency Total |               |                 | 13,426                           | 12,495                                | 2,241.2          | 10.8                              |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

**Table 9: Mutual Aid and Automatic Aid Received and Given – Calls, Responses, and Busy Time**

| Mutual Aid Code        | Number of Calls | Agency or Station | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|------------------------|-----------------|-------------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| Mutual Aid Received    | 10              | AMR               | 6                                | 6                                     | 2.5              | 25.2                              |
|                        |                 | Other Outside     | 10                               | 10                                    | 7.0              | 42.0                              |
|                        |                 | <b>Total</b>      | <b>16</b>                        | <b>16</b>                             | <b>9.5</b>       | <b>35.7</b>                       |
| Automatic Aid Received | 15              | AMR               | 11                               | 10                                    | 5.3              | 32.1                              |
|                        |                 | Other Outside     | 18                               | 18                                    | 7.3              | 24.4                              |
|                        |                 | <b>Total</b>      | <b>29</b>                        | <b>28</b>                             | <b>12.7</b>      | <b>27.2</b>                       |
| Mutual Aid Given       | 127             | Station 1         | 37                               | 37                                    | 32.8             | 53.2                              |
|                        |                 | Station 2         | 20                               | 20                                    | 14.8             | 44.4                              |
|                        |                 | Station 3         | 1                                | 1                                     | 0.1              | 7.6                               |
|                        |                 | Station 4         | 10                               | 10                                    | 7.6              | 45.9                              |
|                        |                 | Station 5         | 29                               | 29                                    | 19.0             | 39.2                              |
|                        |                 | Station 6         | 13                               | 12                                    | 13.2             | 66.0                              |
|                        |                 | Station 7         | 48                               | 48                                    | 33.6             | 42.0                              |
|                        |                 | Station 9         | 20                               | 19                                    | 25.8             | 81.4                              |
|                        |                 | RFD Admin         | 3                                | 0                                     | --               | --                                |
|                        |                 | RFD Other         | 2                                | 0                                     | --               | --                                |
|                        |                 | <b>Total</b>      | <b>183</b>                       | <b>176</b>                            | <b>146.9</b>     | <b>50.1</b>                       |
| Automatic Aid Given    | 65              | Station 1         | 29                               | 29                                    | 29.5             | 61.0                              |
|                        |                 | Station 2         | 7                                | 7                                     | 3.2              | 27.8                              |
|                        |                 | Station 3         | 13                               | 13                                    | 5.2              | 24.0                              |
|                        |                 | Station 4         | 11                               | 10                                    | 7.1              | 42.8                              |
|                        |                 | Station 5         | 6                                | 6                                     | 5.6              | 55.8                              |
|                        |                 | Station 6         | 11                               | 11                                    | 1.9              | 10.6                              |
|                        |                 | Station 7         | 17                               | 17                                    | 9.0              | 31.6                              |
|                        |                 | Station 9         | 9                                | 8                                     | 9.6              | 71.6                              |
|                        |                 | RFD Admin         | 1                                | 0                                     | --               | --                                |
|                        |                 | RFD Other         | 0                                | --                                    | --               | --                                |
|                        |                 | <b>Total</b>      | <b>104</b>                       | <b>101</b>                            | <b>71.1</b>      | <b>42.2</b>                       |
| Other Aid Given        | 1               | Station 9         | 1                                | 1                                     | 0.4              | 21.9                              |
|                        |                 | <b>Total</b>      | <b>1</b>                         | <b>1</b>                              | <b>0.4</b>       | <b>21.9</b>                       |
| None                   | 16,505          | All               | 32,959                           | 31,777                                | 8,227.4          | 15.5                              |
| Y <sup>3</sup>         | 196             | All               | 805                              | 781                                   | 250.3            | 19.2                              |
| <b>Total</b>           | <b>16,919</b>   | <b>All</b>        | <b>34,273</b>                    | <b>33,041</b>                         | <b>8,865.5</b>   | <b>16.1</b>                       |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

<sup>3</sup>Code appeared as “Y,” not otherwise specified.



The last analyses in this section focus on performance times related to dispatch, turnout, travel, and response times. “Dispatch Time” was calculated as Unit Dispatch Date and Time – Received Date and Time. “Turnout Time” was calculated as Unit Enroute Date and Time – Unit Dispatch Date and Time. “Travel Time” was calculated as Unit Arrival Date and Time – Unit Enroute Date and Time. “Response Time” was calculated as Unit Arrival Date and Time – Received Date and Time. “Response Time” may also be calculated by summing relevant dispatch, turnout, and travel times, and “Average Response Time” may be derived by summing relevant average dispatch, turnout, and travel times when the sample data used during calculation of the outcomes are identical for all three outcomes.

Average performance times, median performance times, and performance times at the 90<sup>th</sup> percentile are reported in this section. The 90<sup>th</sup> percentile is presented as a more conservative and reliable measure of performance, as this measure is more robust, or less influenced by outliers, than measures of central tendency such as the average. Best practice is to measure at the 90<sup>th</sup> percentile. In other words, 90% of all performance is captured, expecting that 10% of the time the department may experience abnormal conditions that would typically be considered outliers. For example, if the department were to report an *average* response time of six minutes, then in a normally distributed set of data, half of the responses would be longer than six minutes and half of the responses would be shorter than six minutes. Utilizing six minutes as an example again, a 90<sup>th</sup> percentile value of six minutes communicates that 9 out of 10 times, the department performance is six minutes or better (faster) and is therefore more predictable and more clearly articulated to policy makers and the community. Note, however, that the sum of the 90th percentile values for dispatch, turnout, and travel times is not equivalent to the 90th percentile response time.

Analyses of performance times first focused on emergency (lights and sirens) responses from RFD’s first arriving primary front-line units for all unique incidents in all demand zones. Call status as emergency (lights and sirens) was obtained from the RMS call-level data file (i.e., variable “Emergency\_PRIORITYRESPONSEFLAG”). Units identified by RFD as primary front-line units included Battalion Chief units B1, B2, and B9; brush trucks BR5, BR6, and BR9, engines E1, E2, E3, E4, E5, E5B, E6, E6B, E7, E8, E9, and E9B; grass units G2 and G2; hazmat unit HM1; rescue unit R7; and trucks T1 and T7.

Average performance times are presented in Table 10 and in Figure 13, median values are presented in Table 11, and 90<sup>th</sup> percentile values are presented in Table 12. Due to the restriction of these analyses to select responses and units, maximum available sample size for these analyses is 13,205. Sample data were not identical across all performance time calculations (i.e., missing data) such that the sum of average dispatch, turnout, and travel times will not equal average response times in Table 10.

Across all RFD responses made by first arriving primary front-line units to emergency calls, average dispatch time was 1.5 minutes (median = 1.0 minute; 90<sup>th</sup> percentile = 2.4 minutes); average turnout time was 1.4 minutes (median = 1.3 minutes; 90<sup>th</sup> percentile = 2.2 minutes); average travel time was 3.4 minutes (median = 3.2; 90<sup>th</sup> percentile = 5.5 minutes); and average response time was 6.2 minutes (median = 5.7 minutes; 90<sup>th</sup> percentile = 8.6 minutes).

**Table 10: Average Dispatch, Turnout, Travel, and Response Times by Program – First Arriving Units**

| Call Category                                | Dispatch Time<br>(Minutes) | Turnout Time<br>(Minutes) | Travel Time<br>(Minutes) | Response Time<br>(Minutes) | Sample<br>Size <sup>1</sup> |
|----------------------------------------------|----------------------------|---------------------------|--------------------------|----------------------------|-----------------------------|
| <b>EMS</b>                                   | <b>1.3</b>                 | <b>1.4</b>                | <b>3.4</b>               | <b>6.0</b>                 | <b>9,922</b>                |
| <b>False Alarm &amp; False Call</b>          | <b>1.5</b>                 | <b>1.6</b>                | <b>3.8</b>               | <b>6.8</b>                 | <b>304</b>                  |
| Fire (Not Building or Wildland)              | 1.4                        | 1.5                       | 3.2                      | 6.0                        | 86                          |
| Building Fire                                | 1.4                        | 1.7                       | 3.1                      | 6.0                        | 116                         |
| Wildland Fire                                | 1.6                        | 1.8                       | 4.5                      | 8.0                        | 97                          |
| <b>Fire (All)</b>                            | <b>1.4</b>                 | <b>1.7</b>                | <b>3.6</b>               | <b>6.6</b>                 | <b>299</b>                  |
| <b>Good Intent Call</b>                      | <b>1.8</b>                 | <b>1.4</b>                | <b>3.4</b>               | <b>6.5</b>                 | <b>900</b>                  |
| <b>Hazardous Conditions (No Fire)</b>        | <b>2.2</b>                 | <b>1.7</b>                | <b>3.6</b>               | <b>7.0</b>                 | <b>170</b>                  |
| <b>Rescue</b>                                | <b>1.9</b>                 | <b>1.5</b>                | <b>3.4</b>               | <b>6.7</b>                 | <b>870</b>                  |
| <b>Service Call</b>                          | <b>2.2</b>                 | <b>1.6</b>                | <b>4.1</b>               | <b>7.7</b>                 | <b>738</b>                  |
| <b>Severe Weather &amp; Natural Disaster</b> | <b>3.0</b>                 | <b>0.8</b>                | <b>5.7</b>               | <b>9.5</b>                 | <b>2</b>                    |
| <b>Special Incident Type</b>                 | --                         | --                        | --                       | --                         | <b>0</b>                    |
| <b>Total</b>                                 | <b>1.5</b>                 | <b>1.4</b>                | <b>3.4</b>               | <b>6.2</b>                 | <b>13,205</b>               |

<sup>1</sup>Sample sizes reflect the number of responses made by first arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 11: Median Dispatch, Turnout, Travel, and Response Times by Program – First Arriving Units**

| Call Category                                | Dispatch Time<br>(Minutes) | Turnout Time<br>(Minutes) | Travel Time<br>(Minutes) | Response Time<br>(Minutes) | Sample<br>Size <sup>1</sup> |
|----------------------------------------------|----------------------------|---------------------------|--------------------------|----------------------------|-----------------------------|
| <b>EMS</b>                                   | <b>0.9</b>                 | <b>1.3</b>                | <b>3.2</b>               | <b>5.6</b>                 | <b>9,922</b>                |
| <b>False Alarm &amp; False Call</b>          | <b>1.2</b>                 | <b>1.5</b>                | <b>3.6</b>               | <b>6.4</b>                 | <b>304</b>                  |
| Fire (Not Building or Wildland)              | 1.1                        | 1.6                       | 2.8                      | 5.7                        | 86                          |
| Building Fire                                | 1.1                        | 1.8                       | 2.6                      | 5.6                        | 116                         |
| Wildland Fire                                | 1.1                        | 1.7                       | 3.1                      | 6.0                        | 97                          |
| <b>Fire (All)</b>                            | <b>1.1</b>                 | <b>1.7</b>                | <b>2.9</b>               | <b>5.8</b>                 | <b>299</b>                  |
| <b>Good Intent Call</b>                      | <b>1.3</b>                 | <b>1.3</b>                | <b>3.2</b>               | <b>6.1</b>                 | <b>900</b>                  |
| <b>Hazardous Conditions (No Fire)</b>        | <b>1.5</b>                 | <b>1.5</b>                | <b>3.3</b>               | <b>6.5</b>                 | <b>170</b>                  |
| <b>Rescue</b>                                | <b>1.1</b>                 | <b>1.4</b>                | <b>3.1</b>               | <b>5.9</b>                 | <b>870</b>                  |
| <b>Service Call</b>                          | <b>1.3</b>                 | <b>1.4</b>                | <b>3.4</b>               | <b>6.7</b>                 | <b>738</b>                  |
| <b>Severe Weather &amp; Natural Disaster</b> | <b>3.0</b>                 | <b>0.8</b>                | <b>5.7</b>               | <b>9.5</b>                 | <b>2</b>                    |
| <b>Special Incident Type</b>                 | --                         | --                        | --                       | --                         | <b>0</b>                    |
| <b>Total</b>                                 | <b>1.0</b>                 | <b>1.3</b>                | <b>3.2</b>               | <b>5.7</b>                 | <b>13,205</b>               |

<sup>1</sup>Sample sizes reflect the number of responses made by first arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 12: 90<sup>th</sup> Percentile Dispatch, Turnout, Travel, and Response Times by Program – First Arriving Units**

| Call Category                                | Dispatch Time<br>(Minutes) |            |                            | Turnout Time<br>(Minutes) |            |                                         | Travel Time<br>(Minutes) |            |                            | Response Time<br>(Minutes) |            |                                         | Sample<br>Size <sup>1</sup> |
|----------------------------------------------|----------------------------|------------|----------------------------|---------------------------|------------|-----------------------------------------|--------------------------|------------|----------------------------|----------------------------|------------|-----------------------------------------|-----------------------------|
|                                              | Observed                   | Benchmark  | % At or Below<br>Benchmark | Observed                  | Benchmark  | % At or Below<br>Benchmark <sup>2</sup> | Observed                 | Benchmark  | % At or Below<br>Benchmark | Observed                   | Benchmark  | % At or Below<br>Benchmark <sup>3</sup> |                             |
| <b>EMS</b>                                   | <b>2.1</b>                 | <b>1.0</b> | <b>57.4</b>                | <b>2.2</b>                | <b>1.0</b> | <b>26.7</b>                             | <b>5.4</b>               | <b>5.2</b> | <b>88.3</b>                | <b>8.2</b>                 | <b>7.2</b> | <b>80.4</b>                             | <b>9,922</b>                |
| <b>False Alarm &amp; False Call</b>          | <b>2.6</b>                 | --         | --                         | <b>2.6</b>                | --         | --                                      | <b>6.1</b>               | --         | --                         | <b>9.4</b>                 | --         | --                                      | <b>304</b>                  |
| Fire (Not Building or Wildland)              | 2.5                        | 1.0        | 44.2                       | 2.2                       | 1.7        | 63.4                                    | 5.4                      | 5.2        | 87.2                       | 8.9                        | 7.9        | 85.4                                    | 86                          |
| Building Fire                                | 2.4                        | 1.0        | 44.0                       | 2.4                       | 1.7        | 45.9                                    | 5.5                      | 5.2        | 88.4                       | 8.7                        | 7.9        | 84.5                                    | 116                         |
| Wildland Fire                                | 2.5                        | 1.0        | 42.3                       | 3.2                       | 1.7        | 50.0                                    | 8.8                      | 5.2        | 73.7                       | 13.3                       | 7.9        | 71.1                                    | 97                          |
| <b>Fire (All)</b>                            | <b>2.5</b>                 | <b>1.0</b> | <b>43.5</b>                | <b>2.4</b>                | <b>1.7</b> | <b>52.3</b>                             | <b>6.0</b>               | <b>5.2</b> | <b>83.3</b>                | <b>9.6</b>                 | <b>7.9</b> | <b>80.5</b>                             | <b>299</b>                  |
| <b>Good Intent Call</b>                      | <b>3.0</b>                 | --         | --                         | <b>2.3</b>                | --         | --                                      | <b>5.4</b>               | --         | --                         | <b>8.8</b>                 | --         | --                                      | <b>900</b>                  |
| <b>Hazardous Conditions (No Fire)</b>        | <b>3.4</b>                 | <b>1.0</b> | <b>22.8</b>                | <b>2.6</b>                | <b>2.0</b> | <b>77.9</b>                             | <b>6.0</b>               | <b>5.2</b> | <b>82.8</b>                | <b>9.3</b>                 | <b>8.2</b> | <b>78.9</b>                             | <b>170</b>                  |
| <b>Rescue</b>                                | <b>3.1</b>                 | <b>1.0</b> | <b>41.0</b>                | <b>2.2</b>                | <b>1.7</b> | <b>73.1</b>                             | <b>5.4</b>               | <b>5.2</b> | <b>87.7</b>                | <b>9.5</b>                 | <b>7.9</b> | <b>80.9</b>                             | <b>870</b>                  |
| <b>Service Call</b>                          | <b>3.9</b>                 | --         | --                         | <b>2.7</b>                | --         | --                                      | <b>7.6</b>               | --         | --                         | <b>12.1</b>                | --         | --                                      | <b>738</b>                  |
| <b>Severe Weather &amp; Natural Disaster</b> | --                         | --         | --                         | --                        | --         | --                                      | --                       | --         | --                         | --                         | --         | --                                      | <b>2</b>                    |
| <b>Special Incident Type</b>                 | --                         | --         | --                         | --                        | --         | --                                      | --                       | --         | --                         | --                         | --         | --                                      | <b>0</b>                    |
| <b>Total</b>                                 | <b>2.4</b>                 | --         | --                         | <b>2.2</b>                | --         | --                                      | <b>5.5</b>               | --         | --                         | <b>8.6</b>                 | --         | --                                      | <b>13,205</b>               |

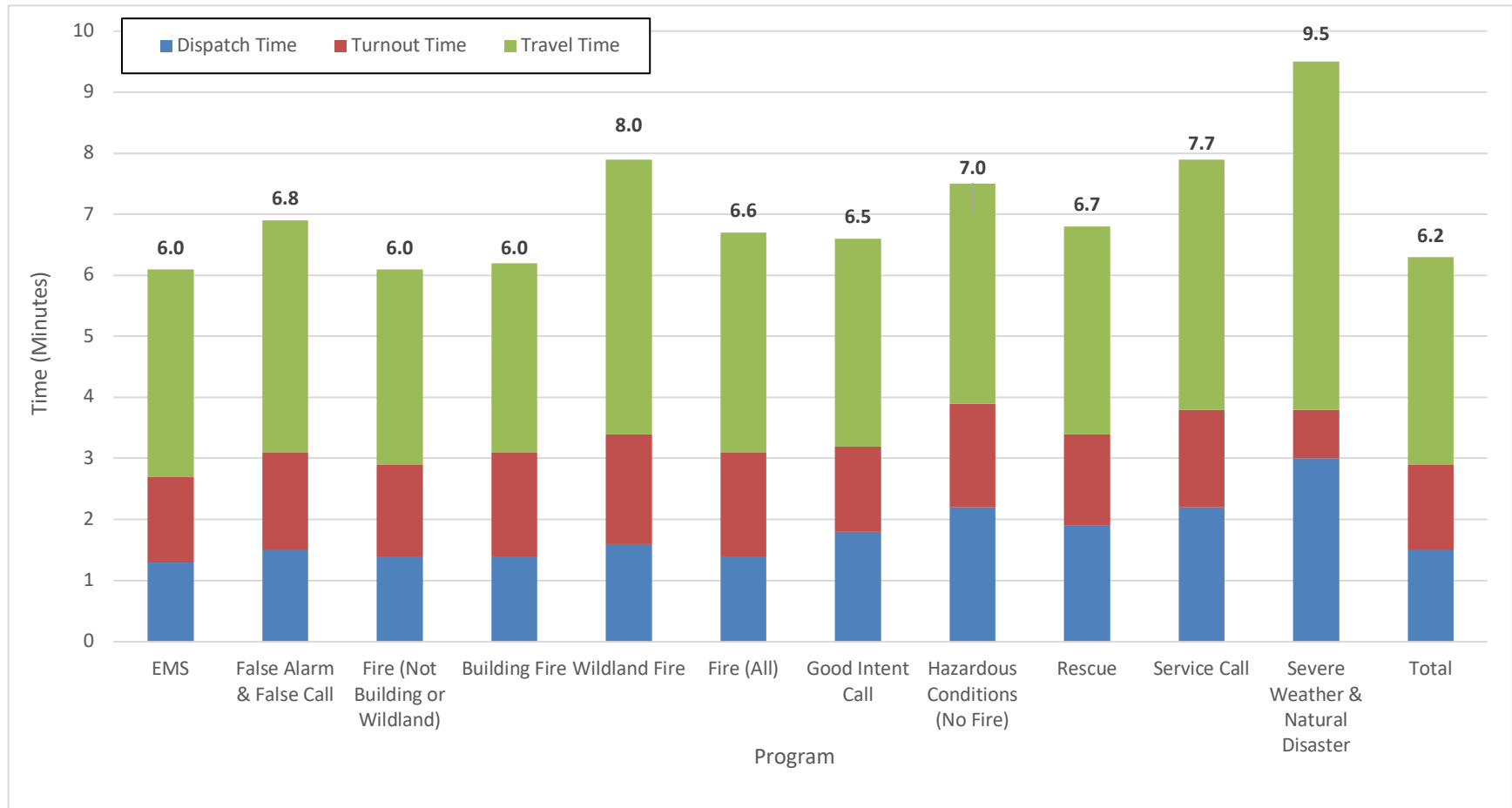
<sup>1</sup>Sample sizes reflect the number of responses made by first arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

<sup>2</sup>Benchmark value used to represent 01:43 or 1.7-minute turnout time in calculation of percentage was 1.7167.

<sup>3</sup>Benchmark value used to represent 07:55 or 7.9-minute response time in calculation of percentage was 7.9167.

Typically, performance varies across call types or categories for a variety of reasons. For example, turnout time may be longer for fire related calls because the crews have to dress in their personal protective ensemble (bunker gear) prior to leaving the station, whereas on an EMS incident, they do not. Similarly, the larger fire apparatus may require longer travel and overall response times due to its size and lack of maneuverability.

**Figure 13: Average Dispatch, Turnout, Travel, and Response Times by Program – First Arriving Units**



Analyses next focused on dispatch times of the first RFD unit dispatched to each emergency (lights and sirens) incident by call category, regardless of unit role or arrival status (Table 13).

**Table 13: Average, Median, and 90<sup>th</sup> Percentile Dispatch Times by Call Category – First Dispatched Units**

| Call Category                                | Average Dispatch Time (Minutes) | Median Dispatch Time (Minutes) | 90 <sup>th</sup> Percentile Dispatch Time (Minutes) | Number of First Dispatches <sup>1</sup> | Sample Size for Dispatch Time <sup>2</sup> |
|----------------------------------------------|---------------------------------|--------------------------------|-----------------------------------------------------|-----------------------------------------|--------------------------------------------|
| <b>EMS</b>                                   | <b>1.2</b>                      | <b>0.9</b>                     | <b>1.7</b>                                          | <b>9,983</b>                            | <b>9,872</b>                               |
| <b>False Alarm &amp; False Call</b>          | <b>1.4</b>                      | <b>1.1</b>                     | <b>2.0</b>                                          | <b>313</b>                              | <b>312</b>                                 |
| Fire (Not Building or Wildland)              | 1.2                             | 1.0                            | 2.0                                                 | 86                                      | 86                                         |
| Building Fire                                | 1.2                             | 1.0                            | 2.1                                                 | 117                                     | 117                                        |
| Wildland Fire                                | 1.3                             | 1.1                            | 2.2                                                 | 98                                      | 98                                         |
| <b>Fire (All)</b>                            | <b>1.2</b>                      | <b>1.0</b>                     | <b>2.0</b>                                          | <b>301</b>                              | <b>301</b>                                 |
| <b>Good Intent Call</b>                      | <b>1.8</b>                      | <b>1.1</b>                     | <b>2.6</b>                                          | <b>2,233</b>                            | <b>2,192</b>                               |
| <b>Hazardous Conditions (No Fire)</b>        | <b>1.9</b>                      | <b>1.3</b>                     | <b>2.7</b>                                          | <b>170</b>                              | <b>167</b>                                 |
| <b>Rescue</b>                                | <b>1.7</b>                      | <b>1.1</b>                     | <b>2.6</b>                                          | <b>881</b>                              | <b>867</b>                                 |
| <b>Service Call</b>                          | <b>1.9</b>                      | <b>1.2</b>                     | <b>2.9</b>                                          | <b>767</b>                              | <b>743</b>                                 |
| <b>Severe Weather &amp; Natural Disaster</b> | <b>3.0</b>                      | <b>3.0</b>                     | <b>--</b>                                           | <b>2</b>                                | <b>2</b>                                   |
| <b>Special Incident Type</b>                 | <b>2.4</b>                      | <b>0.7</b>                     | <b>12.0</b>                                         | <b>12</b>                               | <b>12</b>                                  |
| <b>Total</b>                                 | <b>1.4</b>                      | <b>0.9</b>                     | <b>2.0</b>                                          | <b>14,662</b>                           | <b>14,468</b>                              |

<sup>1</sup>“Number of First Dispatches” reflects the total number of first dispatches made by RFD units to emergency (lights and sirens) calls.

<sup>2</sup>“Sample Size for Dispatch Time” reflects the number of first dispatches with dispatch times retained for analyses.

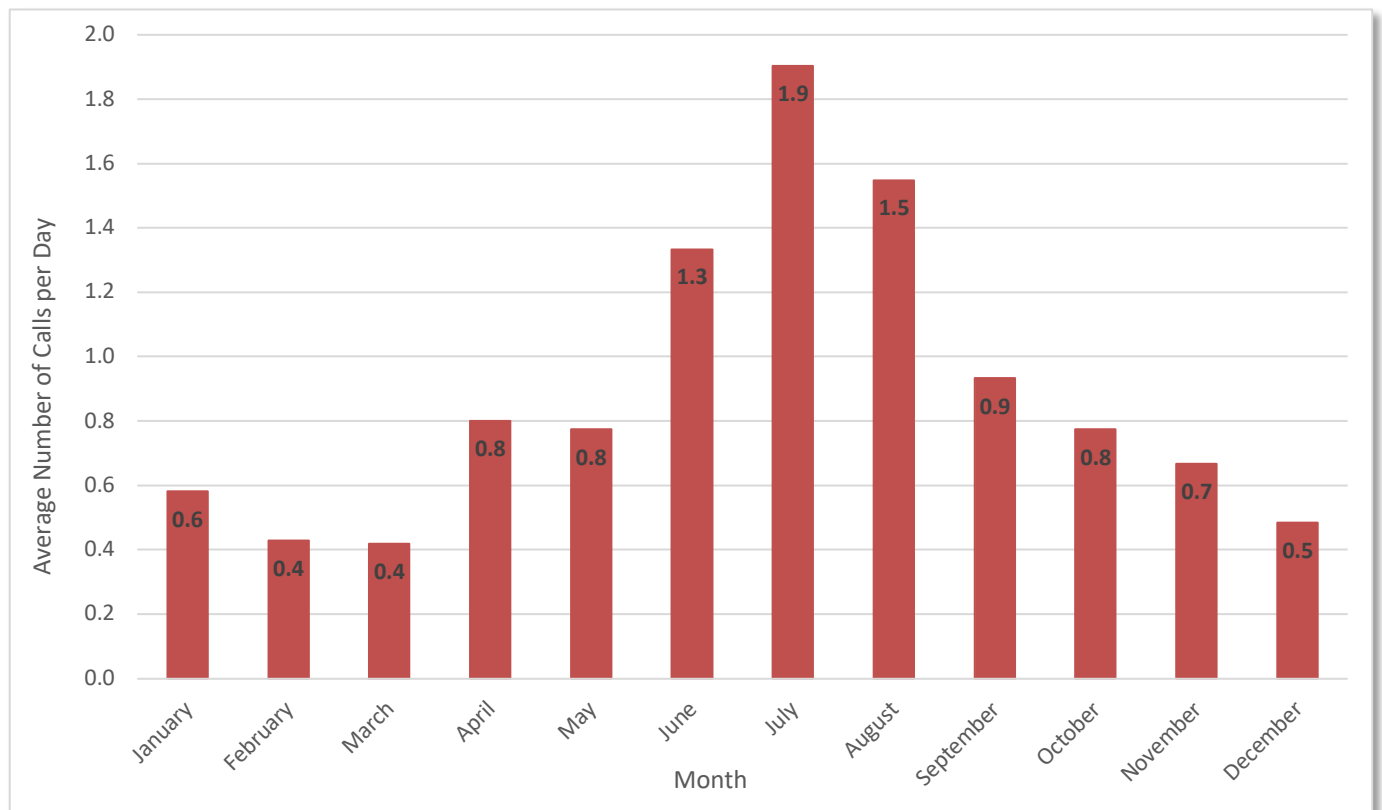
## Fire Services

Temporal analyses were conducted to evaluate patterns in community demands for fire related services. These analyses examined the frequency of requests for service in 2018 by month, day of week, and hour of day. Results found that there was variability by month (Table 14; Figure 14). The three months with the most fire related calls in descending order were: July (1.9 per day), August (1.5 per day), and June (1.3 per day). The three months with the fewest fire related calls in ascending order were: March (0.4 per day), February (0.4 per day), and December (0.5 per day).

**Table 14: Total Fire Related Calls and Average Calls per Day by Month**

| Month        | Number of Calls | Average Calls per Day | Call Percentage |
|--------------|-----------------|-----------------------|-----------------|
| January      | 18              | 0.6                   | 5.5             |
| February     | 12              | 0.4                   | 3.7             |
| March        | 13              | 0.4                   | 4.0             |
| April        | 24              | 0.8                   | 7.4             |
| May          | 24              | 0.8                   | 7.4             |
| June         | 40              | 1.3                   | 12.3            |
| July         | 59              | 1.9                   | 18.2            |
| August       | 48              | 1.5                   | 14.8            |
| September    | 28              | 0.9                   | 8.6             |
| October      | 24              | 0.8                   | 7.4             |
| November     | 20              | 0.7                   | 6.2             |
| December     | 15              | 0.5                   | 4.6             |
| <b>Total</b> | <b>325</b>      | <b>0.9</b>            | <b>100.0</b>    |

**Figure 14: Average Fire Related Calls per Day by Month**



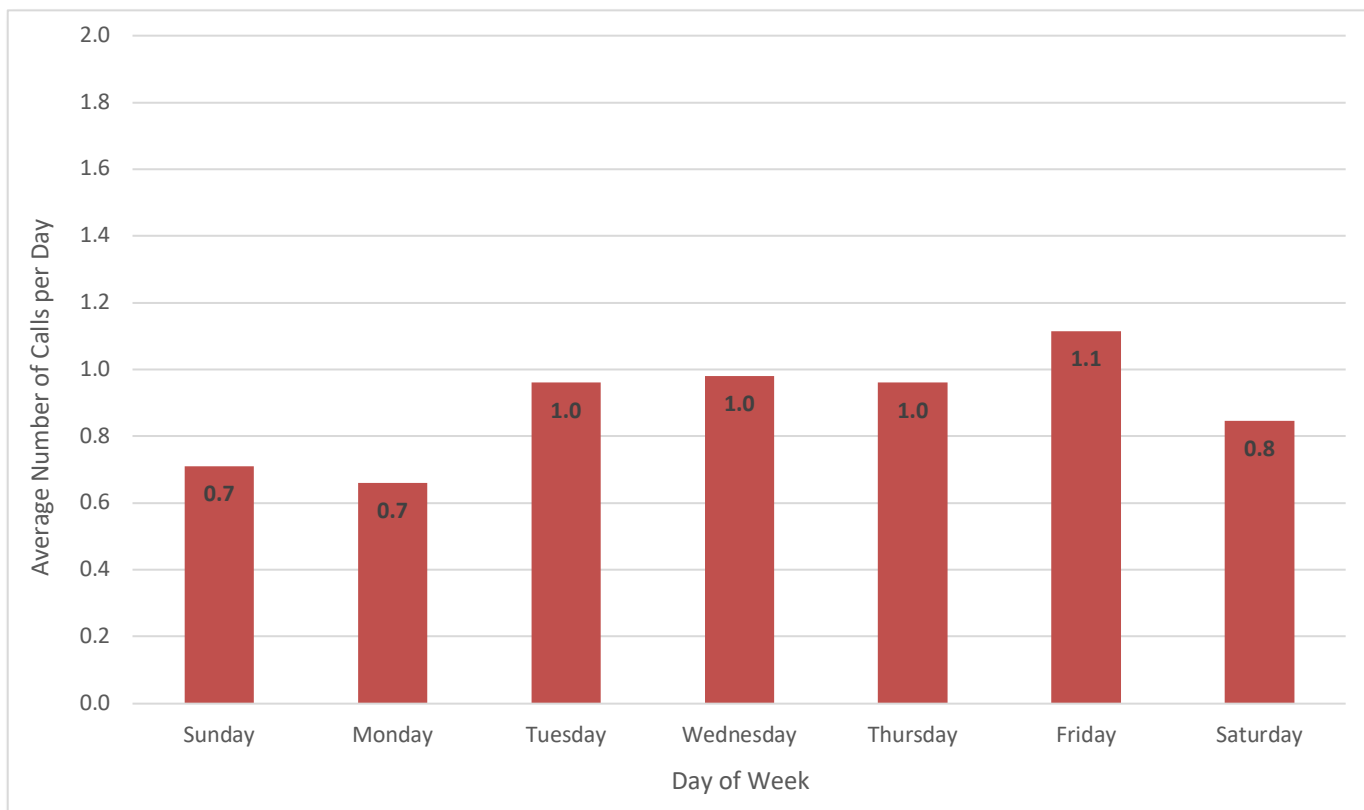
Similar analyses were conducted for fire related calls by day of week (Table 15; Figure 15). The data revealed that there is only slight variability in the demand for services by day of week. The three days with the most fire related calls in descending order were: Friday (1.1 per day), Wednesday (1.0 per day), and Tuesday (1.0 per day). The three days with the fewest fire related calls in ascending order were: Monday (0.7 per day), Sunday (0.7 per day), and Saturday (0.8 per day).

**Table 15: Total Fire Related Calls and Average Calls per Day by Day of Week**

| Day of Week         | Number of Calls | Average Calls per Day | Call Percentage |
|---------------------|-----------------|-----------------------|-----------------|
| Sunday              | 37              | 0.7                   | 11.4            |
| Monday <sup>1</sup> | 35              | 0.7                   | 10.8            |
| Tuesday             | 50              | 1.0                   | 15.4            |
| Wednesday           | 51              | 1.0                   | 15.7            |
| Thursday            | 50              | 1.0                   | 15.4            |
| Friday              | 58              | 1.1                   | 17.8            |
| Saturday            | 44              | 0.8                   | 13.5            |
| <b>Total</b>        | <b>325</b>      | <b>0.9</b>            | <b>100.0</b>    |

<sup>1</sup>There were 53 Mondays during 2018, and 52 of all other days of the week during 2018.

**Figure 15: Average Fire Related Calls per Day by Day of Week**



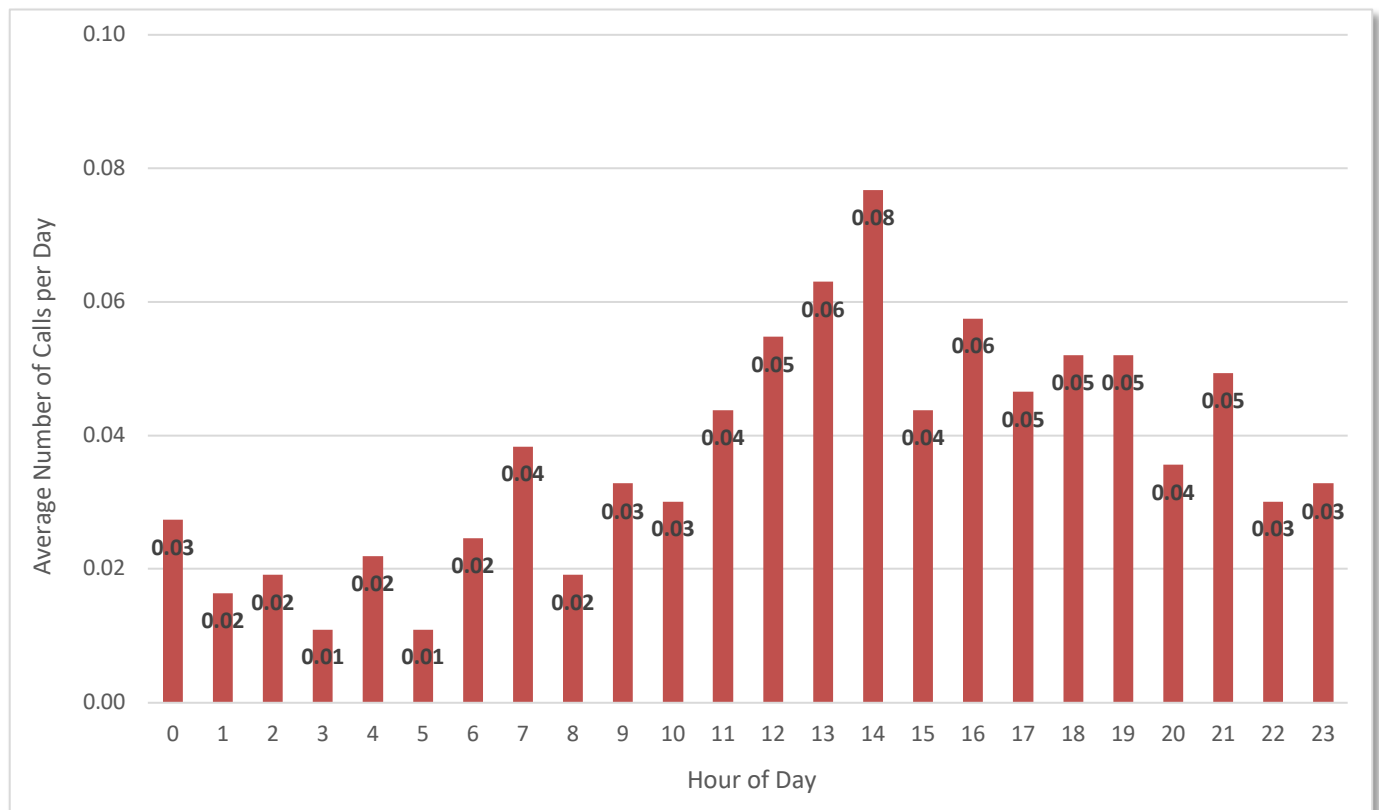


Fire related calls were also evaluated by hour of the day (Table 16; Figure 16). Some variability exists in the time of day that requests for fire related services were received. The hours of 0300 and 0500 had the lowest demands, where average number of calls per day for each of those hours was 0.01. The highest demand for fire related services occurred at 1400 (28 total calls during this hour in 2018), where average number of calls per day during that hour was 0.08.

**Table 16: Total Fire Related Calls and Average Calls per Day by Hour of Day**

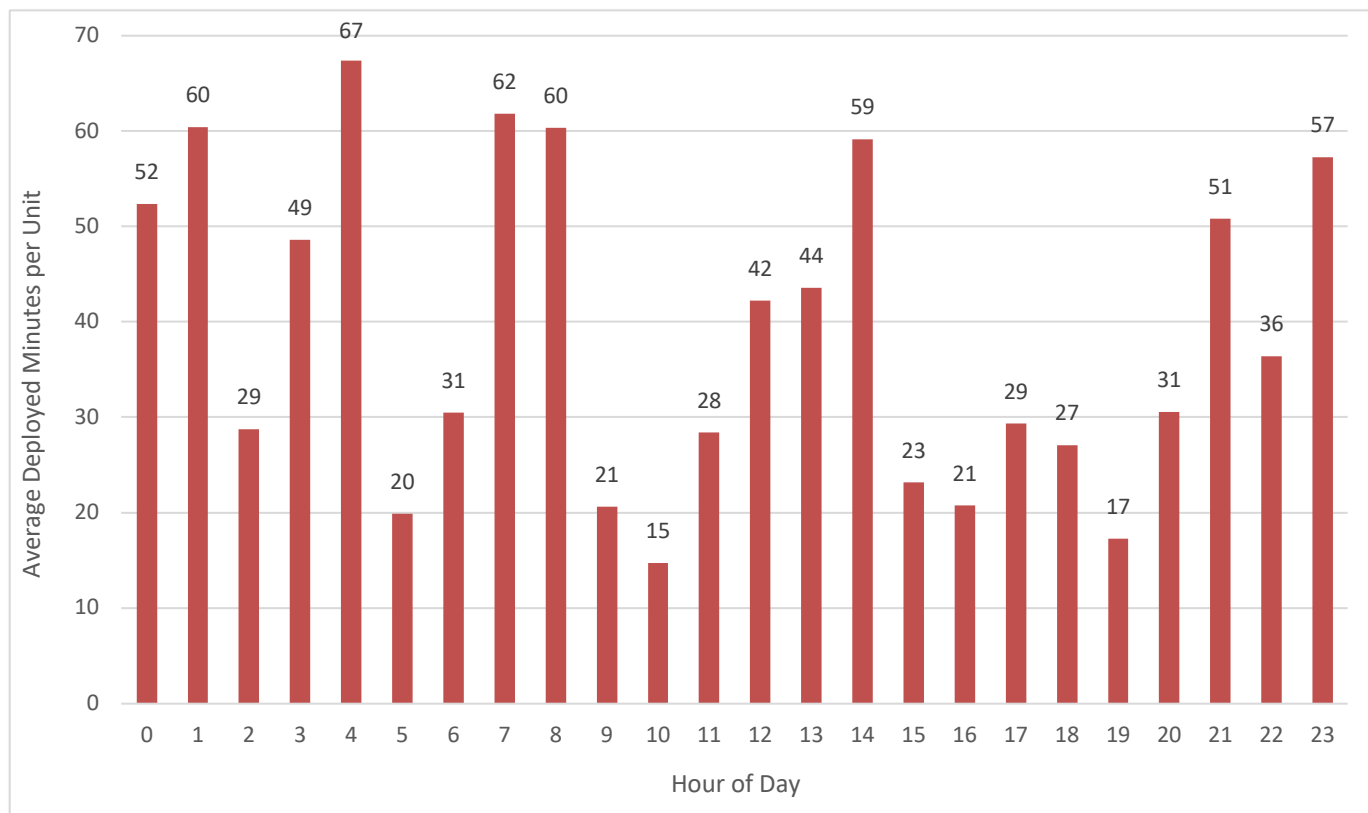
| Hour of Day  | Number of Calls | Average Calls per Day | Call Percentage |
|--------------|-----------------|-----------------------|-----------------|
| 0            | 10              | 0.03                  | 3.1             |
| 1            | 6               | 0.02                  | 1.8             |
| 2            | 7               | 0.02                  | 2.2             |
| 3            | 4               | 0.01                  | 1.2             |
| 4            | 8               | 0.02                  | 2.5             |
| 5            | 4               | 0.01                  | 1.2             |
| 6            | 9               | 0.02                  | 2.8             |
| 7            | 14              | 0.04                  | 4.3             |
| 8            | 7               | 0.02                  | 2.2             |
| 9            | 12              | 0.03                  | 3.7             |
| 10           | 11              | 0.03                  | 3.4             |
| 11           | 16              | 0.04                  | 4.9             |
| 12           | 20              | 0.05                  | 6.2             |
| 13           | 23              | 0.06                  | 7.1             |
| 14           | 28              | 0.08                  | 8.6             |
| 15           | 16              | 0.04                  | 4.9             |
| 16           | 21              | 0.06                  | 6.5             |
| 17           | 17              | 0.05                  | 5.2             |
| 18           | 19              | 0.05                  | 5.8             |
| 19           | 19              | 0.05                  | 5.8             |
| 20           | 13              | 0.04                  | 4.0             |
| 21           | 18              | 0.05                  | 5.5             |
| 22           | 11              | 0.03                  | 3.4             |
| 23           | 12              | 0.03                  | 3.7             |
| <b>Total</b> | <b>325</b>      | <b>0.9</b>            | <b>100.0</b>    |

**Figure 16: Average Fire Related Calls per Day by Hour of Day**



In addition, the average time on task was evaluated to assess the demand for resources through the lens of time commitment per hour of day (Figure 17). Understanding that many fire related incidents require multi-unit responses, this analysis incorporates unit-level activity. Overall, RFD was busy for an average of 38.8 minutes per unit-level response to fire related calls (Table 2).

**Figure 17: Average Deployed Minutes per Unit by Hour of Day for Fire Related Responses**



Fire related requests accounted for 1.9% of the total requests for service during 2018 and averaged 0.9 requests per day (Figure 1; Table 1). Fire related incidents are an aggregated category of the various final incident types available in the data file. Table 17 provides details of these fire related incidents by nature of the call; nature of the call was obtained using a data dictionary provided by RFD that permitted the mapping of text definitions to the numeric NFIRS codes (i.e., variable “INCIDENTTYPE”) presented in the RMS data file.

**Table 17: Total Fire Related Calls by Nature of Call**

| Nature of Call <sup>1</sup>                       | Number of Calls | Percentage of Total Fire Service Demands |
|---------------------------------------------------|-----------------|------------------------------------------|
| Brush, or brush and grass mixture fire            | 65              | 20.0                                     |
| Building fire                                     | 46              | 14.2                                     |
| Passenger vehicle fire                            | 40              | 12.3                                     |
| Trash or rubbish fire, contained                  | 36              | 11.1                                     |
| Cooking fire, confined to container               | 29              | 8.9                                      |
| Grass fire                                        | 24              | 7.4                                      |
| Outside rubbish, trash or waste fire              | 17              | 5.2                                      |
| Outside rubbish fire, other                       | 13              | 4.0                                      |
| Natural vegetation fire, other                    | 12              | 3.7                                      |
| Fire, other                                       | 9               | 2.8                                      |
| Special outside fire, other                       | 7               | 2.2                                      |
| Dumpster or other outside trash receptacle fire   | 6               | 1.8                                      |
| Fires in structures other than in a building      | 4               | 1.2                                      |
| Fire in portable building, fixed location         | 3               | 0.9                                      |
| Outside equipment fire                            | 3               | 0.9                                      |
| Cultivated vegetation, crop fire, other           | 2               | 0.6                                      |
| Fuel burner/boiler malfunction, fire confined     | 2               | 0.6                                      |
| Outside storage fire                              | 2               | 0.6                                      |
| Road freight or transport vehicle fire            | 2               | 0.6                                      |
| Chimney or flue fire, confined to chimney or flue | 1               | 0.3                                      |
| Mobile property (vehicle) fire, other             | 1               | 0.3                                      |
| Off-road vehicle or heavy equipment fire          | 1               | 0.3                                      |
| <b>Total</b>                                      | <b>325</b>      | <b>100.0</b>                             |

<sup>1</sup>Entries are presented verbatim from the data file.

RFD made a total of 1,111 responses to fire related calls (Table 2; Table 18). Total busy time was 709.5 hours, and the average busy minutes per response was 38.8 minutes. The three most utilized units based on busy hours were B1 (123.7 hours), E1 (71.9 hours), and T1 (69.1 hours; Table 18).

**Table 18: Workload by Unit for Fire Related Calls**

| Station   | Unit                 | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|-----------|----------------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| Station 1 | B1                   | Battalion Chief | 174                              | 174                                   | 123.7            | 42.6                              |
|           | E1                   | Engine          | 124                              | 124                                   | 71.9             | 34.8                              |
|           | HZ1                  | Hazmat          | 0                                | --                                    | --               | --                                |
|           | T1                   | Truck           | 80                               | 80                                    | 69.1             | 51.9                              |
|           | <b>Station Total</b> |                 | <b>378</b>                       | <b>378</b>                            | <b>264.7</b>     | <b>42.0</b>                       |
| Station 2 | E2                   | Engine          | 92                               | 91                                    | 45.5             | 30.0                              |
|           | G2                   | Grass           | 25                               | 25                                    | 27.0             | 64.9                              |
|           | <b>Station Total</b> |                 | <b>117</b>                       | <b>116</b>                            | <b>72.5</b>      | <b>37.5</b>                       |
| Station 3 | E3                   | Engine          | 89                               | 87                                    | 47.6             | 32.8                              |
|           | <b>Station Total</b> |                 | <b>89</b>                        | <b>87</b>                             | <b>47.6</b>      | <b>32.8</b>                       |
| Station 4 | E4                   | Engine          | 59                               | 58                                    | 29.1             | 30.1                              |
|           | G4                   | Grass           | 25                               | 24                                    | 19.7             | 49.3                              |
|           | <b>Station Total</b> |                 | <b>84</b>                        | <b>82</b>                             | <b>48.9</b>      | <b>35.8</b>                       |
| Station 5 | BR5                  | Brush Truck     | 20                               | 20                                    | 27.6             | 82.8                              |
|           | E5                   | Engine          | 63                               | 61                                    | 28.8             | 28.4                              |
|           | E5B                  | Engine          | 0                                | --                                    | --               | --                                |
|           | E8                   | Engine          | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>83</b>                        | <b>81</b>                             | <b>56.4</b>      | <b>41.8</b>                       |
| Station 6 | BR6                  | Brush Truck     | 29                               | 29                                    | 27.7             | 57.3                              |
|           | E6                   | Engine          | 87                               | 87                                    | 37.6             | 26.0                              |
|           | E6B                  | Engine          | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>116</b>                       | <b>116</b>                            | <b>65.3</b>      | <b>33.8</b>                       |
| Station 7 | E7                   | Engine          | 96                               | 96                                    | 46.7             | 29.2                              |
|           | R7                   | Rescue          | 1                                | 1                                     | 1.3              | 80.0                              |
|           | T7                   | Truck           | 83                               | 82                                    | 46.9             | 34.3                              |
|           | T7B                  | Truck           | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>180</b>                       | <b>179</b>                            | <b>95.0</b>      | <b>31.8</b>                       |
| Station 9 | BR9                  | Brush Truck     | 17                               | 16                                    | 18.1             | 67.8                              |
|           | E9                   | Engine          | 38                               | 38                                    | 25.1             | 39.6                              |
|           | <b>Station Total</b> |                 | <b>55</b>                        | <b>54</b>                             | <b>43.2</b>      | <b>48.0</b>                       |
| RFD Admin | 1401                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1404                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1405                 | Chief Officer   | 1                                | 1                                     | 0.5              | 28.3                              |
|           | 1410                 | Chief Officer   | 4                                | 1                                     | 5.8              | 345.4                             |
|           | 1411                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1413                 | Chief Officer   | 0                                | --                                    | --               | --                                |

| Station          | Unit          | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|------------------|---------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| RFD Admin        | 1414          | Chief Officer   | 1                                | 0                                     | --               | --                                |
|                  | FPB           | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P2            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P3            | Fire Prevention | 2                                | 2                                     | 9.2              | 276.5                             |
|                  | P4            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P5            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P6            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | Station Total |                 | 8                                | 4                                     | 15.4             | 231.6                             |
| RFD Other        | OES364        | OES Engine      | 1                                | 1                                     | 0.5              | 28.4                              |
|                  | Station Total |                 | 1                                | 1                                     | 0.5              | 28.4                              |
| Department Total |               |                 | 1,111                            | 1,098                                 | 709.5            | 38.8                              |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

We also analyzed number of responding RFD units by fire related call type (Table 19). Overall, 28.9% of fire related calls were responded to by one unit, and 16.0% were responded to by two units.

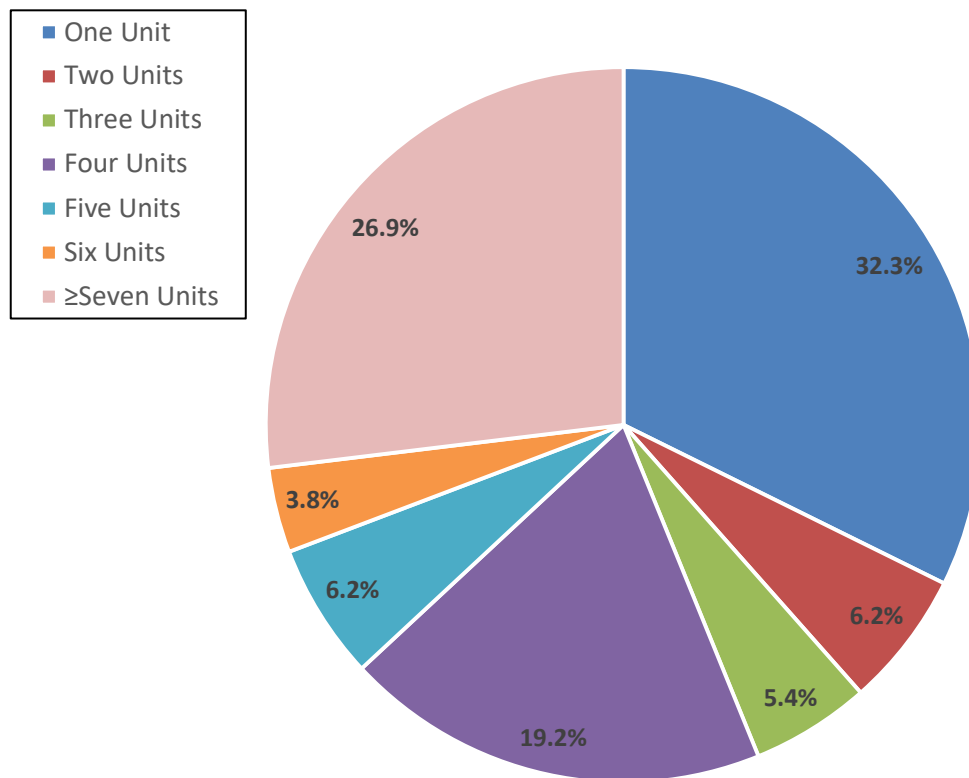
However, for building fire calls, 61.5% of calls (80/130) were responded to by three or more units (Table 19; Figure 18; Table 20). The maximum number of units responding to a building fire call was 10 (Table 20). RFD was busy on building fire calls for 357.7 hours during 2018 (Table 21), making 511 responses to 130 building fire calls and averaging 3.9 responses per call. Average busy minutes per response was 42.4 minutes.

Wildland fire calls had three or more RFD units responding 68.9% of the time (71/103).

**Table 19: Number of Responding Units by Fire Related Call Type**

| Call Category                   | Number of Responding Units |             |             |             |            |            |             | Total        |
|---------------------------------|----------------------------|-------------|-------------|-------------|------------|------------|-------------|--------------|
|                                 | 1                          | 2           | 3           | 4           | 5          | 6          | 7 or more   |              |
| Fire (Not Building or Wildland) | 29                         | 35          | 4           | 11          | 6          | 0          | 7           | 92           |
| Building Fire                   | 42                         | 8           | 7           | 25          | 8          | 5          | 35          | 130          |
| Wildland Fire                   | 23                         | 9           | 22          | 23          | 8          | 8          | 10          | 103          |
| <b>Total</b>                    | <b>94</b>                  | <b>52</b>   | <b>33</b>   | <b>59</b>   | <b>22</b>  | <b>13</b>  | <b>52</b>   | <b>325</b>   |
| <b>Percentage</b>               | <b>28.9</b>                | <b>16.0</b> | <b>10.2</b> | <b>18.2</b> | <b>6.8</b> | <b>4.0</b> | <b>16.0</b> | <b>100.0</b> |

**Figure 18: Percentage of Building Fire Calls by Number of Responding Units**



**Table 20: Number of Responding Units for Building Fire Calls**

| Number of Responding Units | Number of Calls |
|----------------------------|-----------------|
| 1                          | 42              |
| 2                          | 8               |
| 3                          | 7               |
| 4                          | 25              |
| 5                          | 8               |
| 6                          | 5               |
| 7                          | 23              |
| 8                          | 8               |
| 9                          | 3               |
| 10                         | 1               |
| <b>Total</b>               | <b>130</b>      |

**Table 21: Workload by Unit for Fire Related Calls – Building Fires**

| Station   | Unit                 | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|-----------|----------------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| Station 1 | B1                   | Battalion Chief | 78                               | 78                                    | 62.3             | 47.9                              |
|           | E1                   | Engine          | 51                               | 51                                    | 31.9             | 37.5                              |
|           | HZ1                  | Hazmat          | 0                                | --                                    | --               | --                                |
|           | T1                   | Truck           | 60                               | 60                                    | 60.4             | 60.4                              |
|           | <b>Station Total</b> |                 | <b>189</b>                       | <b>189</b>                            | <b>154.6</b>     | <b>49.1</b>                       |
| Station 2 | E2                   | Engine          | 47                               | 47                                    | 29.2             | 37.3                              |
|           | G2                   | Grass           | 1                                | 1                                     | 0.0              | 1.7                               |
|           | <b>Station Total</b> |                 | <b>48</b>                        | <b>48</b>                             | <b>29.2</b>      | <b>36.5</b>                       |
| Station 3 | E3                   | Engine          | 34                               | 33                                    | 17.6             | 32.0                              |
|           | <b>Station Total</b> |                 | <b>34</b>                        | <b>33</b>                             | <b>17.6</b>      | <b>32.0</b>                       |
| Station 4 | E4                   | Engine          | 32                               | 32                                    | 18.5             | 34.7                              |
|           | G4                   | Grass           | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>32</b>                        | <b>32</b>                             | <b>18.5</b>      | <b>34.7</b>                       |
| Station 5 | BR5                  | Brush Truck     | 2                                | 2                                     | 0.8              | 24.4                              |
|           | E5                   | Engine          | 38                               | 37                                    | 20.3             | 33.0                              |
|           | E5B                  | Engine          | 0                                | --                                    | --               | --                                |
|           | E8                   | Engine          | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>40</b>                        | <b>39</b>                             | <b>21.1</b>      | <b>32.5</b>                       |
| Station 6 | BR6                  | Brush Truck     | 1                                | 1                                     | 0.1              | 3.6                               |
|           | E6                   | Engine          | 35                               | 35                                    | 21.5             | 36.9                              |
|           | E6B                  | Engine          | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>36</b>                        | <b>36</b>                             | <b>21.6</b>      | <b>36.0</b>                       |
| Station 7 | E7                   | Engine          | 39                               | 39                                    | 18.1             | 27.8                              |
|           | R7                   | Rescue          | 1                                | 1                                     | 1.3              | 80.0                              |
|           | T7                   | Truck           | 62                               | 62                                    | 40.5             | 39.2                              |
|           | T7B                  | Truck           | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>102</b>                       | <b>102</b>                            | <b>59.9</b>      | <b>35.2</b>                       |
| Station 9 | BR9                  | Brush Truck     | 1                                | 1                                     | 0.0              | 2.0                               |
|           | E9                   | Engine          | 23                               | 23                                    | 20.1             | 52.6                              |
|           | <b>Station Total</b> |                 | <b>24</b>                        | <b>24</b>                             | <b>20.2</b>      | <b>50.4</b>                       |
| RFD Admin | 1401                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1404                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1405                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1410                 | Chief Officer   | 3                                | 1                                     | 5.8              | 345.4                             |
|           | 1411                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1413                 | Chief Officer   | 0                                | --                                    | --               | --                                |



| Station          | Unit          | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|------------------|---------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| RFD Admin        | 1414          | Chief Officer   | 1                                | 0                                     | --               | --                                |
|                  | FPB           | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P2            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P3            | Fire Prevention | 2                                | 2                                     | 9.2              | 276.5                             |
|                  | P4            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P5            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P6            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | Station Total |                 | 6                                | 3                                     | 15.0             | 299.4                             |
| RFD Other        | OES364        | OES Engine      | 0                                | --                                    | --               | --                                |
|                  | Station Total |                 | 0                                | --                                    | --               | --                                |
| Department Total |               |                 | 511                              | 506                                   | 357.7            | 42.4                              |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

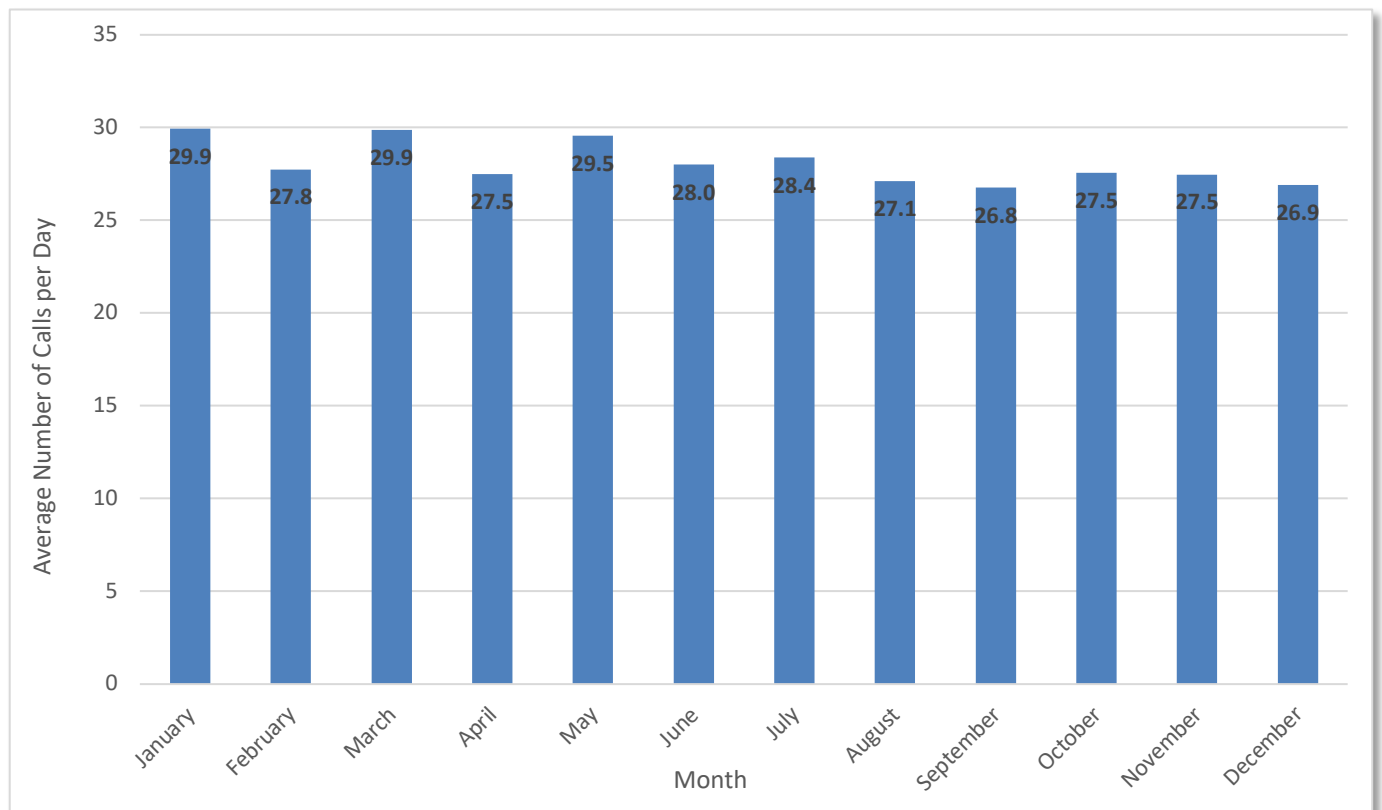
## Emergency Medical Services

Temporal analyses were conducted to evaluate patterns in community demands for EMS related services. These analyses examined the frequency of requests for service in 2018 by month, day of week, and hour of day. Results found that there was some variability by month (Table 22; Figure 19). The three months with the most EMS related calls in descending order were: January (29.9 per day), March (29.9 per day), and May (29.5 per day). The three months with the fewest EMS related calls in ascending order were: September (26.8 per day), December (26.9 per day), and August (27.1 per day).

**Table 22: Total EMS Related Calls and Average Calls per Day by Month**

| Month        | Number of Calls | Average Calls per Day | Call Percentage |
|--------------|-----------------|-----------------------|-----------------|
| January      | 928             | 29.9                  | 9.1             |
| February     | 777             | 27.8                  | 7.6             |
| March        | 926             | 29.9                  | 9.0             |
| April        | 825             | 27.5                  | 8.1             |
| May          | 916             | 29.5                  | 8.9             |
| June         | 840             | 28.0                  | 8.2             |
| July         | 880             | 28.4                  | 8.6             |
| August       | 840             | 27.1                  | 8.2             |
| September    | 803             | 26.8                  | 7.8             |
| October      | 854             | 27.5                  | 8.3             |
| November     | 824             | 27.5                  | 8.0             |
| December     | 834             | 26.9                  | 8.1             |
| <b>Total</b> | <b>10,247</b>   | <b>28.1</b>           | <b>100.0</b>    |

**Figure 19: Average EMS Related Calls per Day by Month**



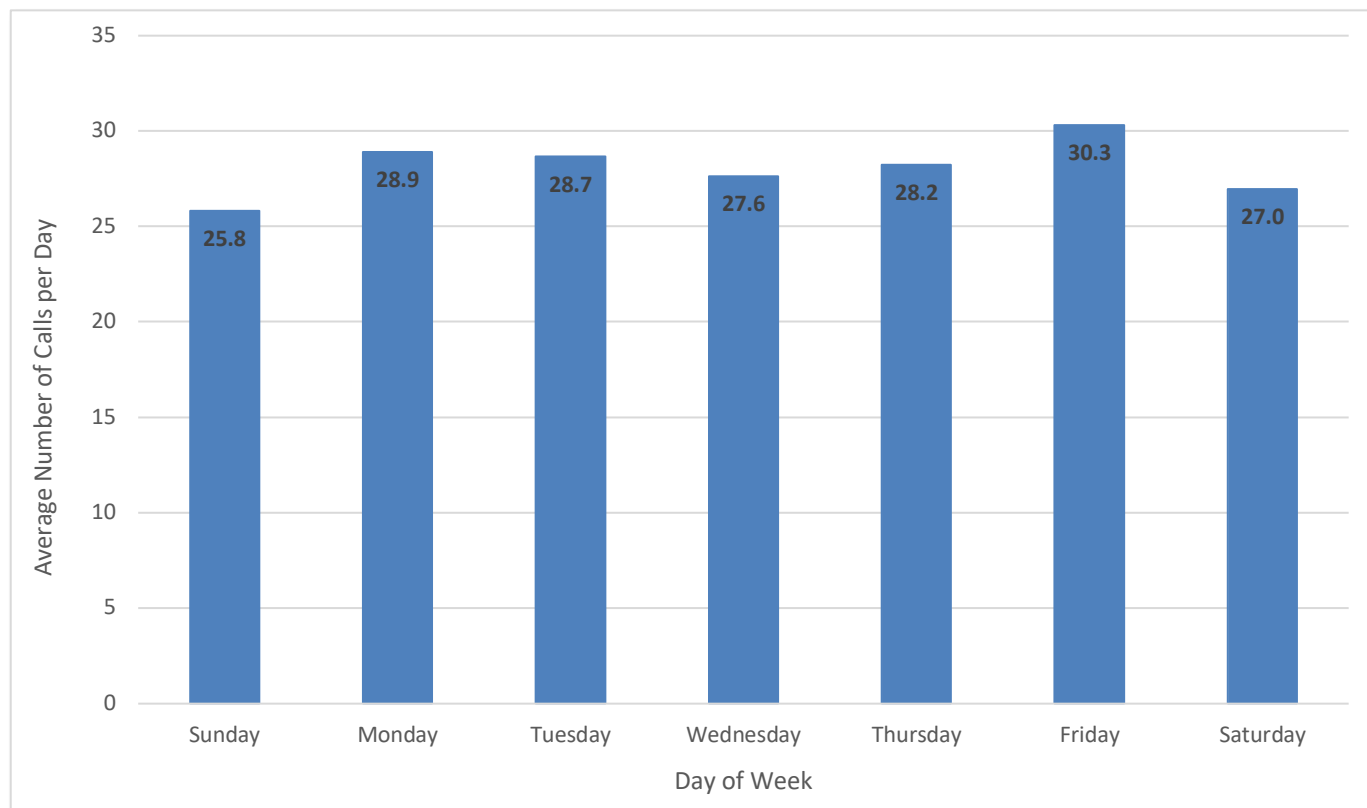
Similar analyses were conducted for EMS related calls by day of week (Table 23; Figure 20). The data revealed that there was some variability in demand for services by day of week. Friday had the highest frequency of requests for EMS related services, averaging 30.3 calls per day and accounting for 15.4% of all EMS related calls. Sunday had the lowest frequency of requests for EMS related services, averaging 25.8 calls per day and accounting for 13.1% of all EMS related calls.

**Table 23: Total EMS Related Calls and Average Calls per Day by Day of Week**

| Day of Week         | Number of Calls | Average Calls per Day | Call Percentage |
|---------------------|-----------------|-----------------------|-----------------|
| Sunday              | 1,342           | 25.8                  | 13.1            |
| Monday <sup>1</sup> | 1,531           | 28.9                  | 14.9            |
| Tuesday             | 1,490           | 28.7                  | 14.5            |
| Wednesday           | 1,437           | 27.6                  | 14.0            |
| Thursday            | 1,468           | 28.2                  | 14.3            |
| Friday              | 1,577           | 30.3                  | 15.4            |
| Saturday            | 1,402           | 27.0                  | 13.7            |
| <b>Total</b>        | <b>10,247</b>   | <b>28.1</b>           | <b>100.0</b>    |

<sup>1</sup>There were 53 Mondays during 2018, and 52 of all other days of the week during 2018.

**Figure 20: Average EMS Related Calls per Day by Day of Week**

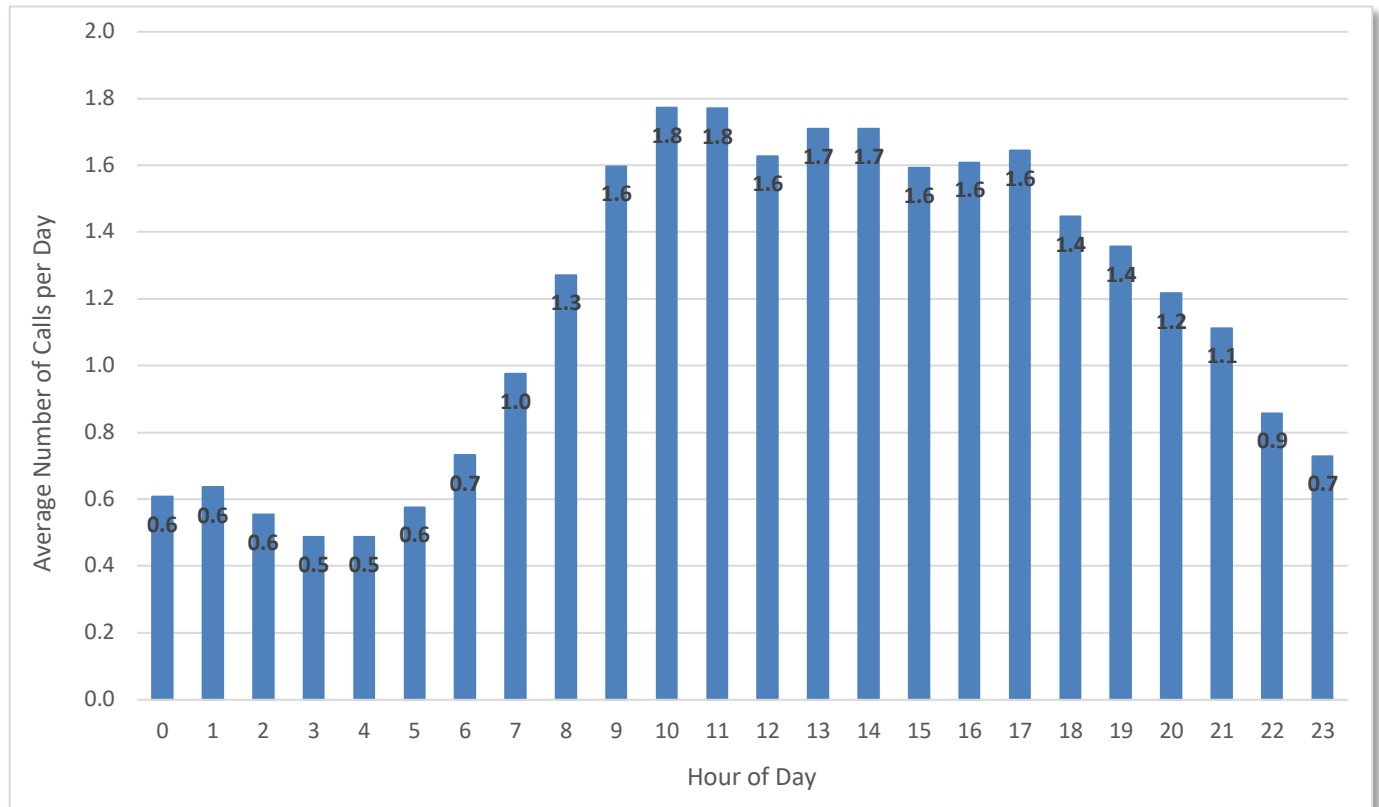


EMS related calls were also evaluated by hour of the day (Table 24; Figure 21). Some variability exists in the time of day that requests for EMS related services were received. The hours from 0000 to 0500 had the lowest demands, where average number of calls per day for each of those hours ranged from 0.5 to 0.6. The highest demand for EMS related services occurred at 1000, where average number of calls per day during that hour was 1.8.

**Table 24: Total EMS Related Calls and Average Calls per Day by Hour of Day**

| Hour of Day  | Number of Calls | Average Calls per Day | Call Percentage |
|--------------|-----------------|-----------------------|-----------------|
| 0            | 222             | 0.6                   | 2.2             |
| 1            | 232             | 0.6                   | 2.3             |
| 2            | 202             | 0.6                   | 2.0             |
| 3            | 178             | 0.5                   | 1.7             |
| 4            | 178             | 0.5                   | 1.7             |
| 5            | 210             | 0.6                   | 2.0             |
| 6            | 267             | 0.7                   | 2.6             |
| 7            | 356             | 1.0                   | 3.5             |
| 8            | 464             | 1.3                   | 4.5             |
| 9            | 583             | 1.6                   | 5.7             |
| 10           | 647             | 1.8                   | 6.3             |
| 11           | 646             | 1.8                   | 6.3             |
| 12           | 594             | 1.6                   | 5.8             |
| 13           | 624             | 1.7                   | 6.1             |
| 14           | 624             | 1.7                   | 6.1             |
| 15           | 581             | 1.6                   | 5.7             |
| 16           | 587             | 1.6                   | 5.7             |
| 17           | 600             | 1.6                   | 5.9             |
| 18           | 528             | 1.4                   | 5.2             |
| 19           | 495             | 1.4                   | 4.8             |
| 20           | 444             | 1.2                   | 4.3             |
| 21           | 406             | 1.1                   | 4.0             |
| 22           | 313             | 0.9                   | 3.1             |
| 23           | 266             | 0.7                   | 2.6             |
| <b>Total</b> | <b>10,247</b>   | <b>28.1</b>           | <b>100.0</b>    |

**Figure 21: Average EMS Related Calls per Day by Hour of Day**



EMS related requests accounted for 60.5% of the total requests for service during 2018 and averaged 28.1 requests per day (Figure 1; Table 1). EMS related incidents are an aggregated category of the various final incident types available in the data file. Table 25 provides details for these EMS related incidents by nature of the call; nature of the call was obtained using a data dictionary provided by RFD that permitted the mapping of text definitions to the numeric NFIRS codes (i.e., variable “INCIDENTTYPE”) presented in the RMS data file.

**Table 25: Total EMS Related Calls by Nature of Call**

| Nature of Call <sup>1</sup>                      | Number of Calls | Percentage of Total EMS Demands |
|--------------------------------------------------|-----------------|---------------------------------|
| EMS call, excluding vehicle accident with injury | 10,065          | 98.2                            |
| Medical assist, assist EMS crew                  | 180             | 1.8                             |
| Emergency medical service, other                 | 2               | 0.0                             |
| <b>Total</b>                                     | <b>10,247</b>   | <b>100.0</b>                    |

<sup>1</sup>Entries are presented verbatim from the data file.

RFD made a total of 11,101 responses to EMS related calls (Table 2; Table 26). Total busy time was 3,671.3 hours, and the average busy minutes per response was 20.1 minutes. The three most utilized units based on total busy hours were E3 (664.0 hours), E5 (486.0 hours), and E9 (441.1 hours; Table 26).

**Table 26: Workload by Unit for EMS Related Calls**

| Station   | Unit                 | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|-----------|----------------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| Station 1 | B1                   | Battalion Chief | 21                               | 19                                    | 7.8              | 24.6                              |
|           | E1                   | Engine          | 1,496                            | 1,460                                 | 381.4            | 15.7                              |
|           | HZ1                  | Hazmat          | 0                                | --                                    | --               | --                                |
|           | T1                   | Truck           | 572                              | 561                                   | 147.3            | 15.8                              |
|           | <b>Station Total</b> |                 | <b>2,089</b>                     | <b>2,040</b>                          | <b>536.5</b>     | <b>15.8</b>                       |
| Station 2 | E2                   | Engine          | 1,243                            | 1,234                                 | 427.4            | 20.8                              |
|           | G2                   | Grass           | 2                                | 2                                     | 1.4              | 42.1                              |
|           | <b>Station Total</b> |                 | <b>1,245</b>                     | <b>1,236</b>                          | <b>428.8</b>     | <b>20.8</b>                       |
| Station 3 | E3                   | Engine          | 1,925                            | 1,918                                 | 664.0            | 20.8                              |
|           | <b>Station Total</b> |                 | <b>1,925</b>                     | <b>1,918</b>                          | <b>664.0</b>     | <b>20.8</b>                       |
| Station 4 | E4                   | Engine          | 1,207                            | 1,199                                 | 392.2            | 19.6                              |
|           | G4                   | Grass           | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>1,207</b>                     | <b>1,199</b>                          | <b>392.2</b>     | <b>19.6</b>                       |
| Station 5 | BR5                  | Brush Truck     | 0                                | --                                    | --               | --                                |
|           | E5                   | Engine          | 1,317                            | 1,304                                 | 486.0            | 22.4                              |
|           | E5B                  | Engine          | 0                                | --                                    | --               | --                                |
|           | E8                   | Engine          | 10                               | 10                                    | 2.8              | 17.1                              |
|           | <b>Station Total</b> |                 | <b>1,327</b>                     | <b>1,314</b>                          | <b>488.9</b>     | <b>22.3</b>                       |
| Station 6 | BR6                  | Brush Truck     | 1                                | 1                                     | 0.4              | 25.3                              |
|           | E6                   | Engine          | 914                              | 900                                   | 281.6            | 18.8                              |
|           | E6B                  | Engine          | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>915</b>                       | <b>901</b>                            | <b>282.1</b>     | <b>18.8</b>                       |
| Station 7 | E7                   | Engine          | 980                              | 970                                   | 354.9            | 22.0                              |
|           | R7                   | Rescue          | 0                                | --                                    | --               | --                                |
|           | T7                   | Truck           | 305                              | 296                                   | 82.7             | 16.8                              |
|           | T7B                  | Truck           | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>1,285</b>                     | <b>1,266</b>                          | <b>437.6</b>     | <b>20.7</b>                       |
| Station 9 | BR9                  | Brush Truck     | 0                                | --                                    | --               | --                                |
|           | E9                   | Engine          | 1,107                            | 1,101                                 | 441.1            | 24.0                              |
|           | <b>Station Total</b> |                 | <b>1,107</b>                     | <b>1,101</b>                          | <b>441.1</b>     | <b>24.0</b>                       |
| RFD Admin | 1401                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1404                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1405                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1410                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1411                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1413                 | Chief Officer   | 0                                | --                                    | --               | --                                |



| Station          | Unit          | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|------------------|---------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| RFD Admin        | 1414          | Chief Officer   | 0                                | --                                    | --               | --                                |
|                  | FPB           | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P2            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P3            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P4            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P5            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | P6            | Fire Prevention | 0                                | --                                    | --               | --                                |
|                  | Station Total |                 | 0                                | --                                    | --               | --                                |
| RFD Other        | OES364        | OES Engine      | 1                                | 1                                     | 0.3              | 19.5                              |
|                  | Station Total |                 | 1                                | 1                                     | 0.3              | 19.5                              |
| Department Total |               |                 | 11,101                           | 10,976                                | 3,671.3          | 20.1                              |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

RFD dispatched multiple units to 8.1% of EMS related calls (833/10,244; Table 27). On average, 1.1 units were dispatched per EMS related call (11,101/10,244; Table 2).

**Table 27: Number of Responding Units by EMS Related Call Type**

| Call Category | Number of Responding Units |     |     |     | Total  |
|---------------|----------------------------|-----|-----|-----|--------|
|               | 1                          | 2   | 3   | 4   |        |
| EMS           | 9,411                      | 810 | 22  | 1   | 10,244 |
| Total         | 9,411                      | 810 | 22  | 1   | 10,244 |
| Percentage    | 91.9                       | 7.9 | 0.2 | 0.0 | 100.0  |

# REVIEW OF SYSTEM PERFORMANCE

The first step in determining the current state of the system's deployment model is to establish baseline measures of performance. This analysis is crucial to the ability to discuss alternatives to the status quo and in identifying opportunities for improvement. This portion of the analysis will focus efforts on elements of response time and the cascade of events that lead to timely response with the appropriate apparatus and personnel to mitigate the event. Response time goals should be examined in terms of total reflex time, or total response time, which includes the dispatch or call processing time, turnout time, and travel time.

## Cascade of Events

The cascade of events is the sum of the individual elements of time beginning with a state of normalcy and continuing until normalcy is once again restored through the mitigation of the event. The elements of time that are important to the ultimate outcome of a structure fire or critical medical emergency begin with the initiation of the event. For example, the first onset of chest pain begins the biological and scientific time clock for heart damage irrespective of when 911 is notified. Similarly, a fire may begin and burn undetected for a period of time before the fire department is notified. The emergency response system does not have control over the time interval for recognition or the choice to request assistance.

Therefore, RFD utilizes quantifiable "hard" data points to measure and manage system performance. These elements include alarm processing, turnout time, travel time, and the time spent prior to unit release. An example of the cascade of events and the elements of performance utilized by RFD is provided on the next page (Figure 22).<sup>1</sup>

## Detection

Detection is the element of time between the time an event occurs and someone detects it, and the emergency response system has been notified. This is typically accomplished by calling the 911 Primary Safety Answering Point (PSAP).

## Call Processing

This is the element of time measured between when 911 answers the 911 call, processes the information, and subsequently dispatches RFD.

---

<sup>1</sup> Olathe Fire Department. (2012). Adapted from Community Risk and Emergency Services Analysis: Standard of Cover. Olathe, Kansas: Author.

### **Turnout Time**

This is the element of time that is measured between the time the fire department is dispatched or alerted of the emergency incident, and the time when the unit is enroute to the call.

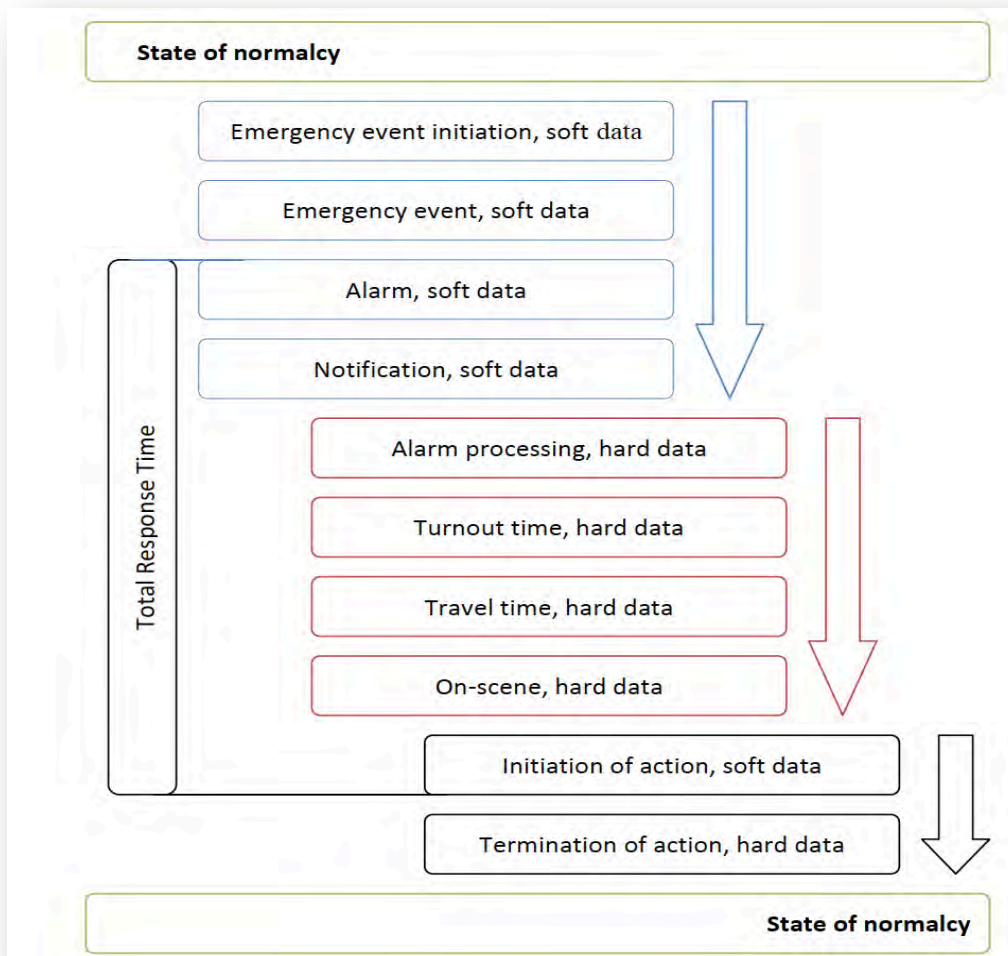
### **Travel Time**

The travel time is the element of time between when the unit went enroute, or began to travel to the incident, and their arrival on scene.

### **Total Response Time**

The total response time, or total reflex time, is the total time required to arrive on scene beginning with 911 answering the phone request for service and the time that the units arrive on scene.

**Figure 22: Cascade of Events**



## Comparison of Workloads by Demand Zone

Another method for assessing the effectiveness of the distribution model is to analyze the demand for services across the distribution model. Workload is assessed at the demand zone (first due RFD station) level and at the individual unit level. The highest volume of incoming calls occurred for Station 3's demand zone (2,985 calls). Station 3's demand zone also had the highest volume of responses made by departmental units to the area (3,521 responses), requiring 16.9% of RFD's total responses (Table 28; Figure 23).

**Table 28: Department Workload by Demand Zone**

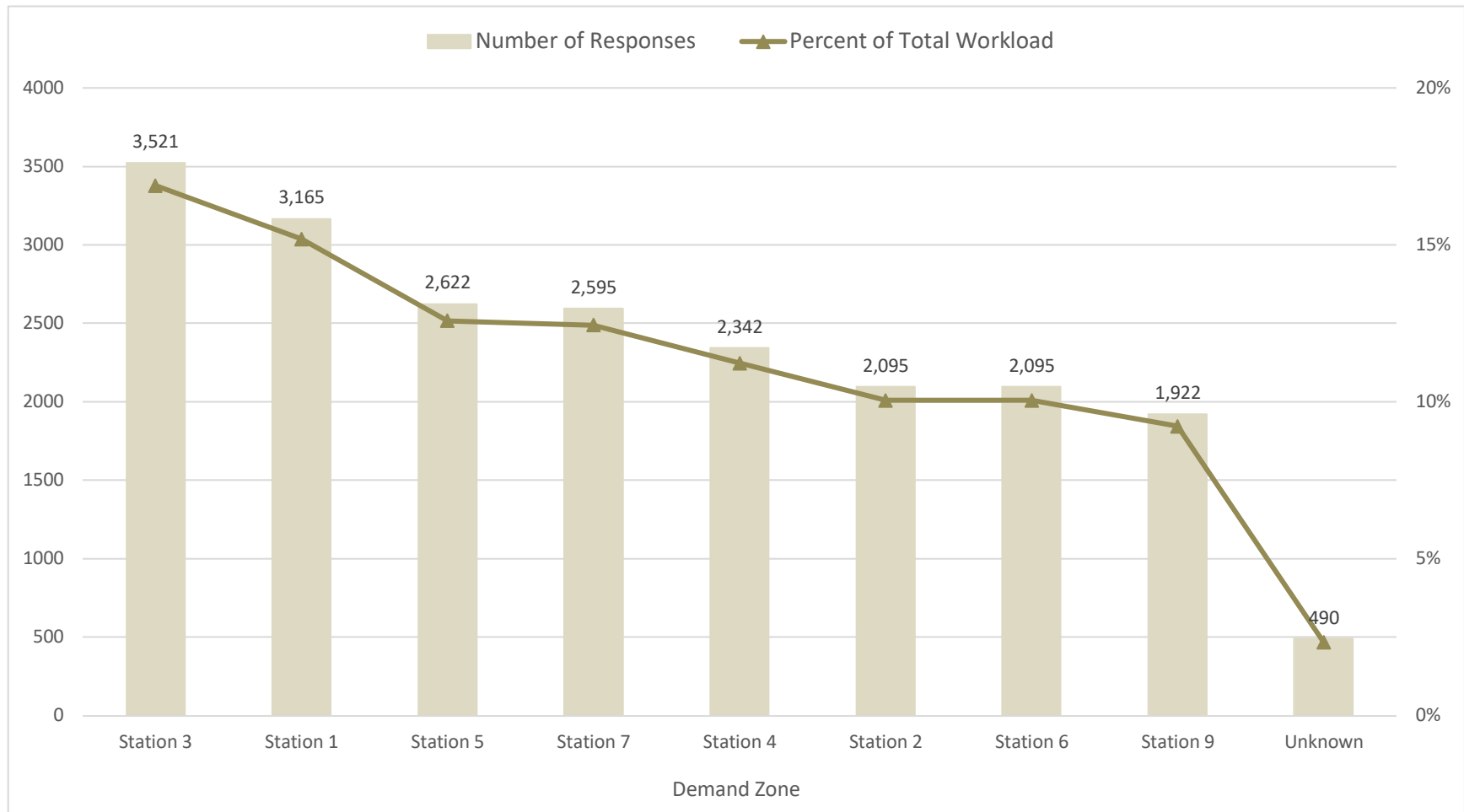
| Demand Zone  | Number of Calls Incoming to Demand Zone <sup>1</sup> | Number of Responses Made by Department in Demand Zone <sup>2</sup> | Percent of Department Workload <sup>3</sup> |
|--------------|------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------------|
| Station 1    | 2,295                                                | 3,165                                                              | 15.2                                        |
| Station 2    | 1,729                                                | 2,095                                                              | 10.0                                        |
| Station 3    | 2,985                                                | 3,521                                                              | 16.9                                        |
| Station 4    | 1,962                                                | 2,342                                                              | 11.2                                        |
| Station 5    | 2,270                                                | 2,622                                                              | 12.6                                        |
| Station 6    | 1,651                                                | 2,095                                                              | 10.0                                        |
| Station 7    | 1,981                                                | 2,595                                                              | 12.4                                        |
| Station 9    | 1,662                                                | 1,922                                                              | 9.2                                         |
| Unknown      | 373                                                  | 490                                                                | 2.4                                         |
| <b>Total</b> | <b>16,908</b>                                        | <b>20,847</b>                                                      | <b>100.0</b>                                |

<sup>1</sup>"Number of Calls" reflects an adjusted number of unique incidents to correspond with responses made by RFD units.

<sup>2</sup>"Number of Responses" reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>3</sup>"Percent of Department Workload" is based on "Number of Responses Made by Department in Demand Zone."

**Figure 23: Department Workload by Demand Zone**



Finally, workload was analyzed by demand zone and program for both comparative purposes as well as for introspection into potential system failures (Table 29). Station 3's demand zone had the highest demand for EMS related services, requiring 2,196 responses by RFD units to the area. Station 1's demand zone had the highest demand for fire related and other services, requiring 227 and 1,270 responses by RFD units to the area.

**Table 29: Number of Responses by Demand Zone and Program**

| Demand Zone  | Program       |              |              | Total         |
|--------------|---------------|--------------|--------------|---------------|
|              | EMS           | Fire         | Other        |               |
| Station 1    | 1,668         | 227          | 1,270        | 3,165         |
| Station 2    | 1,235         | 124          | 736          | 2,095         |
| Station 3    | 2,196         | 141          | 1,184        | 3,521         |
| Station 4    | 1,270         | 106          | 966          | 2,342         |
| Station 5    | 1,524         | 118          | 980          | 2,622         |
| Station 6    | 828           | 114          | 1,153        | 2,095         |
| Station 7    | 1,193         | 136          | 1,266        | 2,595         |
| Station 9    | 1,124         | 97           | 701          | 1,922         |
| Unknown      | 63            | 48           | 379          | 490           |
| <b>Total</b> | <b>11,101</b> | <b>1,111</b> | <b>8,635</b> | <b>20,847</b> |

Another measure, time on task, is necessary to evaluate best practices in efficient system delivery and consider the impact workload has on personnel. Unit Hour Utilization (UHU) values represent the proportion of the work period (24 hours) that is utilized responding to requests for service.

Historically, the International Association of Fire Fighters (IAFF) has recommended that 24-hour units utilize 0.30, or 30% workload as an upper threshold.<sup>2</sup> In other words, this recommendation would have personnel spend no more than 7.2 hours per day on emergency incidents. These thresholds take into consideration the necessity to accomplish non-emergency activities such as training, health and wellness, public education, and fire inspections. The 4th edition of the IAFF EMS Guidebook no longer specifically identifies an upper threshold. However, *FITCH* recommends that an upper unit utilization threshold of approximately 0.30, or 30%, would be considered best practice. In other words, units and personnel should not exceed 30%, or 7.2 hours, of their work day responding to calls. These recommendations are also validated in the literature. For example, in their review of the City of Rolling Meadows, the Illinois Fire Chiefs Association utilized a UHU threshold of 0.30 as an indication to add additional resources.<sup>3</sup> Similarly, in a standards of cover study facilitated by the Center for Public Safety Excellence, the Castle Rock Fire and Rescue Department utilizes a UHU of

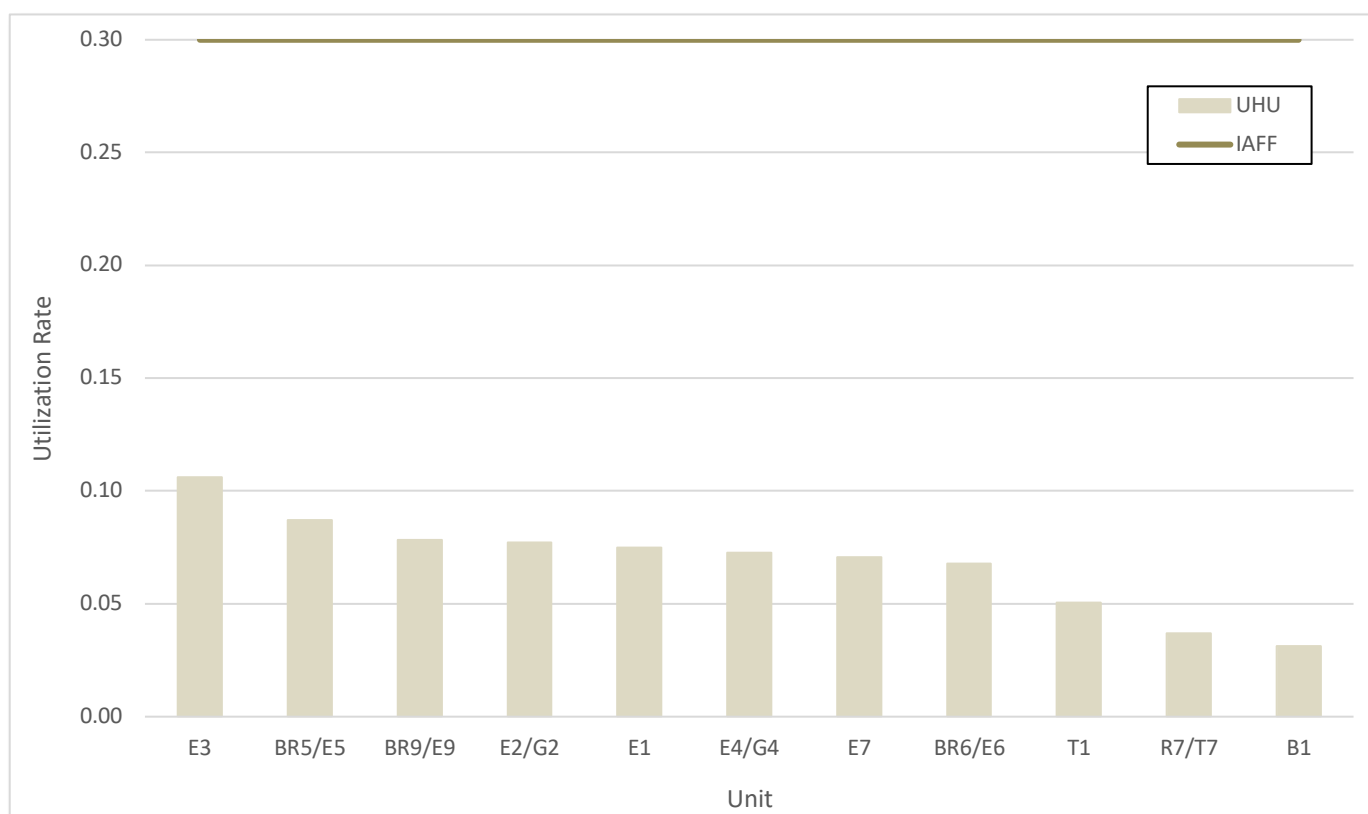
<sup>2</sup> International Association of Firefighters. (1995). *Emergency Medical Services: A Guidebook for Fire-Based Systems*. Washington, DC: Author. (p. 11)

<sup>3</sup> Illinois Fire Chiefs Association. (2012). *An Assessment of Deployment and Station Location: Rolling Meadows Fire Department*. Rolling Meadows, Illinois: Author. (pp. 54-55)

0.30 as the upper limit in their standards of cover due to the necessity to accomplish other non-emergency activities.<sup>4</sup>

UHU analyses included 18 units designated by RFD as 24-hour units (i.e., Battalion Chief unit B1; brush trucks BR5, BR6, and BR9; engines E1, E2, E3, E4, E5, E6, E7, and E9; grass units G2 and G4; hazmat unit HM1; rescue unit R7; and trucks T1 and T7). Cross-staffed units were identified by RFD and combined to reflect one 24-hour unit as follows: HM1/T1, E2/G2, E4/G4, BR5/E5, BR6/E6, R7/T7, and BR9/E9. However, all HM1 response entries ( $n = 12$ ) were missing unit clear dates and times such that busy time could not be calculated for this unit. As such, T1 is reported in the figure below without HM1. All units had UHU values below 0.30 (Figure 24).

**Figure 24: Unit Hour Utilization**



<sup>4</sup> Castle Rock Fire and Rescue Department. (2011). *Community Risk Analysis and Standards of Cover*. Castle Rock, Colorado: Author. (p. 58)

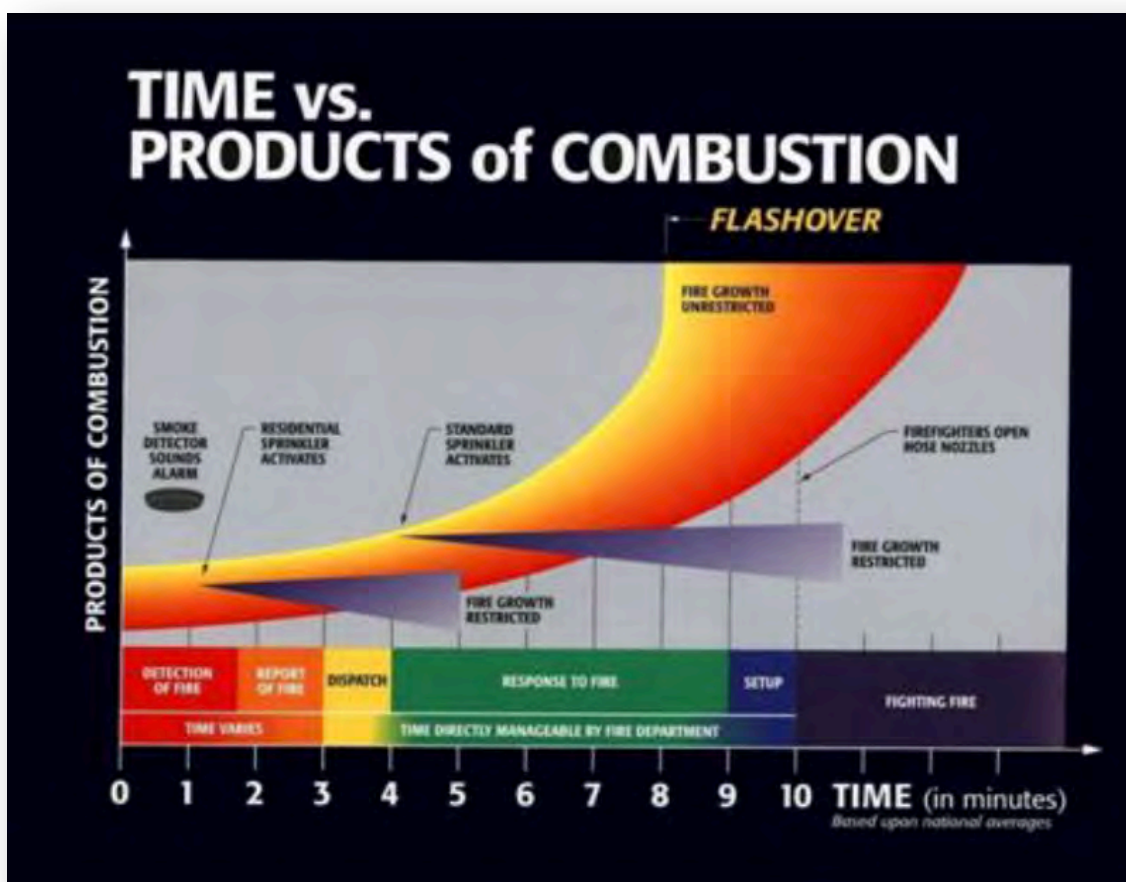
# RESPONSE TIME CONTINUUM

## Fire

The number one priority with structural fire incidents is to save lives followed by the minimization of property damage. A direct relationship exists between the timeliness of the response and the survivability of unprotected occupants and property damage. The most identifiable point of fire behavior is flashover.

Flashover is the point in fire growth where the contents of an entire area, including the smoke, reach their ignition temperature, resulting in a rapid-fire growth rendering the area un-survivable by civilians and untenable for firefighters. Best practices would result in the fire department arriving and attacking the fire prior to the point of flashover. A representation of the traditional time temperature curve and the cascade of events is provided in Figure 25.<sup>5</sup>

Figure 25: Example of Traditional Time Temperature Curve

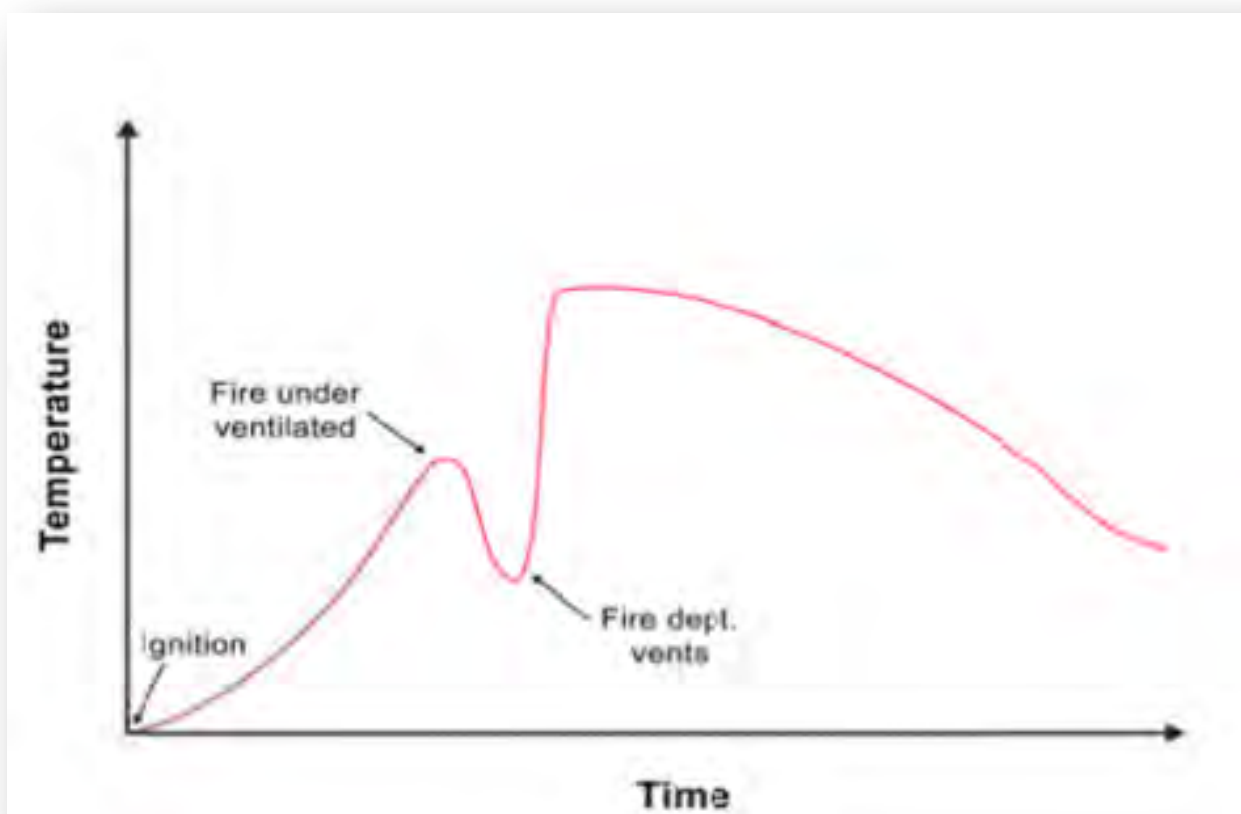


<sup>5</sup> Example of Traditional Time Temperature Curve. Retrieved at <http://www.usfa.fema.gov/downloads/pdf/coffee-break/time-vs-products-of-combustion.pdf>



Recent studies by Underwriter's Laboratories (UL) have found that in compartment fires such as structure fires, flashover occurs within four minutes in modern fire environment. In addition, the UL research has identified an updated time temperature curve due to fires being ventilation-controlled rather than fuel-controlled as represented in the traditional time temperature curve. While this ventilation-controlled environment continues to provide a high risk to unprotected occupants to smoke and high heat, it does provide some advantage to property conservation efforts, as water may be applied to the fire prior to ventilation and the subsequent flashover. An example of UL's ventilation-controlled time temperature curve is provided in Figure 26.<sup>6</sup>

**Figure 26: Ventilation-Controlled Time Temperature Curve**



## EMS

The effective response to EMS incidents also has a direct correlation to the ability to respond within a specified period of time. However, unlike structure fires, responding to EMS incidents introduces considerable variability in the level of clinical acuity. From this perspective, the association of response time and clinical outcome varies depending on the severity of the injury or the illness. Research has demonstrated that the overwhelming majority of requests for EMS are not time sensitive between five minutes and 11 minutes for emergency responses and 13 minutes for non-

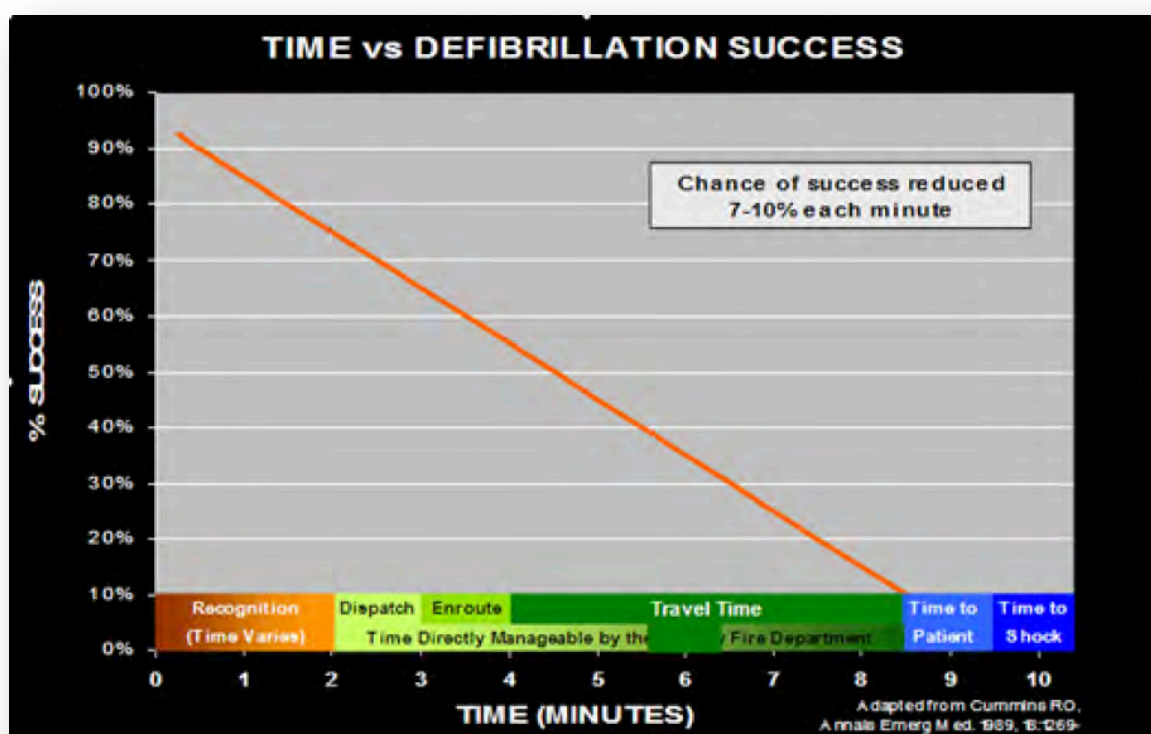
<sup>6</sup> UL/NIST Ventilation Controlled Time Temperature Curve. Retrieved from [http://www.nist.gov/fire/fire\\_behavior.cfm](http://www.nist.gov/fire/fire_behavior.cfm)

emergency responses.<sup>7</sup> The 12-minute upper threshold is only the upper limit of the available research and is not a clinically significant time measure, as patients were not found to have a significantly different clinical outcome when the 12-minute threshold was exceeded.<sup>8</sup>

Out-of-hospital sudden cardiac arrest is the most identifiable and measured incident type for EMS. In an effort to demonstrate the relationship between response time and clinical outcome, a representation of the cascade of events and the time to defibrillation (shock) is presented in Figure 27. The American Heart Association (AHA) has determined that brain damage will begin to occur between four and six minutes and become irreversible after ten minutes without intervention.

Modern sudden cardiac arrest protocols recognize that high quality Cardio-Pulmonary Resuscitation (CPR) at the Basic Life Support (BLS) level is a quality intervention until defibrillation can be delivered in shockable rhythms. Figure 27 below<sup>9</sup> is representative of a sudden cardiac arrest that is presenting in a shockable heart rhythm such as Ventricular Fibrillation or Ventricular Tachycardia.

**Figure 27: Cascade of Events for Sudden Cardiac Arrest with Shockable Rhythm**



<sup>7</sup> Blackwell, T.H., & Kaufman, J.S. (April 2002). Response time effectiveness: Comparison of response time and survival in an urban emergency medical services system. *Academic Emergency Medicine*, 9(4): 289-295.

<sup>8</sup> Blackwell, T.H., et al. (Oct-Dec 2009). Lack of association between prehospital response times and patient outcomes. *Prehospital Emergency Care*, 13(4): 444-450.

<sup>9</sup> Olathe Fire Department. (2012). Adapted from Community Risk and Emergency Services Analysis: Standard of Cover. Olathe, Kansas: Author.

## DESCRIPTION OF FIRST ARRIVING UNIT PERFORMANCE

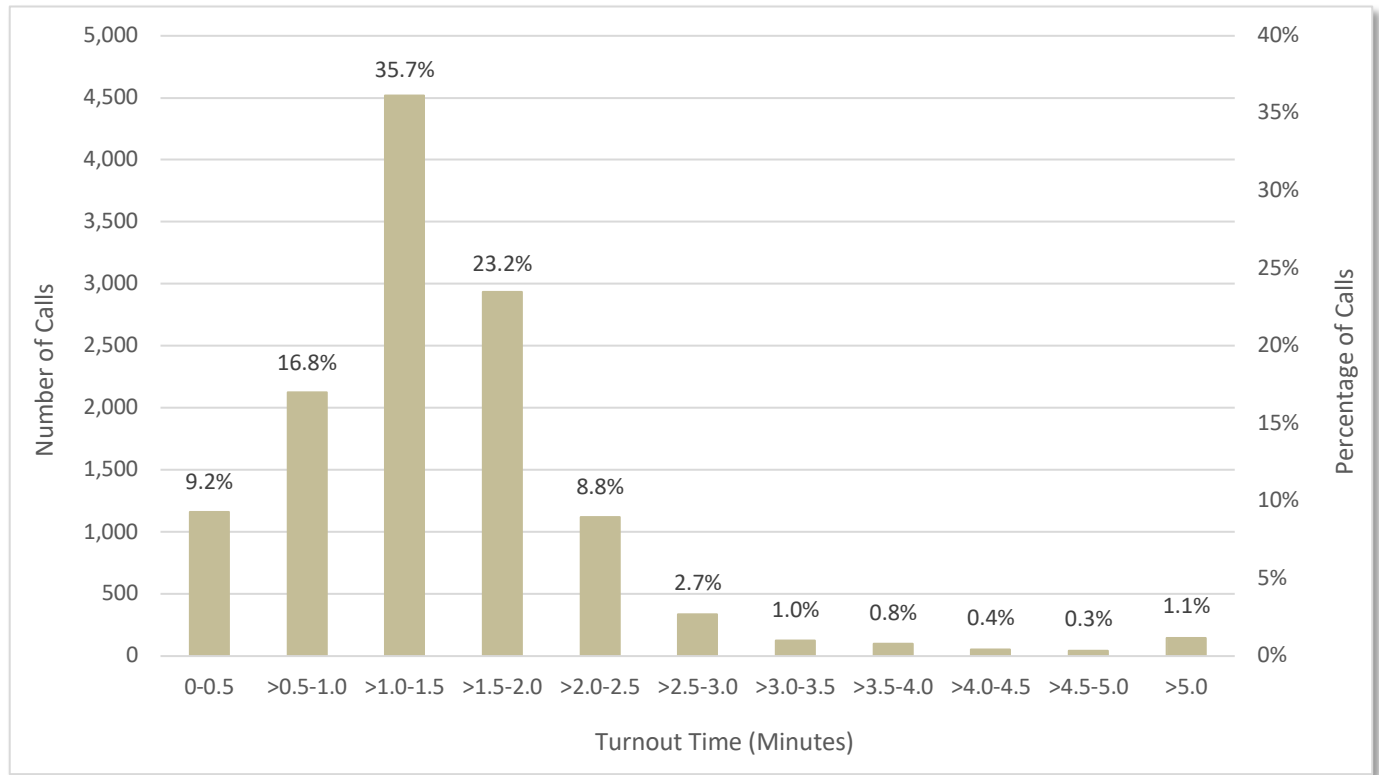
Additional analyses related to the response characteristics of first arriving units were conducted. The analyses in this first section focused on emergency (lights and sirens) responses from primary front-line units arriving first on scene, irrespective of station demand zone, for all distinct incidents. Call status as emergency (lights and sirens) was classified by GFD. Units identified by GFD as primary front-line units included ambulance units A6, A7, and A8; Battalion Chief BC6; engines E6, E7, E8, and E13; and ladder truck T14. Due to the restriction of these analyses to select responses and units, maximum available sample size for these analyses is 6,885. Sample sizes for relevant metrics in this section may be smaller due to select exclusion of time data, as outlined in the Appendix.

To first recap the data presented previously in Table 10, Figure 13, Table 11, and Table 12, RFD had an overall average dispatch time of 1.5 minutes (median = 1.0 minute), and a dispatch time of 2.4 minutes at the 90<sup>th</sup> percentile (Table 30). Overall, RFD had an average turnout time of 1.4 minutes (median = 1.3 minutes), and a turnout time of 2.2 minutes at the 90<sup>th</sup> percentile. A total of 3,288 of 12,643 calls with turnout times (26.0%) experienced turnout times of one minute or less, and 85.0% of calls (10,741/12,643) experienced turnout times of two minutes or less (Figure 28). The overall average travel time was 3.4 minutes (median = 3.2 minutes); performance at the 90<sup>th</sup> percentile for travel time was 5.5 minutes. A total of 5,916 of 12,939 calls with travel times (45.7%) experienced travel times of three minutes or less, and 69.4% of calls (8,975/12,939) experienced travel times of four minutes or less (Figure 29). The average response time was 6.2 minutes (median = 5.7 minutes); performance at the 90<sup>th</sup> percentile for response time was 8.6 minutes.

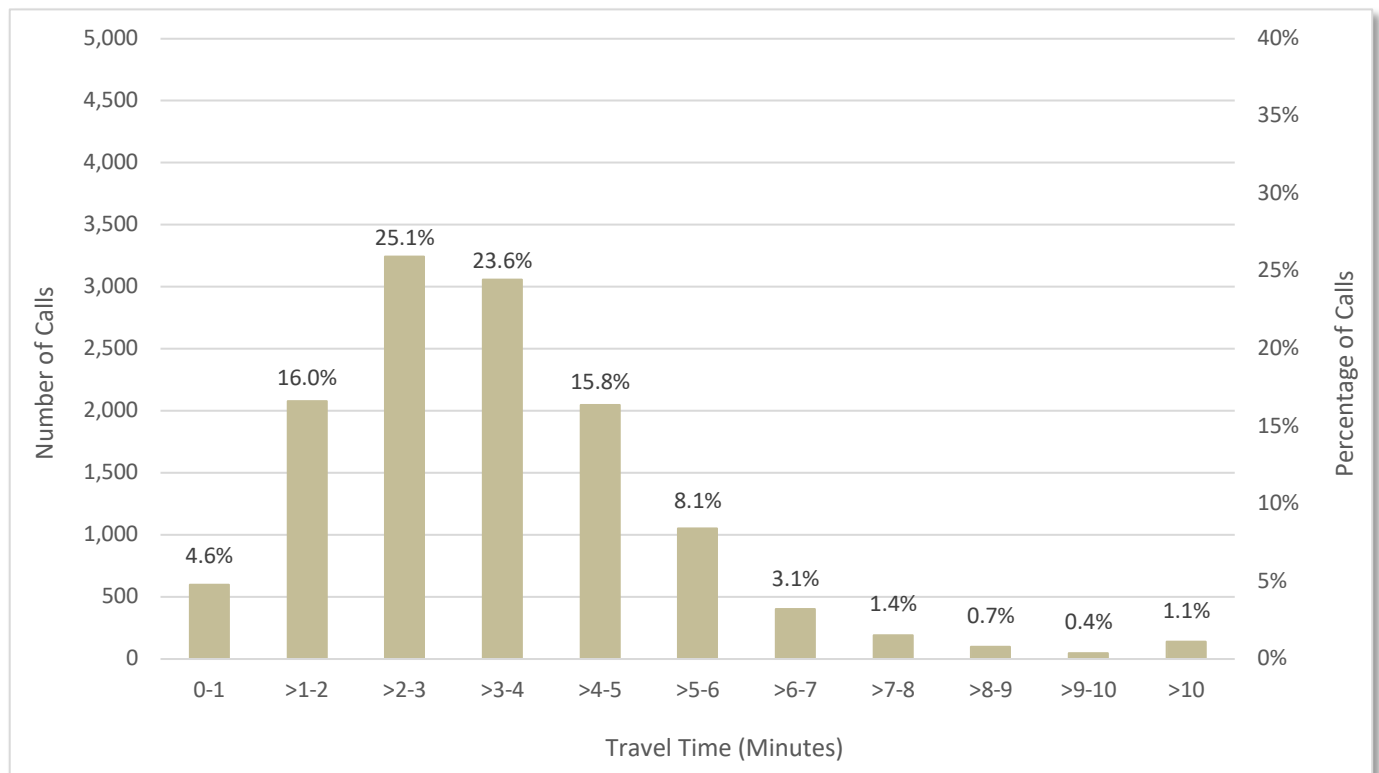
**Table 30: Description of First Arriving Unit Emergency Response Performance in Minutes**

| Measure       | Average | Median | 90th Percentile |
|---------------|---------|--------|-----------------|
| Dispatch Time | 1.5     | 1.0    | 2.4             |
| Turnout Time  | 1.4     | 1.3    | 2.2             |
| Travel Time   | 3.4     | 3.2    | 5.5             |
| Response Time | 6.2     | 5.7    | 8.6             |

**Figure 28: Distribution of Turnout Time of First Arriving Unit – All Emergency Calls**



**Figure 29: Distribution of Travel Time of First Arriving Unit – All Emergency Calls**

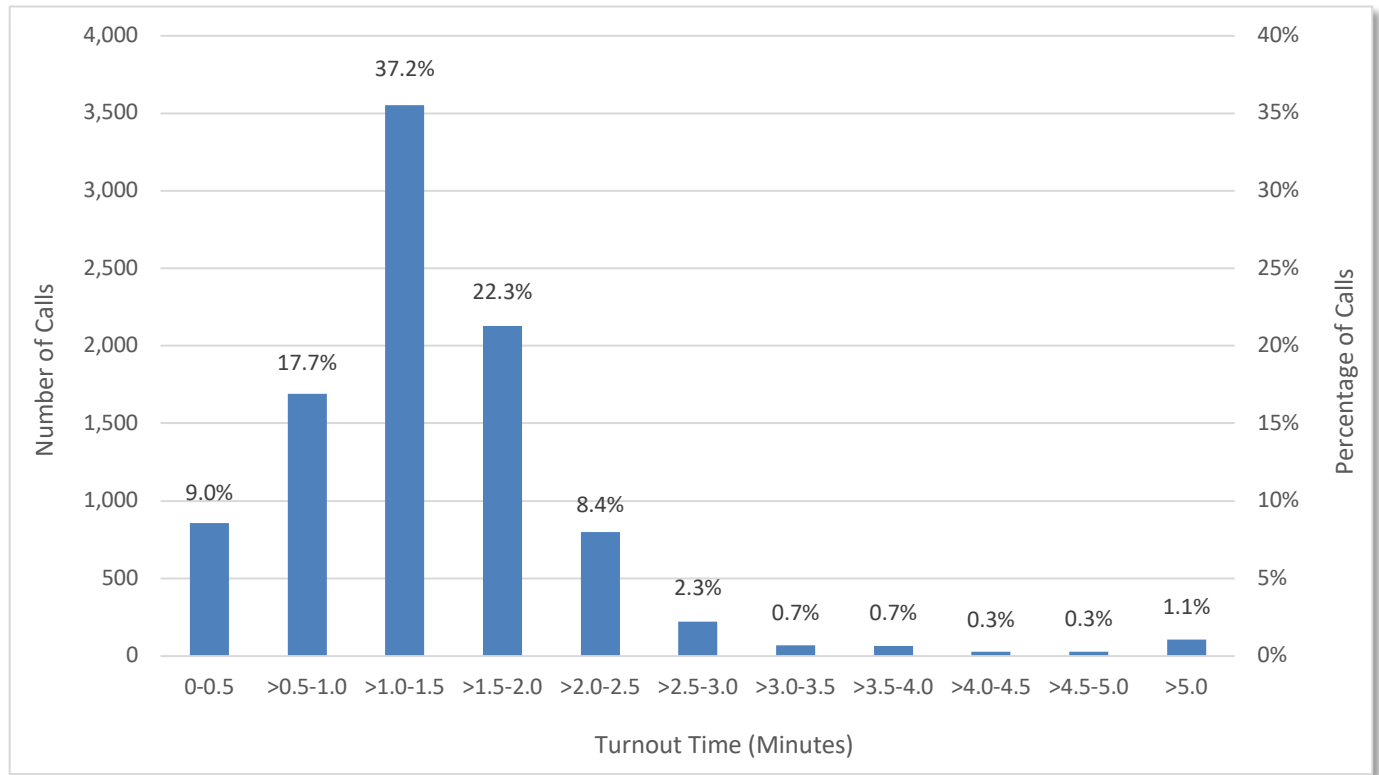


National recommendations provide differentiation between EMS and fire/special operations incidents. For example, the best practice for an EMS incident is a turnout time of 60 seconds or less 90% of the time. Due to the necessity to don personal protective equipment prior to responding to fire related incidents, best practices provide either 80 seconds (NFPA) or 90 seconds (CFAI) or less at the 90<sup>th</sup> percentile for turnout times associated with fire calls. Therefore, turnout and travel times are also reported by the major program areas of EMS and fire.

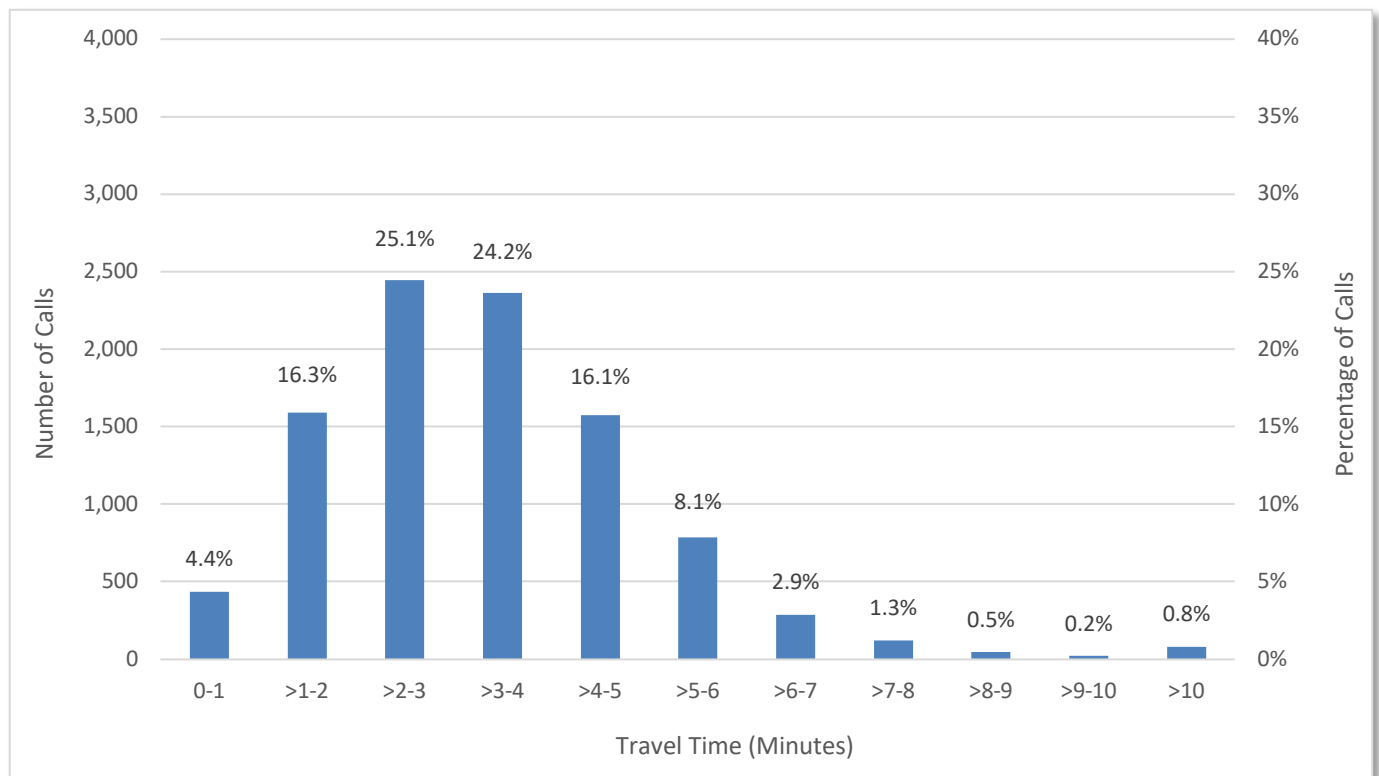
For EMS incidents, RFD had an average turnout time of 1.4 minutes (Table 10), a median turnout time of 1.3 minutes (Table 11), and a turnout time of 2.2 minutes at the 90<sup>th</sup> percentile (Table 12). A total of 2,550 of 9,550 calls with turnout times (26.7%) experienced turnout times of one minute or less, and 86.2% of calls (8,231/9,550) experienced turnout times of two minutes or less (Figure 30). The average travel time for EMS incidents was 3.4 minutes (median = 3.2 minutes); performance at the 90<sup>th</sup> percentile for travel time was 5.4 minutes. A total of 4,474 of 9,765 calls with travel times (45.8%) experienced travel times of three minutes or less, and 70.0% of calls (6,838/9,765) experienced travel times of four minutes or less (Figure 31). The average response time for EMS calls was 6.0 minutes (median = 5.6 minutes); performance at the 90<sup>th</sup> percentile for response time was 8.2 minutes.

For fire related incidents, RFD had an average turnout time of 1.7 minutes (Table 10), a median turnout time of 1.7 minutes (Table 11), and a turnout time of 2.4 minutes at the 90<sup>th</sup> percentile (Table 12). A total of 46 of 285 calls with turnout times (16.1%) experienced turnout times of one minute or less, and 71.6% of calls (204/285) experienced turnout times of two minutes or less (Figure 32). The average travel time for fire related incidents was 3.6 minutes (median = 2.9 minutes); performance at the 90<sup>th</sup> percentile for travel time was 6.0 minutes. A total of 158 of 293 calls with travel times (53.9%) experienced travel times of three minutes or less, and 72.4% of calls (212/293) experienced travel times of four minutes or less (Figure 33). The average response time for fire related calls was 6.6 minutes (median = 5.8 minutes); performance at the 90<sup>th</sup> percentile for response time was 9.6 minutes.

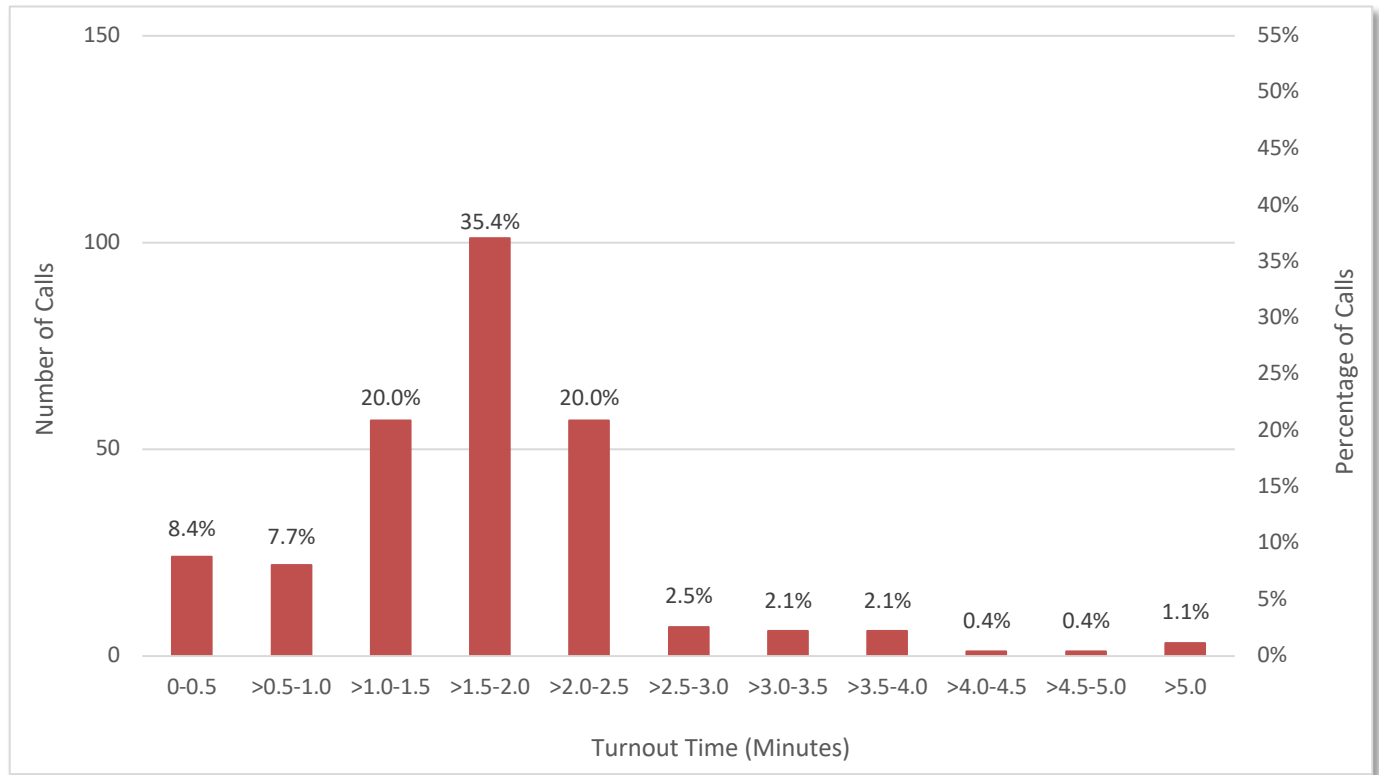
**Figure 30: Distribution of Turnout Time of First Arriving Unit – Emergency EMS Related Calls**



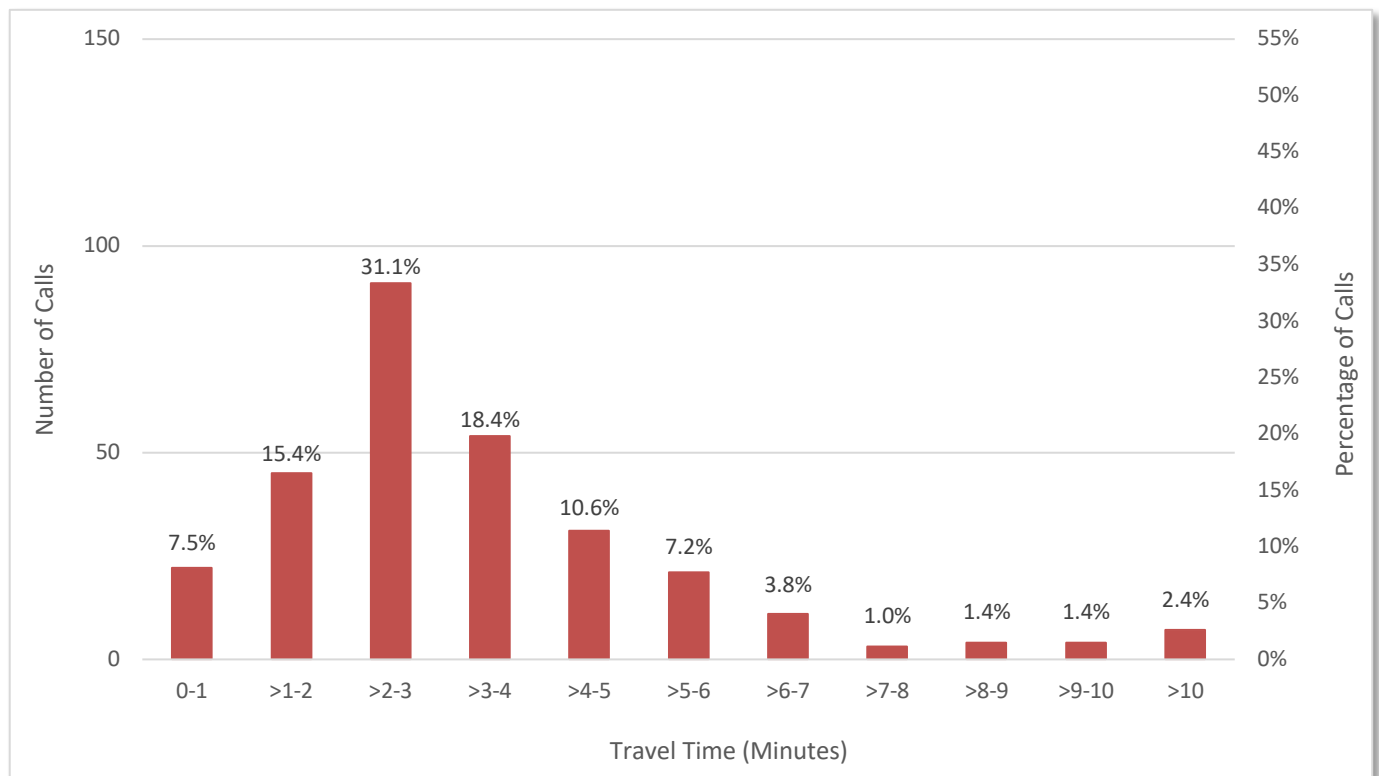
**Figure 31: Distribution of Travel Time of First Arriving Unit – Emergency EMS Related Calls**



**Figure 32: Distribution of Turnout Time of First Arriving Unit – Emergency Fire Related Calls**



**Figure 33: Distribution of Travel Time of First Arriving Unit – Emergency Fire Related Calls**



## First Arriving Unit Response Time by Demand Zone

Further analyses were conducted for the first due stations (demand zones) to measure the performance of the first arriving primary front-line units to emergency calls in each demand zone. Performance times are reported at the average (Table 31; Figure 34), median (Table 32; Figure 35), and 90<sup>th</sup> percentile (Table 33; Figure 36) values.

**Table 31: Average First Arrival Performance in Minutes by Demand Zone**

| Demand Zone              | Dispatch Time | Turnout Time | Travel Time | Response Time |
|--------------------------|---------------|--------------|-------------|---------------|
| Station 1                | 1.8           | 1.4          | 2.7         | 5.6           |
| Station 2                | 1.4           | 1.5          | 3.3         | 6.2           |
| Station 3                | 1.3           | 1.3          | 3.1         | 5.6           |
| Station 4                | 1.4           | 1.5          | 3.0         | 5.9           |
| Station 5                | 1.3           | 1.5          | 3.8         | 6.5           |
| Station 6                | 1.5           | 1.4          | 3.3         | 6.0           |
| Station 7                | 1.7           | 1.5          | 3.7         | 6.8           |
| Station 9                | 1.2           | 1.6          | 4.6         | 7.3           |
| <b>Total<sup>1</sup></b> | <b>1.5</b>    | <b>1.4</b>   | <b>3.4</b>  | <b>6.2</b>    |

<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values, but are not presented separately in the table.

**Table 32: Median First Arrival Performance in Minutes by Demand Zone**

| Demand Zone              | Dispatch Time | Turnout Time | Travel Time | Response Time |
|--------------------------|---------------|--------------|-------------|---------------|
| Station 1                | 1.1           | 1.3          | 2.5         | 5.2           |
| Station 2                | 0.9           | 1.4          | 3.1         | 5.7           |
| Station 3                | 0.9           | 1.2          | 2.8         | 5.1           |
| Station 4                | 1.0           | 1.4          | 2.9         | 5.4           |
| Station 5                | 0.9           | 1.3          | 3.6         | 6.0           |
| Station 6                | 1.0           | 1.2          | 2.9         | 5.4           |
| Station 7                | 1.0           | 1.4          | 3.4         | 6.1           |
| Station 9                | 0.9           | 1.4          | 4.5         | 7.0           |
| <b>Total<sup>1</sup></b> | <b>1.0</b>    | <b>1.3</b>   | <b>3.2</b>  | <b>5.7</b>    |

<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values, but are not presented separately in the table.



**Table 33: 90th Percentile First Arrival Performance in Minutes by Demand Zone**

| Demand Zone              | Dispatch Time | Turnout Time | Travel Time | Response Time |
|--------------------------|---------------|--------------|-------------|---------------|
| Station 1                | 3.2           | 2.3          | 4.3         | 7.6           |
| Station 2                | 2.2           | 2.3          | 5.1         | 8.2           |
| Station 3                | 2.2           | 2.0          | 5.0         | 7.8           |
| Station 4                | 2.2           | 2.2          | 4.9         | 7.8           |
| Station 5                | 2.0           | 2.3          | 5.8         | 8.7           |
| Station 6                | 2.4           | 2.1          | 5.5         | 8.8           |
| Station 7                | 2.7           | 2.4          | 6.0         | 9.3           |
| Station 9                | 1.9           | 2.3          | 6.3         | 9.3           |
| <b>Total<sup>1</sup></b> | <b>2.4</b>    | <b>2.2</b>   | <b>5.5</b>  | <b>8.6</b>    |

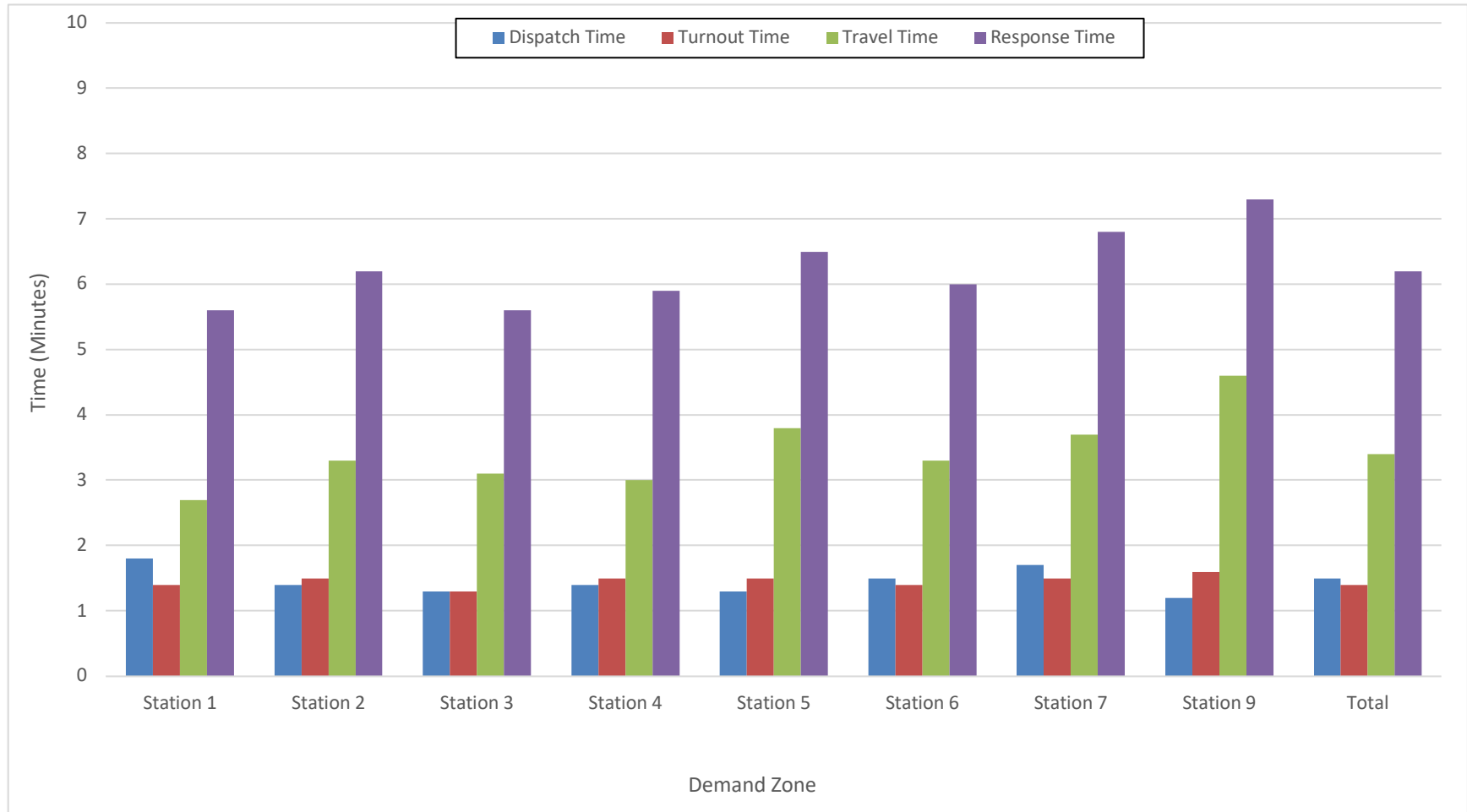
<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values, but are not presented separately in the table.

**Table 34: Sample Sizes for First Arrival Performance by Demand Zone**

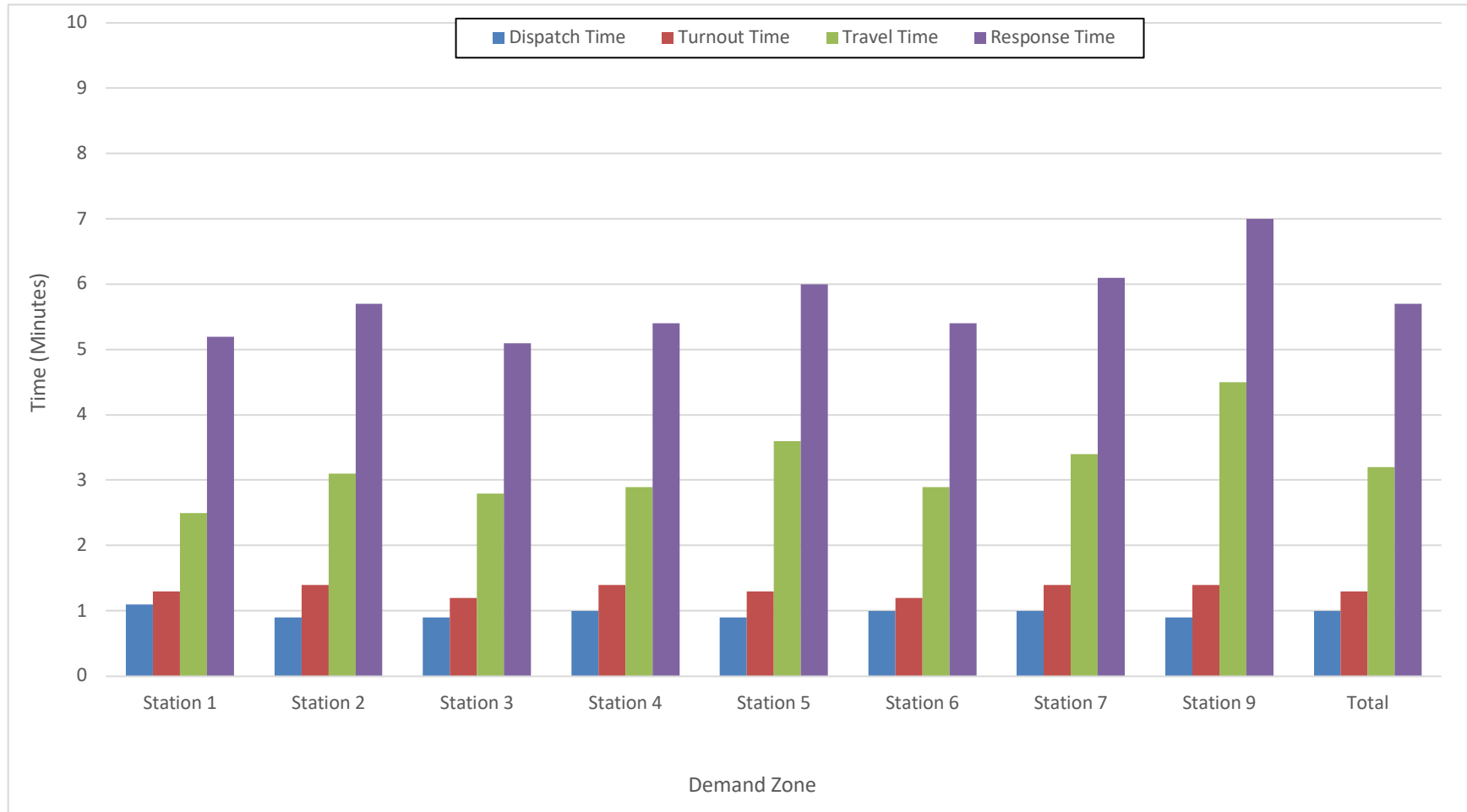
| Demand Zone              | Dispatch Time | Turnout Time  | Travel Time   | Response Time |
|--------------------------|---------------|---------------|---------------|---------------|
| Station 1                | 1,803         | 1,708         | 1,755         | 1,631         |
| Station 2                | 1,373         | 1,341         | 1,368         | 1,318         |
| Station 3                | 2,459         | 2,362         | 2,447         | 2,332         |
| Station 4                | 1,550         | 1,514         | 1,552         | 1,492         |
| Station 5                | 1,694         | 1,659         | 1,687         | 1,640         |
| Station 6                | 1,196         | 1,162         | 1,185         | 1,138         |
| Station 7                | 1,546         | 1,492         | 1,522         | 1,459         |
| Station 9                | 1,262         | 1,244         | 1,260         | 1,233         |
| <b>Total<sup>1</sup></b> | <b>13,050</b> | <b>12,643</b> | <b>12,939</b> | <b>12,399</b> |

<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values, but are not presented separately in the table.

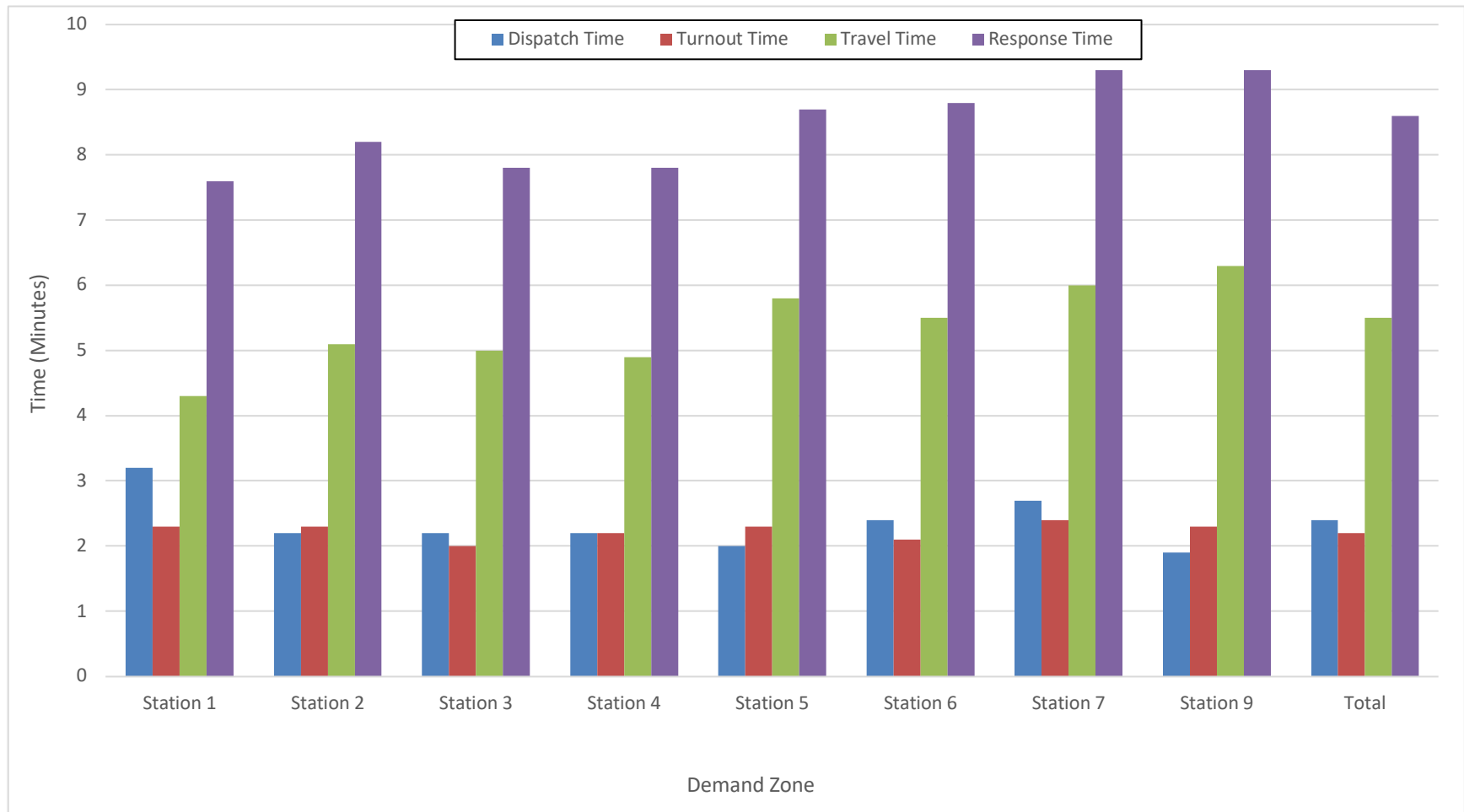
**Figure 34: Average First Arrival Performance in Minutes by Demand Zone**



**Figure 35: Median First Arrival Performance in Minutes by Demand Zone**



**Figure 36: 90th Percentile First Arrival Performance in Minutes by Demand Zone**



## Effective Response Force Capabilities for Building Fires

The capability of an Effective Response Force (ERF) to assemble in a timely manner with the appropriate personnel, apparatus, and equipment is important to the success of a significant building fire event. Therefore, it is important to measure the capabilities of assembling an ERF. In most fire departments, the distribution model performs satisfactorily, but it is not uncommon to be challenged to assemble an ERF in the recommended timeframes. Several factors affect the capabilities to assemble an ERF such as the number of fire stations, number of units, and number of personnel on each unit. Each of these policy decisions should be made in relation to the community's specific risks and the willingness to assume risk.

Analyses of performance for RFD's first due stations (demand zones) were based on an examination of travel times by any of RFD's primary front-line units arriving on scene in response to a building fire call in the demand zone's area (Table 35 through Table 38; Figure 37). While RFD had units arriving up to 10<sup>th</sup> to the scene, table data are presented up to the 6<sup>th</sup> arrival only for all demand zones. In select cases, small or zero sample sizes precluded calculation or presentation of performance metrics (noted as "--" in the tables). For this reason, limited figure data are presented. Caution when interpreting metrics associated with small sample sizes.

**Table 35: Building Fire: Average Travel Time in Minutes for ERF by Demand Zone**

| Demand Zone              | Order of Arrival |            |            |            |            |            |            |
|--------------------------|------------------|------------|------------|------------|------------|------------|------------|
|                          | 1                | 2          | 3          | 4          | 5          | 6          | 7          |
| Station 1                | 2.1              | 2.6        | 3.5        | 4.6        | 5.8        | 6.7        | 8.7        |
| Station 2                | 2.6              | 3.0        | 3.4        | 2.9        | 3.8        | 5.6        | 5.5        |
| Station 3                | 2.2              | 4.7        | 4.0        | 4.2        | 7.1        | 8.6        | 8.0        |
| Station 4                | 2.7              | 4.0        | 5.3        | 5.8        | 4.9        | 7.5        | --         |
| Station 5                | 3.8              | 5.3        | 6.1        | 7.7        | 5.1        | 7.2        | 8.1        |
| Station 6                | 3.1              | --         | --         | --         | --         | --         | --         |
| Station 7                | 2.8              | 4.2        | 5.3        | 7.1        | --         | 7.6        | 7.0        |
| Station 9                | 3.4              | 5.1        | 5.7        | 7.6        | 9.2        | 4.8        | 8.1        |
| <b>Total<sup>1</sup></b> | <b>3.1</b>       | <b>4.3</b> | <b>4.4</b> | <b>5.0</b> | <b>5.7</b> | <b>6.8</b> | <b>7.2</b> |

<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values, but are not presented separately in the table.

**Table 36: Building Fire: Median Travel Time in Minutes for ERF by Demand Zone**

| Demand Zone              | Order of Arrival |            |            |            |            |            |            |
|--------------------------|------------------|------------|------------|------------|------------|------------|------------|
|                          | 1                | 2          | 3          | 4          | 5          | 6          | 7          |
| Station 1                | 2.4              | 2.7        | 3.2        | 3.9        | 6.4        | 7.1        | 8.7        |
| Station 2                | 2.1              | 2.9        | 3.4        | 2.6        | 4.7        | 4.8        | 6.3        |
| Station 3                | 1.8              | 4.0        | 3.7        | 3.1        | 6.2        | 8.4        | 8.0        |
| Station 4                | 2.7              | 3.9        | 5.1        | 5.2        | 5.3        | 7.1        | --         |
| Station 5                | 3.6              | 4.5        | 5.5        | 8.3        | 5.3        | 7.0        | 8.1        |
| Station 6                | 1.7              | --         | --         | --         | --         | --         | --         |
| Station 7                | 2.3              | 3.9        | 5.7        | 7.7        | --         | 7.6        | 7.0        |
| Station 9                | 3.4              | 4.6        | 5.4        | 8.1        | 8.8        | 7.8        | 8.1        |
| <b>Total<sup>1</sup></b> | <b>2.6</b>       | <b>3.9</b> | <b>3.8</b> | <b>4.3</b> | <b>5.3</b> | <b>7.0</b> | <b>7.4</b> |

<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values, but are not presented separately in the table.

**Table 37: Building Fire: 90th Percentile Travel Time in Minutes for ERF by Demand Zone**

| Demand Zone              | Order of Arrival |            |            |            |            |            |             |
|--------------------------|------------------|------------|------------|------------|------------|------------|-------------|
|                          | 1                | 2          | 3          | 4          | 5          | 6          | 7           |
| Station 1                | 3.2              | 4.3        | 9.3        | 9.6        | --         | --         | --          |
| Station 2                | 5.8              | 4.3        | 5.7        | 4.8        | --         | --         | --          |
| Station 3                | 4.1              | --         | --         | --         | --         | --         | --          |
| Station 4                | 4.0              | --         | --         | --         | --         | --         | --          |
| Station 5                | 6.0              | 7.9        | --         | --         | --         | --         | --          |
| Station 6                | --               | --         | --         | --         | --         | --         | --          |
| Station 7                | 4.9              | --         | --         | --         | --         | --         | --          |
| Station 9                | 5.3              | --         | --         | --         | --         | --         | --          |
| <b>Total<sup>1</sup></b> | <b>5.5</b>       | <b>7.7</b> | <b>8.6</b> | <b>8.8</b> | <b>9.3</b> | <b>9.4</b> | <b>10.3</b> |

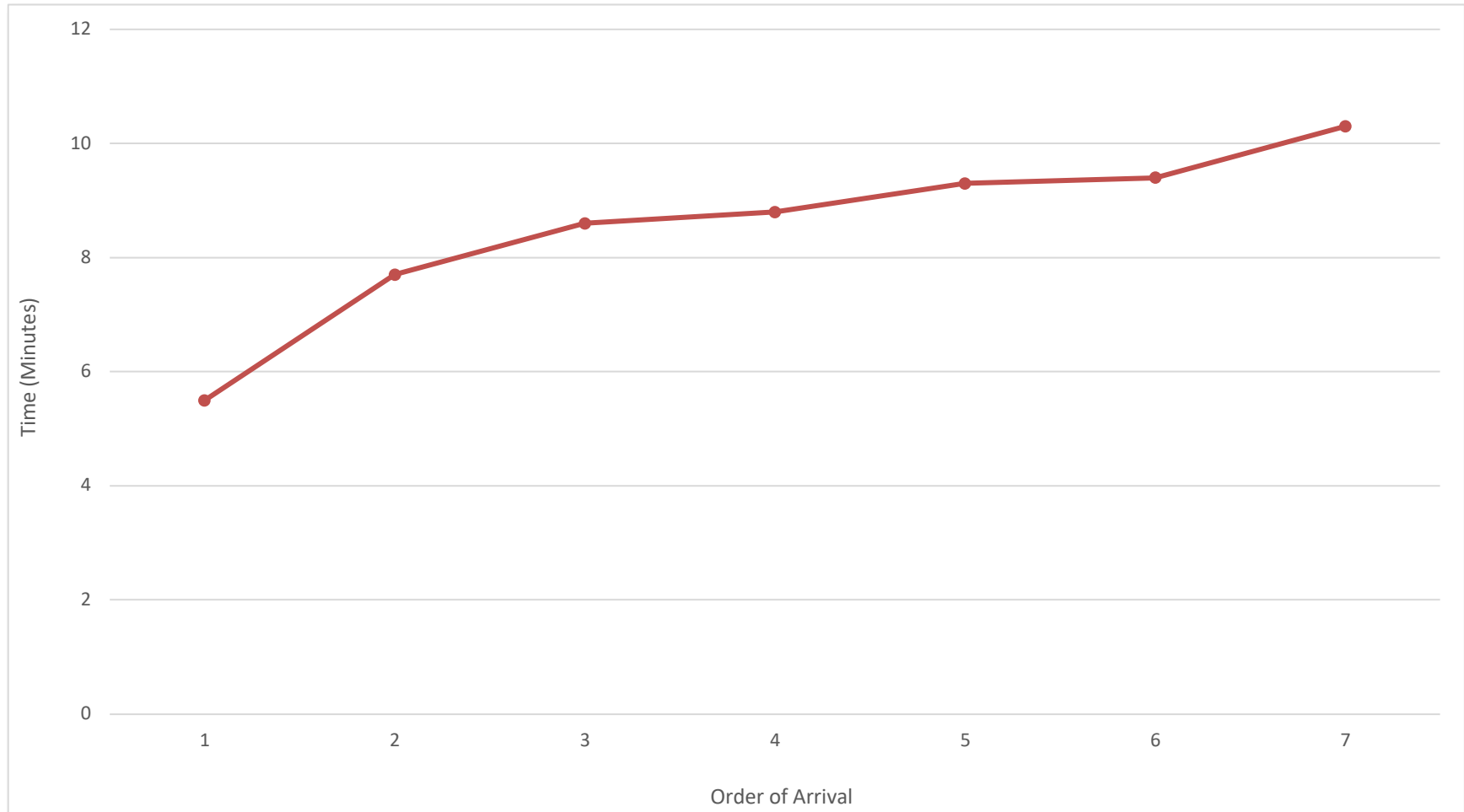
<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values, but are not presented separately in the table.

**Table 38: Building Fire: Sample Size for ERF Analysis by Demand Zone**

| Demand Zone              | Order of Arrival |           |           |           |           |           |           |
|--------------------------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|
|                          | 1                | 2         | 3         | 4         | 5         | 6         | 7         |
| Station 1                | 16               | 12        | 11        | 10        | 6         | 4         | 2         |
| Station 2                | 15               | 10        | 10        | 10        | 7         | 6         | 6         |
| Station 3                | 18               | 8         | 5         | 4         | 4         | 4         | 2         |
| Station 4                | 14               | 8         | 8         | 6         | 3         | 6         | 1         |
| Station 5                | 13               | 10        | 4         | 3         | 3         | 6         | 2         |
| Station 6                | 5                | 1         | 1         | 1         | 0         | 0         | 0         |
| Station 7                | 11               | 5         | 4         | 3         | 1         | 2         | 2         |
| Station 9                | 12               | 6         | 4         | 3         | 3         | 2         | 2         |
| <b>Total<sup>1</sup></b> | <b>112</b>       | <b>66</b> | <b>49</b> | <b>40</b> | <b>27</b> | <b>24</b> | <b>17</b> |

<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values, but are not presented separately in the table.

**Figure 37: 90th Percentile ERF Travel Time Performance for Building Fires Overall**



## Response Time Performance by Available Vehicles

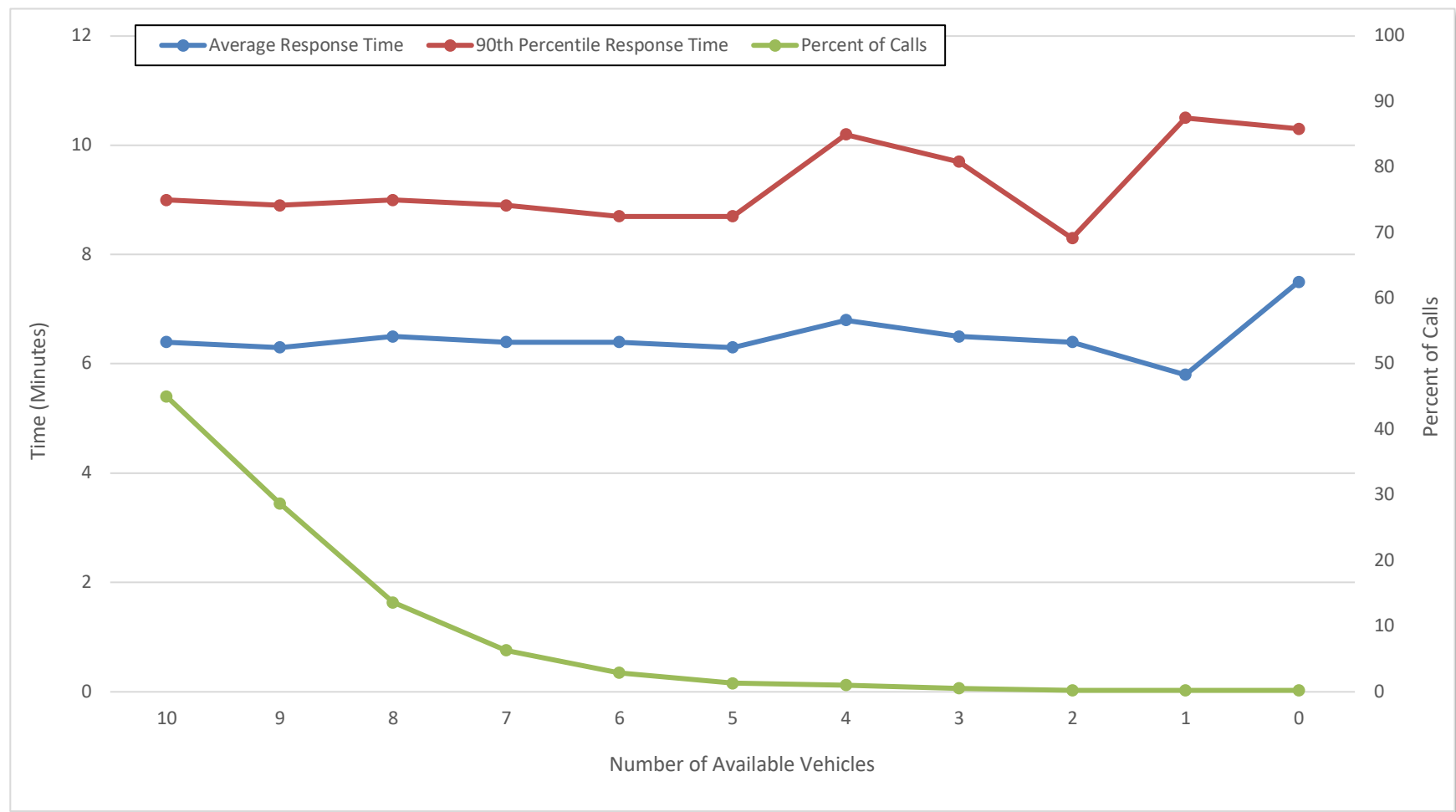
We investigated whether response time performance deteriorated when there were fewer RFD primary front-line vehicles available (Table 39; Figure 38). Primary front-line units for these analyses included engines E1, E2, E3, E4, E5, E6, E7, and E9, and trucks T1 and T7 (total  $n = 10$ ). Calls to which primary front-line units responded in 2018 were used to determine number of available primary front-line units at the time each call was received. Performance times were then based on primary front-line units responding to emergency (lights and sirens) calls only.

**Table 39: Average and 90th Percentile Response Times in Minutes by Number of Available Vehicles**

| Number of Available Vehicles | Average | 90 <sup>th</sup> Percentile | Sample Size Calls | % of Calls |
|------------------------------|---------|-----------------------------|-------------------|------------|
| 10                           | 6.4     | 9.0                         | 6,543             | 45.0       |
| 9                            | 6.3     | 8.9                         | 4,177             | 28.7       |
| 8                            | 6.5     | 9.0                         | 1,981             | 13.6       |
| 7                            | 6.4     | 8.9                         | 909               | 6.3        |
| 6                            | 6.4     | 8.7                         | 419               | 2.9        |
| 5                            | 6.3     | 8.7                         | 196               | 1.3        |
| 4                            | 6.8     | 10.2                        | 149               | 1.0        |
| 3                            | 6.5     | 9.7                         | 78                | 0.5        |
| 2                            | 6.4     | 8.3                         | 35                | 0.2        |
| 1                            | 5.8     | 10.5                        | 23                | 0.2        |
| 0                            | 7.5     | 10.3                        | 32                | 0.2        |



Figure 38: Average and 90<sup>th</sup> Percentile Response Times by Number of Available Vehicles



## Reliability Factors

### Percentage of First Due Compliance

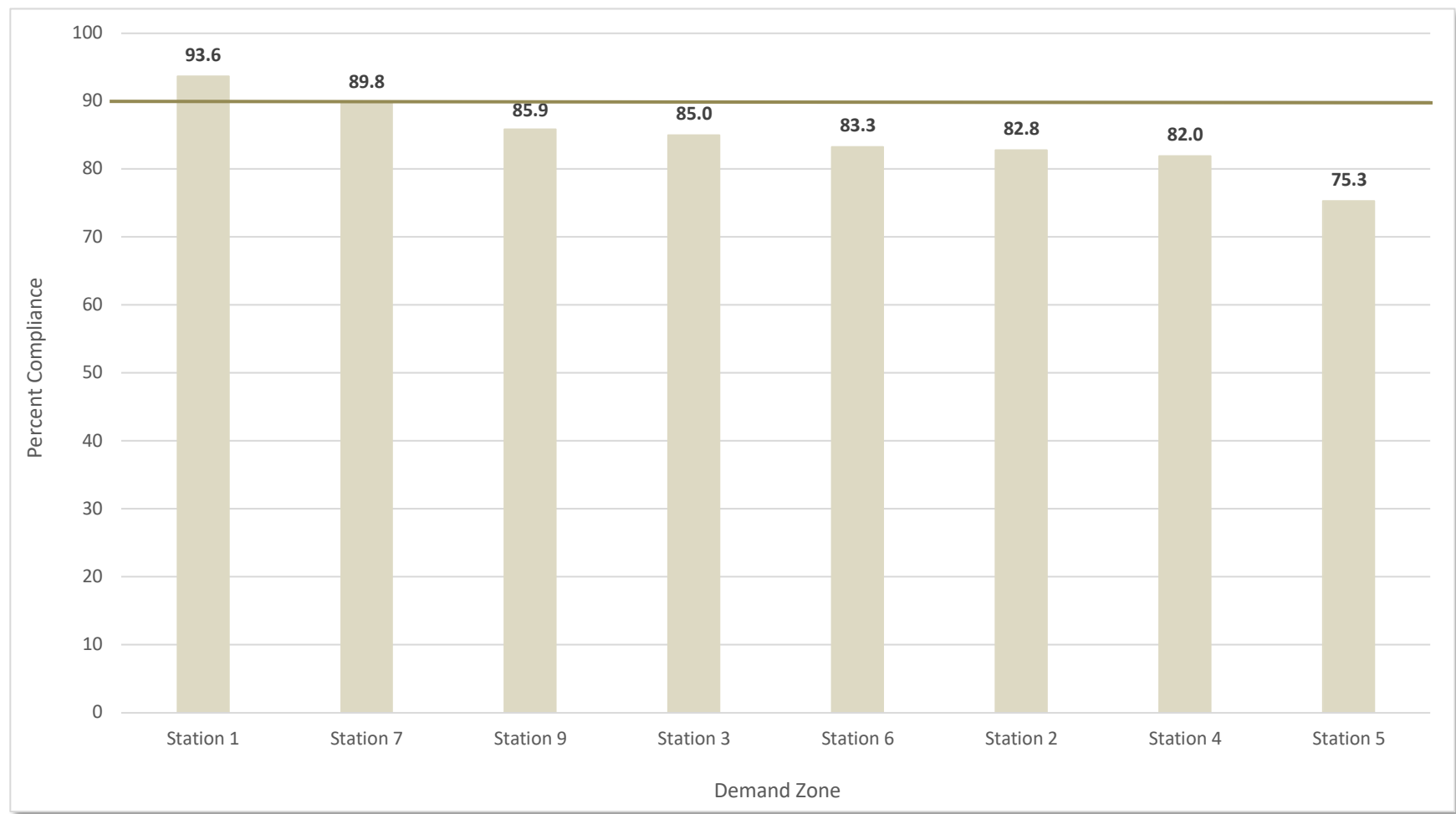
The reliability of the distribution model is a factor of how often the response model is available and able to respond to a call within the assigned demand zone. This analysis utilized all dispatched calls within RFD's demand zones, and performance included responses from any unit in RFD's department. Units assigned to Station 1 responded to calls within their respective demand zone >90% of the time (Table 40; Figure 39). Units from all other stations responded to calls within their respective demand zones <90% of the time.

**Table 40: First Due Compliance by Demand Zone – Number of Calls**

| Demand Zone  | Responding Unit's Assigned Station |              |              |              |              |              |              |              |           |           | Total <sup>1</sup> |
|--------------|------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-----------|--------------------|
|              | Station 1                          | Station 2    | Station 3    | Station 4    | Station 5    | Station 6    | Station 7    | Station 9    | RFD Admin | RFD Other |                    |
| Station 1    | 2,149                              | 74           | 91           | 28           | 16           | 121          | 72           | 7            | 5         | 0         | 2,295              |
| Station 2    | 214                                | 1,432        | 11           | 5            | 120          | 10           | 143          | 10           | 4         | 0         | 1,729              |
| Station 3    | 440                                | 37           | 2,537        | 202          | 8            | 99           | 39           | 0            | 5         | 0         | 2,985              |
| Station 4    | 122                                | 5            | 223          | 1,608        | 5            | 250          | 29           | 2            | 4         | 0         | 1,962              |
| Station 5    | 77                                 | 337          | 2            | 1            | 1,710        | 4            | 117          | 314          | 3         | 1         | 2,270              |
| Station 6    | 168                                | 7            | 56           | 200          | 5            | 1,375        | 164          | 3            | 6         | 0         | 1,651              |
| Station 7    | 133                                | 83           | 4            | 10           | 31           | 203          | 1,778        | 21           | 5         | 0         | 1,981              |
| Station 9    | 58                                 | 39           | 2            | 1            | 270          | 3            | 82           | 1,427        | 0         | 0         | 1,662              |
| Unknown      | 85                                 | 40           | 63           | 45           | 55           | 31           | 99           | 41           | 3         | 4         | 373                |
| <b>Total</b> | <b>3,446</b>                       | <b>2,054</b> | <b>2,989</b> | <b>2,100</b> | <b>2,220</b> | <b>2,096</b> | <b>2,523</b> | <b>1,825</b> | <b>35</b> | <b>5</b>  | <b>16,908</b>      |

<sup>1</sup>“Total” values may not equal the sum of the cell values across columns per row because units from multiple stations may have responded to a call within the given demand zone.

Figure 39: Percentage of First Due Compliance by Demand Zone



## Overlapped or Simultaneous Call Analysis

Overlapped or simultaneous calls are defined as another call being received in a demand zone or for a first due station while one or more calls are already ongoing for the same demand zone or first due station. For example, if there is an ongoing call in Station 1's zone wherein all units have not yet been cleared, and another request for service occurs in Station 1's zone, those two calls would be captured as overlapped calls. Understanding the percentage of overlapped calls will help to determine the number of units to staff for each station. In general, the larger the call volume for a demand zone or first due station, the greater the likelihood of overlapped calls occurring. The distribution of the demand throughout the day will impact the chance of having overlapped calls. Additionally, the duration of a call plays a significant role; the longer it takes to clear a request, the greater the likelihood of having an overlapping request.

Results for these analyses are reported for all calls and by EMS and fire calls. Note that for EMS and fire calls, overlapped calls represent any call classified in its respective program area, but that overlapped with one or more calls from *any* program area. For example, Station 1 observed 187 calls during 2018 that overlapped with one or more calls within its demand zone—113 were classified as EMS calls, 16 were classified as fire calls, and 58 were classified into one of the other call categories. The 113 calls that were classified as EMS calls could have overlapped with one or more calls from EMS, fire, or other program areas. Calls with an unknown demand zone (first due station) were not included in these analyses.

Station 3's demand zone had the highest percentage of overlapped calls during 2018 for overall calls (11.8%; Table 41; Figure 40) and for EMS calls (8.6%; Table 42; Figure 41). Station 1's demand zone had the highest percentage of overlapped calls during 2018 classified as fire calls (0.7%; Table 43; Figure 42).

**Table 41: Overlapped Calls by Demand Zone**

| Demand Zone            | Overlapped Calls | Total Calls | Percentage of Overlapped Calls |
|------------------------|------------------|-------------|--------------------------------|
| Station 1 <sup>1</sup> | 187              | 2,291       | 8.2                            |
| Station 2 <sup>2</sup> | 106              | 1,726       | 6.1                            |
| Station 3 <sup>3</sup> | 353              | 2,980       | 11.8                           |
| Station 4 <sup>4</sup> | 154              | 1,960       | 7.9                            |
| Station 5 <sup>5</sup> | 196              | 2,265       | 8.7                            |
| Station 6 <sup>6</sup> | 99               | 1,645       | 6.0                            |
| Station 7 <sup>2</sup> | 197              | 1,978       | 10.0                           |
| Station 9              | 114              | 1,662       | 6.9                            |

<sup>1</sup>Four calls were missing maximum clear dates and times.

<sup>2</sup>Three calls were missing maximum clear dates and times.

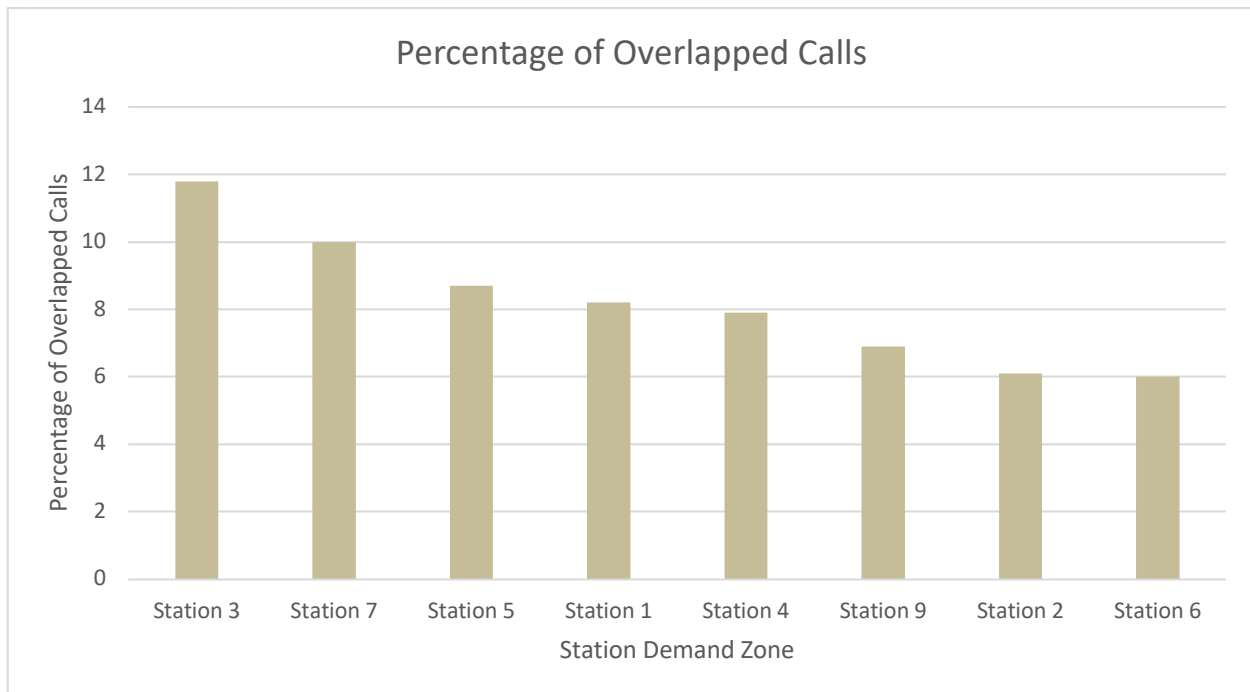
<sup>3</sup>Four calls were missing maximum clear dates and times, and one call's maximum clear date was reported as 10/12/20.

<sup>4</sup>Two calls were missing maximum clear dates and times.

<sup>5</sup>Five calls were missing maximum clear dates and times.

<sup>6</sup>Six calls were missing maximum clear dates and times.

**Figure 40: Percentage of Overlapped Calls by Demand Zone**



**Table 42: Overlapped EMS Calls by Demand Zone**

| Demand Zone            | Overlapped Calls | Total Calls | Percentage of Overlapped Calls |
|------------------------|------------------|-------------|--------------------------------|
| Station 1 <sup>1</sup> | 113              | 2,291       | 4.9                            |
| Station 2 <sup>2</sup> | 74               | 1,726       | 4.3                            |
| Station 3 <sup>3</sup> | 257              | 2,980       | 8.6                            |
| Station 4 <sup>4</sup> | 96               | 1,960       | 4.9                            |
| Station 5 <sup>5</sup> | 131              | 2,265       | 5.8                            |
| Station 6 <sup>6</sup> | 56               | 1,645       | 3.4                            |
| Station 7 <sup>2</sup> | 128              | 1,978       | 6.5                            |
| Station 9              | 83               | 1,662       | 5.0                            |

<sup>1</sup>Four calls were missing maximum clear dates and times.

<sup>2</sup>Three calls were missing maximum clear dates and times.

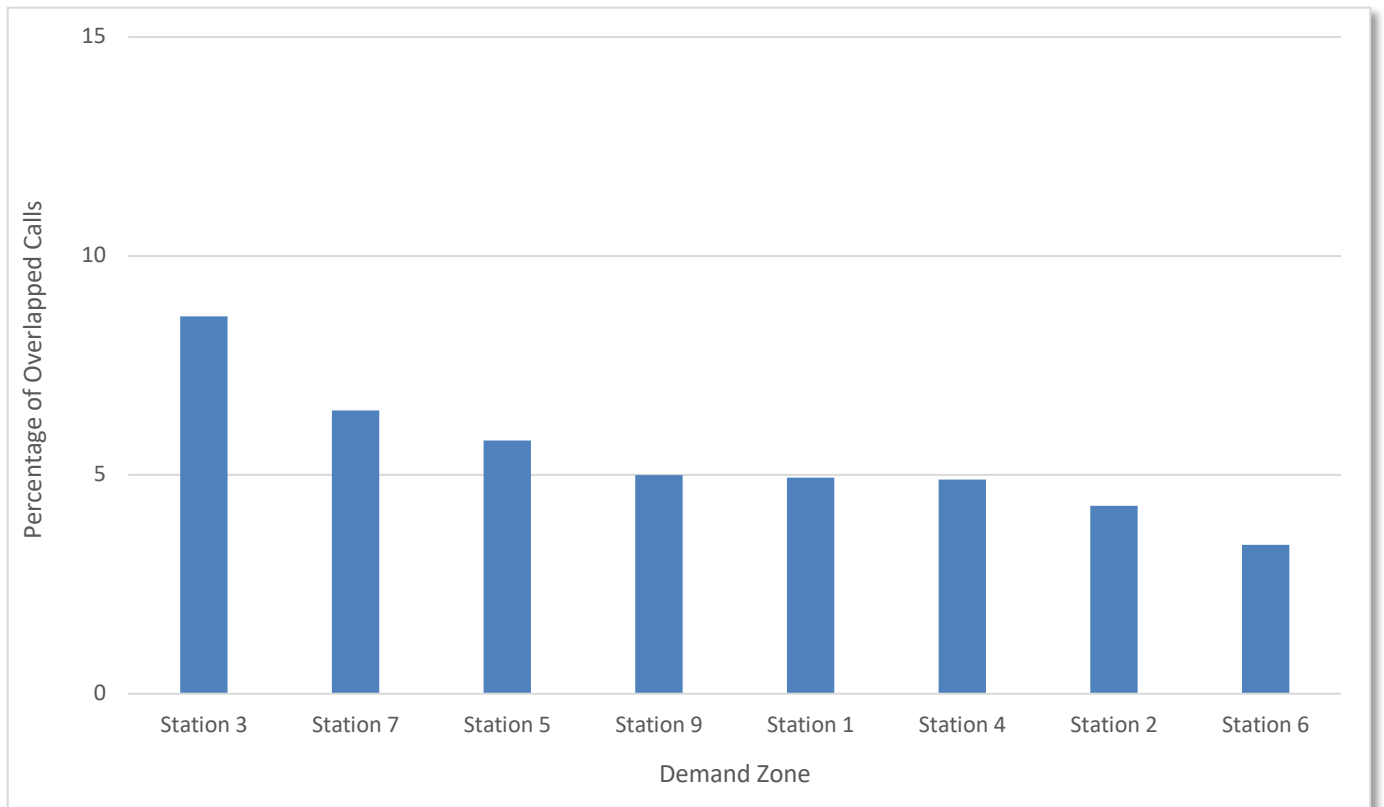
<sup>3</sup>Four calls were missing maximum clear dates and times, and one call's maximum clear date was reported as 10/12/20.

<sup>4</sup>Two calls were missing maximum clear dates and times.

<sup>5</sup>Five calls were missing maximum clear dates and times.

<sup>6</sup>Six calls were missing maximum clear dates and times.

**Figure 41: Percentage of Overlapped EMS Calls by Demand Zone**



**Table 43: Overlapped Fire Calls by Demand Zone**

| Demand Zone            | Overlapped Calls | Total Calls | Percentage of Overlapped Calls |
|------------------------|------------------|-------------|--------------------------------|
| Station 1 <sup>1</sup> | 16               | 2,291       | 0.7                            |
| Station 2 <sup>2</sup> | 4                | 1,726       | 0.2                            |
| Station 3 <sup>3</sup> | 9                | 2,980       | 0.3                            |
| Station 4 <sup>4</sup> | 6                | 1,960       | 0.3                            |
| Station 5 <sup>5</sup> | 1                | 2,265       | 0.0                            |
| Station 6 <sup>6</sup> | 1                | 1,645       | 0.1                            |
| Station 7 <sup>2</sup> | 8                | 1,978       | 0.4                            |
| Station 9              | 4                | 1,662       | 0.2                            |

<sup>1</sup>Four calls were missing maximum clear dates and times.

<sup>2</sup>Three calls were missing maximum clear dates and times.

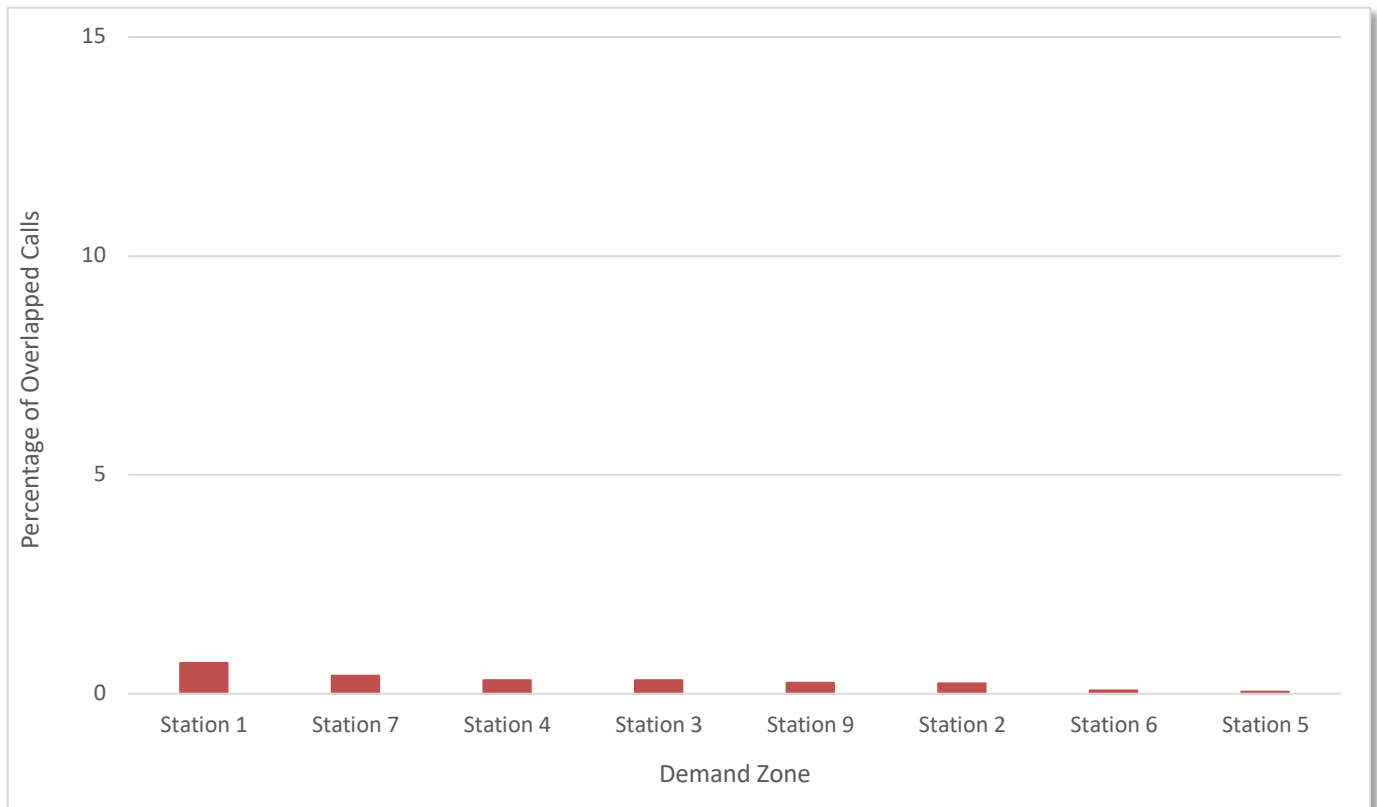
<sup>3</sup>Four calls were missing maximum clear dates and times, and one call's maximum clear date was reported as 10/12/20.

<sup>4</sup>Two calls were missing maximum clear dates and times.

<sup>5</sup>Five calls were missing maximum clear dates and times.

<sup>6</sup>Six calls were missing maximum clear dates and times.

**Figure 42: Percentage of Overlapped Fire Calls by Demand Zone**



## BASELINE PERFORMANCE TABLES

From the reporting periods of 2014 to 2018, the total number of calls increased from 13,468 (average 36.9 calls per day) to 16,930 (average 46.4 calls per day; Table 44). Year-over-year (YoY) growth during this time frame ranged from 3.0% to 11.3%.

**Table 44: Number of Incidents Dispatched by Category, Reporting Period, and Demand Zone**

| Demand Zone | Call Category                      | Reporting Period <sup>1</sup> |        |        |        |        |
|-------------|------------------------------------|-------------------------------|--------|--------|--------|--------|
|             |                                    | 2014                          | 2015   | 2016   | 2017   | 2018   |
| Roseville   | EMS                                | 8,618                         | 9,614  | 9,561  | 9,769  | 10,190 |
|             | False Alarm & False Call           | 474                           | 576    | 675    | 685    | 734    |
|             | Fire (Not Building or Wildland)    | 133                           | 121    | 121    | 123    | 89     |
|             | Building Fire                      | 109                           | 112    | 109    | 101    | 120    |
|             | Wildland Fire                      | 66                            | 54     | 62     | 64     | 91     |
|             | Fire (All)                         | 308                           | 287    | 292    | 288    | 300    |
|             | Good Intent Call                   | 1,345                         | 1,582  | 1,833  | 2,336  | 2,447  |
|             | Hazardous Conditions (No Fire)     | 201                           | 215    | 220    | 237    | 258    |
|             | Rescue                             | 772                           | 806    | 922    | 876    | 918    |
|             | Service Call                       | 1,386                         | 1,567  | 1,563  | 1,731  | 1,703  |
|             | Severe Weather & Natural Disaster  | 6                             | 2      | 1      | 2      | 3      |
|             | Special Incident Type              | 3                             | 1      | 4      | 14     | 29     |
|             | Unknown                            | 0                             | 5      | 0      | 1      | 0      |
|             | Total <sup>2</sup>                 | 13,113                        | 14,655 | 15,071 | 15,939 | 16,582 |
|             | Average Calls per Day <sup>2</sup> | 35.9                          | 40.2   | 41.2   | 43.7   | 45.4   |
|             | YoY Growth                         | N/A                           | 11.8%  | 2.8%   | 5.8%   | 4.0%   |
| Livotti     | EMS                                | 42                            | 38     | 22     | 41     | 39     |
|             | False Alarm & False Call           | 0                             | 0      | 1      | 1      | 2      |
|             | Fire (Not Building or Wildland)    | 0                             | 2      | 2      | 0      | 0      |
|             | Building Fire                      | 0                             | 1      | 1      | 1      | 0      |
|             | Wildland Fire                      | 0                             | 1      | 0      | 0      | 1      |
|             | Fire (All)                         | 0                             | 4      | 3      | 1      | 1      |
|             | Good Intent Call                   | 6                             | 5      | 5      | 5      | 5      |
|             | Hazardous Conditions (No Fire)     | 1                             | 3      | 0      | 0      | 0      |
|             | Rescue                             | 3                             | 4      | 1      | 2      | 3      |
|             | Service Call                       | 7                             | 3      | 4      | 4      | 11     |
|             | Severe Weather & Natural Disaster  | 0                             | 0      | 0      | 0      | 0      |
|             | Special Incident Type              | 0                             | 0      | 0      | 0      | 0      |
|             | Unknown                            | 0                             | 0      | 0      | 0      | 0      |
|             | Total <sup>2</sup>                 | 59                            | 57     | 36     | 54     | 61     |
|             | Average Calls per Day <sup>2</sup> | 0.2                           | 0.2    | 0.1    | 0.1    | 0.1    |
|             | YoY Growth                         | N/A                           | -3.4%  | -36.8% | 50.0%  | 13.0%  |



| Demand Zone                     | Call Category                      | Reporting Period <sup>1</sup> |        |        |        |        |
|---------------------------------|------------------------------------|-------------------------------|--------|--------|--------|--------|
|                                 |                                    | 2014                          | 2015   | 2016   | 2017   | 2018   |
| Other Jurisdiction <sup>3</sup> | EMS                                | 26                            | 22     | 25     | 16     | 14     |
|                                 | False Alarm & False Call           | 2                             | 5      | 3      | 3      | 3      |
|                                 | Fire (Not Building or Wildland)    | 10                            | 8      | 5      | 2      | 3      |
|                                 | Building Fire                      | 18                            | 12     | 9      | 8      | 10     |
|                                 | Wildland Fire                      | 17                            | 13     | 13     | 7      | 11     |
|                                 | Fire (All)                         | 45                            | 33     | 27     | 17     | 24     |
|                                 | Good Intent Call                   | 153                           | 146    | 175    | 180    | 138    |
|                                 | Hazardous Conditions (No Fire)     | 6                             | 6      | 2      | 2      | 2      |
|                                 | Rescue                             | 22                            | 21     | 10     | 13     | 6      |
|                                 | Service Call                       | 27                            | 31     | 71     | 61     | 80     |
|                                 | Severe Weather & Natural Disaster  | 0                             | 0      | 1      | 0      | 0      |
|                                 | Special Incident Type              | 0                             | 0      | 0      | 0      | 0      |
|                                 | Unknown                            | 0                             | 0      | 0      | 0      | 0      |
|                                 | Total <sup>2</sup>                 | 281                           | 264    | 314    | 292    | 267    |
|                                 | Average Calls per Day <sup>2</sup> | 0.8                           | 0.7    | 0.9    | 0.8    | 0.7    |
|                                 | YoY Growth                         | N/A                           | -6.0%  | 18.9%  | -7.0%  | -8.6%  |
| All <sup>4</sup>                | EMS                                | 8,688                         | 9,674  | 9,611  | 9,826  | 10,247 |
|                                 | False Alarm & False Call           | 476                           | 581    | 679    | 689    | 739    |
|                                 | Fire (Not Building or Wildland)    | 143                           | 131    | 128    | 125    | 92     |
|                                 | Building Fire                      | 128                           | 125    | 119    | 110    | 130    |
|                                 | Wildland Fire                      | 89                            | 70     | 78     | 73     | 103    |
|                                 | Fire (All)                         | 360                           | 326    | 325    | 308    | 325    |
|                                 | Good Intent Call                   | 1,506                         | 1,743  | 2,015  | 2,529  | 2,594  |
|                                 | Hazardous Conditions (No Fire)     | 209                           | 224    | 222    | 239    | 261    |
|                                 | Rescue                             | 797                           | 831    | 935    | 893    | 928    |
|                                 | Service Call                       | 1,422                         | 1,602  | 1,645  | 1,801  | 1,804  |
|                                 | Severe Weather & Natural Disaster  | 6                             | 2      | 1      | 2      | 3      |
|                                 | Special Incident Type              | 4                             | 1      | 5      | 14     | 29     |
|                                 | Unknown                            | 0                             | 5      | 0      | 2      | 0      |
|                                 | Total <sup>2</sup>                 | 13,468                        | 14,989 | 15,438 | 16,303 | 16,930 |
|                                 | Average Calls per Day <sup>2</sup> | 36.9                          | 41.1   | 42.2   | 44.7   | 46.4   |
|                                 | YoY Growth                         | N/A                           | 11.3%  | 3.0%   | 5.6%   | 3.8%   |

<sup>1</sup>Reporting periods reflect full calendar years, from January 1 to December 31 of each respective year.

<sup>2</sup>Reporting period 2016 contained 366 days due to inclusion of leap year date February 29, 2016; all other reporting periods contained 365 days.

<sup>3</sup>Other jurisdictions include Amador El Dorado, Auburn, Butte, Casino, CDF, El Dorado Hills, Foresthill, Lake Napa, Lincoln, Loomis, Mountain, North San Juan, OES, Penryn, Placer Consolidated, Placer Hills, PLCR CON, PLCR South, Rocklin, Sacramento City Fire, Sacramento Metro Fire, and other jurisdictions known to be outside Roseville, but not otherwise specified.

<sup>4</sup>Values for all demand zones include calls for which the demand zone was unknown; however, values specifically for unknown demand zones are not displayed individually in the table.

From the reporting periods of 2014 to 2018, the total number of responses to calls by RFD units increased from 16,487 (average 45.2 responses per day) to 20,847 (average 57.1 responses per day; Table 45). Total busy hours increased from 5,672.4 hours in 2014 to 6,624.4 hours in 2018. Average number of responses per call has remained consistent across reporting periods at 1.2 average responses per call.

Note that a small portion of responses each year were either missing times or had times excluded as outliers that were otherwise required for the calculation of busy time (compare “Number of Responses” column to “Responses with Time Data” column in the table below; see Appendix for additional details). To provide a possible upper range of busy hours per year, the average busy minutes per response per year could be substituted for each of the missing entries per year and included with the total calculation of busy hours per year. Under these circumstances, upper limits of busy hours per year would be as follows: 5,698.0 hours for 2014; 6,418.7 hours for 2015; 6,493.3 hours for 2016; 6,363.3 hours for 2017; and 6,721.4 hours for 2018.

**Table 45: Number of Calls, Number of Responses, and Total Busy Time by Reporting Period**

| Reporting Period <sup>1</sup> | Number of Calls <sup>2</sup> | Number of Responses <sup>3</sup> | Average Responses per Call | Total Busy Hours | Responses with Time Data <sup>4</sup> | Average Busy Minutes per Response | Average Calls per Day <sup>5</sup> | Average Responses per Day <sup>5</sup> |
|-------------------------------|------------------------------|----------------------------------|----------------------------|------------------|---------------------------------------|-----------------------------------|------------------------------------|----------------------------------------|
| 2014                          | 13,466                       | 16,487                           | 1.2                        | 5,672.4          | 16,413                                | 20.7                              | 36.9                               | 45.2                                   |
| 2015                          | 14,969                       | 18,123                           | 1.2                        | 6,173.6          | 17,431                                | 21.3                              | 41.0                               | 49.7                                   |
| 2016                          | 15,402                       | 17,942                           | 1.2                        | 6,190.4          | 17,105                                | 21.7                              | 42.1                               | 49.0                                   |
| 2017                          | 16,277                       | 19,839                           | 1.2                        | 6,236.6          | 19,444                                | 19.2                              | 44.6                               | 54.4                                   |
| 2018                          | 16,908                       | 20,847                           | 1.2                        | 6,624.4          | 20,546                                | 19.3                              | 46.3                               | 57.1                                   |

<sup>1</sup>Reporting periods reflect full calendar years, from January 1 to December 31 of each respective year.

<sup>2</sup>“Number of Calls” reflects an adjusted number of unique incidents to correspond with responses made by RFD units as available in the unit-level data file. For example, for 2018, 11 unique incident keys appeared in the call-level data file, but not in the unit-level data file, and within the unit-level data file, 11 additional unique calls reported only AMR unit responses.

<sup>3</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>4</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

<sup>5</sup>Reporting period 2016 contained 366 days due to inclusion of leap year date February 29, 2016; all other reporting periods contained 365 days.

This last section presents analyses of baseline performance times separately for EMS (Table 46 and Table 47) and fire related incidents (Table 48 and Table 49) that focus on responses from RFD's arriving primary front-line units to emergency (lights and sirens) calls. Call status as emergency (lights and sirens) was obtained from the RMS call-level data file (i.e., variable "Emergency\_PRIORITYRESPONSEFLAG"). Units identified by RFD as primary front-line units included Battalion Chief units B1, B2, and B9; brush trucks BR5, BR6, and BR9, engines E1, E2, E3, E4, E5, E5B, E6, E6B, E7, E8, E9, and E9B; grass units G2 and G2; hazmat unit HM1; rescue unit R7; and trucks T1 and T7.

Across the reporting periods of 2014 to 2018, the vast majority of emergency calls associated with primary front-line unit arrivals to EMS related incidents included one (46,530/46,747; 99.5%) or two arriving units (199/46,747; 0.4%); as such, we used the 2<sup>nd</sup> arriving unit as ERF for EMS related incidents. The majority of emergency calls associated with primary front-line unit arrivals to fire related incidents included one (1,423/3,292; 43.2%), two (691/3,292; 21.0%), three (435/3,292; 13.2%), four (284/3,292; 8.6%), and five (176/3,292; 5.3%) arriving units; as such, we used the 3<sup>rd</sup> and 5<sup>th</sup> arriving unit as ERF for fire related incidents.

**Table 46: Baseline Average Performance of Primary Front-Line Arriving Units for EMS Incidents by Reporting Period**

| Performance Metric       | Arriving Unit         | Average Time (Minutes) |       |       |       |       |
|--------------------------|-----------------------|------------------------|-------|-------|-------|-------|
|                          |                       | 2014                   | 2015  | 2016  | 2017  | 2018  |
| Dispatch Time            | 1 <sup>st</sup>       | 1.0                    | 1.1   | 1.1   | 1.3   | 1.3   |
|                          | 2 <sup>nd</sup> (ERF) | 6.8                    | 5.7   | 8.0   | 5.7   | 7.9   |
| Turnout Time             | 1 <sup>st</sup>       | 1.2                    | 1.2   | 1.3   | 1.3   | 1.4   |
|                          | 2 <sup>nd</sup> (ERF) | 1.3                    | 1.6   | 2.2   | 2.6   | 3.0   |
| Travel Time              | 1 <sup>st</sup>       | 3.3                    | 3.3   | 3.4   | 3.5   | 3.4   |
|                          | 2 <sup>nd</sup> (ERF) | 5.3                    | 5.2   | 6.1   | 5.5   | 5.4   |
| Response Time            | 1 <sup>st</sup>       | 5.3                    | 5.6   | 5.8   | 6.0   | 6.0   |
|                          | 2 <sup>nd</sup> (ERF) | 14.0                   | 18.0  | 15.8  | 13.1  | 15.0  |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 8,418                  | 9,345 | 9,287 | 9,558 | 9,922 |
|                          | 2 <sup>nd</sup> (ERF) | 67                     | 32    | 30    | 36    | 34    |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 47: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-Line Arriving Units for EMS Incidents by Reporting Period**

| Performance Metric       | Arriving Unit         | 90 <sup>th</sup> Percentile Time (Minutes) |       |       |       |       |
|--------------------------|-----------------------|--------------------------------------------|-------|-------|-------|-------|
|                          |                       | 2014                                       | 2015  | 2016  | 2017  | 2018  |
| Dispatch Time            | 1 <sup>st</sup>       | 1.6                                        | 1.8   | 1.8   | 2.0   | 2.1   |
|                          | 2 <sup>nd</sup> (ERF) | 16.3                                       | 15.4  | 21.6  | 13.8  | 19.6  |
| Turnout Time             | 1 <sup>st</sup>       | 1.9                                        | 2.0   | 2.1   | 2.1   | 2.2   |
|                          | 2 <sup>nd</sup> (ERF) | 2.3                                        | 3.1   | 4.3   | 8.9   | 6.5   |
| Travel Time              | 1 <sup>st</sup>       | 5.2                                        | 5.3   | 5.4   | 5.5   | 5.4   |
|                          | 2 <sup>nd</sup> (ERF) | 9.7                                        | 13.0  | 11.2  | 11.1  | 11.8  |
| Response Time            | 1 <sup>st</sup>       | 7.5                                        | 7.8   | 8.1   | 8.3   | 8.2   |
|                          | 2 <sup>nd</sup> (ERF) | 28.7                                       | 39.9  | 28.8  | 21.2  | 27.1  |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 8,418                                      | 9,345 | 9,287 | 9,558 | 9,922 |
|                          | 2 <sup>nd</sup> (ERF) | 67                                         | 32    | 30    | 36    | 34    |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 48: Baseline Average Performance of Primary Front-Line Arriving Units for Fire Incidents by Reporting Period**

| Performance Metric       | Arriving Unit         | Average Time (Minutes) |      |      |      |      |
|--------------------------|-----------------------|------------------------|------|------|------|------|
|                          |                       | 2014                   | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup>       | 1.6                    | 1.4  | 1.5  | 1.5  | 1.4  |
|                          | 3 <sup>rd</sup> (ERF) | 2.7                    | 2.0  | 2.3  | 1.8  | 2.2  |
|                          | 5 <sup>th</sup> (ERF) | 4.5                    | 3.1  | 3.3  | 2.9  | 4.1  |
| Turnout Time             | 1 <sup>st</sup>       | 1.5                    | 1.6  | 1.7  | 1.7  | 1.7  |
|                          | 3 <sup>rd</sup> (ERF) | 1.9                    | 2.5  | 2.1  | 2.6  | 2.5  |
|                          | 5 <sup>th</sup> (ERF) | 2.2                    | 2.3  | 2.1  | 2.8  | 2.2  |
| Travel Time              | 1 <sup>st</sup>       | 4.3                    | 3.7  | 4.3  | 3.9  | 3.6  |
|                          | 3 <sup>rd</sup> (ERF) | 5.9                    | 5.5  | 7.1  | 5.8  | 5.2  |
|                          | 5 <sup>th</sup> (ERF) | 7.9                    | 6.6  | 7.7  | 7.9  | 7.4  |
| Response Time            | 1 <sup>st</sup>       | 7.0                    | 6.4  | 7.1  | 7.1  | 6.6  |
|                          | 3 <sup>rd</sup> (ERF) | 9.7                    | 9.3  | 10.9 | 9.0  | 9.5  |
|                          | 5 <sup>th</sup> (ERF) | 13.4                   | 11.2 | 12.7 | 13.6 | 13.1 |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 297                    | 282  | 281  | 264  | 299  |
|                          | 3 <sup>rd</sup> (ERF) | 74                     | 81   | 94   | 85   | 101  |
|                          | 5 <sup>th</sup> (ERF) | 30                     | 34   | 32   | 34   | 46   |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 49: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-Line Arriving Units for Fire Incidents by Reporting Period**

| Performance Metric       | Arriving Unit         | Average Time (Minutes) |      |      |      |      |
|--------------------------|-----------------------|------------------------|------|------|------|------|
|                          |                       | 2014                   | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup>       | 3.1                    | 2.7  | 2.2  | 2.9  | 2.5  |
|                          | 3 <sup>rd</sup> (ERF) | 6.8                    | 5.5  | 7.5  | 5.0  | 5.0  |
|                          | 5 <sup>th</sup> (ERF) | 15.4                   | 10.6 | 11.2 | 8.6  | 12.2 |
| Turnout Time             | 1 <sup>st</sup>       | 2.3                    | 2.6  | 2.7  | 2.6  | 2.4  |
|                          | 3 <sup>rd</sup> (ERF) | 3.1                    | 4.2  | 3.5  | 4.2  | 4.9  |
|                          | 5 <sup>th</sup> (ERF) | 3.7                    | 3.4  | 3.9  | 6.4  | 3.6  |
| Travel Time              | 1 <sup>st</sup>       | 6.9                    | 5.8  | 7.8  | 6.3  | 6.0  |
|                          | 3 <sup>rd</sup> (ERF) | 11.3                   | 10.5 | 12.2 | 10.1 | 10.5 |
|                          | 5 <sup>th</sup> (ERF) | 16.0                   | 11.0 | 13.3 | 16.0 | 11.4 |
| Response Time            | 1 <sup>st</sup>       | 10.2                   | 9.1  | 10.3 | 9.9  | 9.6  |
|                          | 3 <sup>rd</sup> (ERF) | 16.9                   | 14.4 | 16.8 | 13.5 | 14.0 |
|                          | 5 <sup>th</sup> (ERF) | 29.1                   | 16.0 | 19.6 | 23.9 | 23.9 |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 297                    | 282  | 281  | 264  | 299  |
|                          | 3 <sup>rd</sup> (ERF) | 74                     | 81   | 94   | 85   | 101  |
|                          | 5 <sup>th</sup> (ERF) | 30                     | 34   | 32   | 34   | 46   |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

## APPENDIX

This section reflects the audit, exclusion, and classification activities performed on the combined 2016-2018 CAD and 2014-2018 RMS data files available from RFD spanning January 1, 2016 to December 31, 2018 and January 1, 2014 to December 31, 2018, respectively. Prior to any exclusion activity, the 2014-2018 RMS unit-level data file, with companion data subsequently mapped from the RMS call-level data file and the CAD call-/unit-level data file, as available and as needed, originally contained 154,344 entries.

There were 74 incident numbers in the RMS call-level data file that were reported more than once. Only five of the 74 duplicated incident numbers were due to exposure > 0 (e.g., one structure fire call wherein one or more adjacent structures also caught on fire). These calls were only counted as one unique call each, regardless of exposure count. For the remaining 69 duplicated incident numbers, if the call received dates and times and the addresses matched between the entries, the call was counted only once as a unique call. If the call received dates and times and the addresses did not match between the entries, the incident number was modified with a suffix (i.e., “-A” or “-B”) to signify each entry as a unique call.

Additional details related to call demand zone and incident type were mapped to data in the RMS call-level file using external data dictionaries provided by RFD. These original and expanded RMS call-level details were then mapped to data in the RMS unit-level data file via the “incidentkey” variable. Additional unit details were mapped to data in the RMS unit-level file using worksheets completed by RFD leadership. CAD data were mapped to data in the RMS unit-level data file through the original incident number, once this variable was re-formatted in the CAD data file to match the format in the RMS call-level data file (e.g., CAD incident number 2018-00017227 appears as incident number 1817227 in the RMS call-level data file).

Not all incident numbers reported in the CAD data file appeared in the RMS call-level data file, and not all incident numbers reported in the RMS call-level data file appeared in the CAD data file. Reasons for this include, but are not limited to, (1) missing incident numbers for entries in the CAD data file, (2) date and time entries in the CAD data file are reported in GMT, whereas date and time entries in the RMS call-level data file are reported in PDT, such that calls occurring late in 2018 reported in RMS will not appear in CAD until 2019, and (3) test calls reported in the CAD data file are not recorded in RMS.

Of the 154,344 entries, 93,238 reflected responses from RFD units, 60,564 reflected responses from AMR units, and 542 reflected responses from units assigned to other agencies. All records related to RFD units were retained to reflect RFD response workload, but negative times, times indicating 0 minutes, and times considered to be outliers were excluded from all related analyses, whether for RFD units or for units from other agencies.

**Table 50: Basic Audit of Data Files – 2014-2018**

| Audit Activity <sup>1</sup>                                                                            | Frequency<br>(n) | Percent<br>of Total<br>(%) |
|--------------------------------------------------------------------------------------------------------|------------------|----------------------------|
| <b>Total Entries in Data Set</b>                                                                       | <b>154,344</b>   | <b>--</b>                  |
| First Due Station Not Available 2016-2018 Only <sup>2</sup>                                            | 1,733            | --                         |
| Demand Zone Not Identifiable <sup>3</sup>                                                              | 136              | 0.1                        |
| Incident Type is Blank                                                                                 | 8                | 0.0                        |
| Mutual Aid Code is Blank                                                                               | 22               | 0.0                        |
| Unit Dispatch Date and Time is Blank                                                                   | 1,095            | 0.7                        |
| Unit Dispatch Date and Time Reported as 1/1/1900 12:00:00 AM                                           | 11               | 0.0                        |
| Unit Enroute Date and Time Missing When Unit Arrival Date and Time Reported                            | 2,136            | 1.4                        |
| Unit Enroute Date and Time Reported as 1/1/1900 12:00:00 AM                                            | 11               | 0.0                        |
| Entries Reporting Cancelled Enroute <sup>4</sup> When Scene Arrival Date and Time Reported             | 1,397            | 0.9                        |
| Unit Clear Date and Time is Blank                                                                      | 5,345            | 3.5                        |
| Unit Clear Date Reported as xx/xx/2019 When Call Received Date Reported as xx/xx/2018 <sup>5</sup>     | 2                | 0.0                        |
| Unit Clear Date Reported as xx/xx/2020 When Call Received Date Reported as xx/xx/2018 <sup>5</sup>     | 1                | 0.0                        |
| Unit Clear Date Reported as 4/26/3320 When Call Received Date Reported as 1/23/2016                    | 1                | 0.0                        |
| Received Date and Time to Unit Dispatch Date and Time (Unit Dispatch Time) < 0 Minutes                 | 59               | 0.0                        |
| Unit Dispatch Date and Time = Received Date and Time (Unit Dispatch Time = 0 Minutes)                  | 1,330            | 0.9                        |
| Received Date and Time to Unit Dispatch Date and Time (Unit Dispatch Time) > 1 Minute <sup>6</sup>     | 100,589          | 65.2                       |
| Received Date and Time to Unit Dispatch Date and Time (Unit Dispatch Time) > 30 Minutes                | 1,400            | 0.9                        |
| Unit Dispatch Date and Time to Unit Enroute Date and Time (Unit Turnout Time) < 0 Minutes              | 2                | 0.0                        |
| Unit Enroute Date and Time = Unit Dispatch Date and Time (Unit Turnout Time = 0 Minutes)               | 17,350           | 11.2                       |
| Unit Dispatch Date and Time to Unit Enroute Date and Time (Unit Turnout Time) > 4 Minutes <sup>6</sup> | 2,172            | 1.4                        |
| Unit Dispatch Date and Time to Unit Enroute Date and Time (Unit Turnout Time) > 30 Minutes             | 25               | 0.0                        |
| Unit Enroute Date and Time to Unit Arrival Date and Time (Unit Travel Time) < 0 Minutes                | 8                | 0.0                        |
| Unit Arrival Date and Time = Unit Enroute Date and Time (Unit Travel Time = 0 Minutes)                 | 8,892            | 5.8                        |
| Unit Enroute Date and Time to Unit Arrival Date and Time (Unit Travel Time) > 13 Minutes <sup>6</sup>  | 1,735            | 1.1                        |
| Unit Enroute Date and Time to Unit Arrival Date and Time (Unit Travel Time) > 60 Minutes               | 99               | 0.1                        |
| Received Date and Time to Unit Arrival Date and Time (Unit Response Time) < 0 Minutes                  | 31               | 0.0                        |
| Unit Arrival Date and Time = Received Date and Time (Unit Response Time = 0 Minutes)                   | 374              | 0.2                        |
| Received Date and Time to Unit Arrival Date and Time (Unit Response Time) > 15 Minutes <sup>6</sup>    | 6,158            | 4.0                        |
| Received Date and Time to Unit Arrival Date and Time (Unit Response Time) > 60 Minutes                 | 554              | 0.4                        |
| Unit Dispatch Date and Time = Unit Clear Date and Time (Unit Busy Time = 0 Minutes)                    | 12               | 0.0                        |
| Unit Dispatch Date and Time to Unit Clear Date and Time (Unit Busy Time) > 24 Hours <sup>7</sup>       | 103              | 0.1                        |
| Unit Busy Time Not Calculated Due to Missing Unit Dispatch and/or Clear Date and Time                  | 6,418            | 4.2                        |

<sup>1</sup>Audit activities were independent of one another, such that frequency and percent data are not intended to be additive.

<sup>2</sup>“StationLayer” variable from CAD data file reflecting data from 2016-2018 only; 1,733 missing for individual responses due to no “StationLayer” available for 1,141 unique calls, either because the entry was “NULL” in the CAD data file or because an incident number appeared in the RMS data file but not in the CAD data file where first due station was retrieved.

<sup>3</sup>Reflects 81 unique calls; demand zone entries not identifiable included “0,” “d109,” “Z06,” “n/a,” “NA,” “NULL,” and “UNK.”

<sup>4</sup>Variable in RMS file “CANCELLEDENROUTEFLAG” = 1.

<sup>5</sup>Year was changed to 2018 given other time values and last unit cleared date for call.

<sup>6</sup>Threshold for identification of entries as outliers applied by RFD, as noted in the 2015 Standards of Cover report.

<sup>7</sup>Using the call received date and time and last unit cleared date and time as a measure of call duration for comparison, 49 of these 103 entries had call durations < 60 minutes and ten entries had call durations between one and ten hours, indicating a high probability that the individual unit clear date and time entries contained errors. The remaining 44 entries had call durations between 22 hours and 30 days, such that data entry errors may or may not have occurred with individual unit clear date and time entries.

**Table 51: Exclusions from Data Files for Busy and Performance Time Analyses – 2014-2018**

| Exclusion Activity <sup>1</sup>                                                                         | Frequency (n)  | Percent of Total (%) |
|---------------------------------------------------------------------------------------------------------|----------------|----------------------|
| <b>Total Entries in Data Set</b>                                                                        | <b>154,344</b> | <b>--</b>            |
| Unit Dispatch Date and Time Reported as 1/1/1900 12:00:00 AM                                            | 11             | 0.0                  |
| Unit Enroute Date and Time Reported as 1/1/1900 12:00:00 AM                                             | 11             | 0.0                  |
| Received Date and Time to Unit Dispatch Date and Time (Unit Dispatch Time) < 0 Minutes <sup>2</sup>     | 59             | 0.0                  |
| Unit Dispatch Date and Time = Received Date and Time (Unit Dispatch Time = 0 Minutes) <sup>2</sup>      | 1,330          | 0.9                  |
| Received Date and Time to Unit Dispatch Date and Time (Unit Dispatch Time) > 30 Minutes <sup>2</sup>    | 1,400          | 0.9                  |
| Unit Dispatch Date and Time to Unit Enroute Date and Time (Unit Turnout Time) < 0 Minutes <sup>3</sup>  | 2              | 0.0                  |
| Unit Enroute Date and Time = Unit Dispatch Date and Time (Unit Turnout Time = 0 Minutes) <sup>3</sup>   | 17,350         | 11.2                 |
| Unit Dispatch Date and Time to Unit Enroute Date and Time (Unit Turnout Time) > 30 Minutes <sup>3</sup> | 25             | 0.0                  |
| Unit Enroute Date and Time to Unit Arrival Date and Time (Unit Travel Time) < 0 Minutes <sup>4</sup>    | 8              | 0.0                  |
| Unit Arrival Date and Time = Unit Enroute Date and Time (Unit Travel Time = 0 Minutes) <sup>4</sup>     | 8,892          | 5.8                  |
| Unit Enroute Date and Time to Unit Arrival Date and Time (Unit Travel Time) > 60 Minutes <sup>4</sup>   | 99             | 0.1                  |
| Received Date and Time to Unit Arrival Date and Time (Unit Response Time) < 0 Minutes <sup>5</sup>      | 2              | 0.0                  |
| Unit Arrival Date and Time = Received Date and Time (Unit Response Time = 0 Minutes) <sup>5</sup>       | 6              | 0.0                  |
| Received Date and Time to Unit Arrival Date and Time (Unit Response Time) > 60 Minutes <sup>5</sup>     | 29             | 0.0                  |
| Unit Dispatch Date and Time = Unit Clear Date and Time (Unit Busy Time = 0 Minutes) <sup>6</sup>        | 12             | 0.0                  |
| Unit Dispatch Date and Time to Unit Clear Date and Time (Unit Busy Time) > 24 Hours <sup>6</sup>        | 103            | 0.1                  |
| <b>Individual Time Values Excluded<sup>7</sup></b>                                                      | <b>29,339</b>  | <b>--</b>            |

<sup>1</sup>Exclusion activities were sequential, such that frequency data are additive.

<sup>2</sup>Retained records to reflect response workload, but excluded dispatch times and corresponding response times from all related analyses.

<sup>3</sup>Retained records to reflect response workload, but excluded turnout times and corresponding response times from all related analyses.

<sup>4</sup>Retained records to reflect response workload, but excluded travel times and corresponding response times from all related analyses.

<sup>5</sup>Retained records to reflect response workload, but excluded response times from all related analyses.

<sup>6</sup>Retained records to reflect response workload, but excluded busy times from all related analyses.

<sup>7</sup>Plus additional exclusion of corresponding response times, where applicable.



The table below compares 90<sup>th</sup> percentile performance time measures and corresponding sample sizes for the 2014 calendar year between values found in the 2015 Standards of Cover (SOC) report, and values calculated by *FITCH* following the application of criteria for (1) the removal of outliers as reflected in the preceding table and (2) the identification of RFD first arrivals of primary front-line units to emergency (lights and sirens) calls.

**Table 52: Comparison of 90<sup>th</sup> Percentile Performance Time Outcomes – 2014 Data**

| Outcome                 | Methods Applied in<br>2015 SOC Report |             | Methods Applied in<br>Current Report |             |
|-------------------------|---------------------------------------|-------------|--------------------------------------|-------------|
|                         | 90 <sup>th</sup> Percentile           | Sample Size | 90 <sup>th</sup> Percentile          | Sample Size |
| Dispatch Time (Minutes) | 1.73                                  | 10,225      | 1.77                                 | 10,699      |
| Turnout Time (Minutes)  | 1.92                                  | 9,629       | 1.95                                 | 10,157      |
| Travel Time (Minutes)   | 5.25                                  | 10,024      | 5.28                                 | 10,561      |
| Response Time (Minutes) | 7.63                                  | 10,191      | 7.67                                 | 10,002      |

**Table 53: Classification of Incident Description Matching NFIRS Code into Program and Call Category**

| Program | Call Category                   | Incident Description from RFD Data Dictionary <sup>1</sup> |
|---------|---------------------------------|------------------------------------------------------------|
| EMS     | EMS                             | Emergency medical service, other                           |
| EMS     | EMS                             | EMS call, excluding vehicle accident with injury           |
| EMS     | EMS                             | Medical assist, assist EMS crew                            |
| EMS     | EMS                             | Rescue, emergency medical call (EMS) call, other           |
| Fire    | Fire (Not Building or Wildland) | Camper or recreational vehicle (RV) fire                   |
| Fire    | Fire (Not Building or Wildland) | Construction or demolition landfill fire                   |
| Fire    | Fire (Not Building or Wildland) | Dumpster or other outside trash receptacle fire            |
| Fire    | Fire (Not Building or Wildland) | Mobile property (vehicle) fire, other                      |
| Fire    | Fire (Not Building or Wildland) | Off-road vehicle or heavy equipment fire                   |
| Fire    | Fire (Not Building or Wildland) | Outside equipment fire                                     |
| Fire    | Fire (Not Building or Wildland) | Outside rubbish fire, other                                |
| Fire    | Fire (Not Building or Wildland) | Outside rubbish, trash or waste fire                       |
| Fire    | Fire (Not Building or Wildland) | Outside stationary compactor/compacted trash fire          |
| Fire    | Fire (Not Building or Wildland) | Outside storage fire                                       |
| Fire    | Fire (Not Building or Wildland) | Passenger vehicle fire                                     |
| Fire    | Fire (Not Building or Wildland) | Rail vehicle fire                                          |
| Fire    | Fire (Not Building or Wildland) | Road freight or transport vehicle fire                     |
| Fire    | Fire (Not Building or Wildland) | Self-propelled motor home or recreational vehicle          |
| Fire    | Fire (Not Building or Wildland) | Special outside fire, other                                |
| Fire    | Fire (Not Building or Wildland) | Water vehicle fire                                         |
| Fire    | Building Fire                   | Building fire                                              |
| Fire    | Building Fire                   | Chimney or flue fire, confined to chimney or flue          |
| Fire    | Building Fire                   | Commercial Compactor fire, confined to rubbish             |
| Fire    | Building Fire                   | Cooking fire, confined to container                        |
| Fire    | Building Fire                   | Fire in mobile home used as fixed residence                |
| Fire    | Building Fire                   | Fire in mobile property used as a fixed structure, other   |
| Fire    | Building Fire                   | Fire in motor home, camper, recreational vehicle           |
| Fire    | Building Fire                   | Fire in portable building, fixed location                  |
| Fire    | Building Fire                   | Fire, other                                                |
| Fire    | Building Fire                   | Fires in structures other than in a building               |
| Fire    | Building Fire                   | Fuel burner/boiler malfunction, fire confined              |
| Fire    | Building Fire                   | Trash or rubbish fire, contained                           |
| Fire    | Wildland Fire                   | Brush, or brush and grass mixture fire                     |
| Fire    | Wildland Fire                   | Cultivated trees or nursery stock fire                     |
| Fire    | Wildland Fire                   | Cultivated vegetation, crop fire, other                    |
| Fire    | Wildland Fire                   | Forest, woods or wildland fire                             |
| Fire    | Wildland Fire                   | Grass fire                                                 |
| Fire    | Wildland Fire                   | Natural vegetation fire, other                             |
| Other   | False Alarm & False Call        | Alarm system sounded due to malfunction                    |
| Other   | False Alarm & False Call        | Alarm system sounded, no fire - unintentional              |
| Other   | False Alarm & False Call        | Bomb scare - no bomb                                       |
| Other   | False Alarm & False Call        | Carbon monoxide detector activation, no CO                 |
| Other   | False Alarm & False Call        | Central station, malicious false alarm                     |

| Program | Call Category                 | Incident Description from RFD Data Dictionary <sup>1</sup> |
|---------|-------------------------------|------------------------------------------------------------|
| Other   | False Alarm & False Call      | CO detector activation due to malfunction                  |
| Other   | False Alarm & False Call      | Detector activation, no fire - unintentional               |
| Other   | False Alarm & False Call      | Direct tie to FD, malicious/false alarm                    |
| Other   | False Alarm & False Call      | Extinguishing system activation                            |
| Other   | False Alarm & False Call      | Extinguishing system activation due to malfunction         |
| Other   | False Alarm & False Call      | False alarm or false call, other                           |
| Other   | False Alarm & False Call      | Heat detector activation due to malfunction                |
| Other   | False Alarm & False Call      | Local alarm system, malicious false alarm                  |
| Other   | False Alarm & False Call      | Malicious, mischievous false call, other                   |
| Other   | False Alarm & False Call      | Municipal alarm system, malicious false alarm              |
| Other   | False Alarm & False Call      | Smoke detector activation due to malfunction               |
| Other   | False Alarm & False Call      | Smoke detector activation, no fire - unintentional         |
| Other   | False Alarm & False Call      | Sprinkler activation due to malfunction                    |
| Other   | False Alarm & False Call      | Sprinkler activation, no fire - unintentional              |
| Other   | False Alarm & False Call      | System malfunction, other                                  |
| Other   | False Alarm & False Call      | Telephone, malicious false alarm                           |
| Other   | False Alarm & False Call      | Unintentional transmission of alarm, other                 |
| Other   | Good Intent Call              | Authorized controlled burning                              |
| Other   | Good Intent Call              | Barbecue, tar kettle                                       |
| Other   | Good Intent Call              | Biological hazard investigation, none found                |
| Other   | Good Intent Call              | Dispatched & cancelled en route                            |
| Other   | Good Intent Call              | Dispatched & cancelled en route by Ambulance               |
| Other   | Good Intent Call              | EMS call, party transported by non-fire agency             |
| Other   | Good Intent Call              | Good intent call, other                                    |
| Other   | Good Intent Call              | Hazmat release investigation w/ no hazmat                  |
| Other   | Good Intent Call              | No incident found on arrival at dispatch address           |
| Other   | Good Intent Call              | Prescribed fire                                            |
| Other   | Good Intent Call              | Smoke scare, odor of smoke                                 |
| Other   | Good Intent Call              | Steam, other gas mistaken for smoke, other                 |
| Other   | Good Intent Call              | Steam, vapor, fog or dust thought to be smoke              |
| Other   | Good Intent Call              | Vicinity alarm (incident in other location)                |
| Other   | Good Intent Call              | Wrong location                                             |
| Other   | Hazardous Condition (No Fire) | Accident, potential accident, other                        |
| Other   | Hazardous Condition (No Fire) | Arcing, shorted electrical equipment                       |
| Other   | Hazardous Condition (No Fire) | Attempt to burn                                            |
| Other   | Hazardous Condition (No Fire) | Attempted burning, illegal action, other                   |
| Other   | Hazardous Condition (No Fire) | Biological hazard, confirmed or suspected                  |
| Other   | Hazardous Condition (No Fire) | Building or structure weakened or collapsed                |
| Other   | Hazardous Condition (No Fire) | Carbon monoxide incident                                   |
| Other   | Hazardous Condition (No Fire) | Chemical hazard (no spill or leak)                         |
| Other   | Hazardous Condition (No Fire) | Chemical spill or leak                                     |
| Other   | Hazardous Condition (No Fire) | Electrical wiring/equipment problem, other                 |
| Other   | Hazardous Condition (No Fire) | Excessive heat, scorch burns with no ignition              |
| Other   | Hazardous Condition (No Fire) | Explosion (no fire), other                                 |

| Program | Call Category                 | Incident Description from RFD Data Dictionary <sup>1</sup> |
|---------|-------------------------------|------------------------------------------------------------|
| Other   | Hazardous Condition (No Fire) | Explosive, bomb removal (for bomb scare, use 721)          |
| Other   | Hazardous Condition (No Fire) | Fireworks explosion (no fire)                              |
| Other   | Hazardous Condition (No Fire) | Flammable gas or liquid condition, other                   |
| Other   | Hazardous Condition (No Fire) | Gas leak (natural gas or LPG)                              |
| Other   | Hazardous Condition (No Fire) | Gasoline or other flammable liquid spill                   |
| Other   | Hazardous Condition (No Fire) | Hazardous condition, other                                 |
| Other   | Hazardous Condition (No Fire) | Heat from short circuit (wiring), defective/worn           |
| Other   | Hazardous Condition (No Fire) | Light ballast breakdown                                    |
| Other   | Hazardous Condition (No Fire) | Oil or other combustible liquid spill                      |
| Other   | Hazardous Condition (No Fire) | Overheated motor                                           |
| Other   | Hazardous Condition (No Fire) | Overpressure rupture from air or gas, other                |
| Other   | Hazardous Condition (No Fire) | Overpressure rupture of air or gas pipe/pipeline           |
| Other   | Hazardous Condition (No Fire) | Overpressure rupture, explosion, overheat other            |
| Other   | Hazardous Condition (No Fire) | Power line down                                            |
| Other   | Hazardous Condition (No Fire) | Refrigeration leak                                         |
| Other   | Hazardous Condition (No Fire) | Threat to burn                                             |
| Other   | Hazardous Condition (No Fire) | Toxic condition, other                                     |
| Other   | Hazardous Condition (No Fire) | Vehicle accident, general cleanup                          |
| Other   | Rescue                        | Confined space rescue                                      |
| Other   | Rescue                        | Extrication of victim(s) from building/structure           |
| Other   | Rescue                        | Extrication of victim(s) from machinery                    |
| Other   | Rescue                        | Extrication of victim(s) from vehicle                      |
| Other   | Rescue                        | Extrication, rescue, other                                 |
| Other   | Rescue                        | High angle rescue                                          |
| Other   | Rescue                        | Lock-in (if lock out , use 511 )                           |
| Other   | Rescue                        | Motor vehicle accident with no injuries                    |
| Other   | Rescue                        | Motor vehicle/pedestrian accident (MV Ped)                 |
| Other   | Rescue                        | Removal of victim(s) from stalled elevator                 |
| Other   | Rescue                        | Rescue or EMS standby                                      |
| Other   | Rescue                        | Search for person in water                                 |
| Other   | Rescue                        | Search for person on land                                  |
| Other   | Rescue                        | Search, other                                              |
| Other   | Rescue                        | Swimming/recreational water areas rescue                   |
| Other   | Rescue                        | Trench/below grade rescue                                  |
| Other   | Rescue                        | Vehicle accident with injuries                             |
| Other   | Service Call                  | Animal problem                                             |
| Other   | Service Call                  | Animal problem, other                                      |
| Other   | Service Call                  | Animal rescue                                              |
| Other   | Service Call                  | Assist invalid                                             |
| Other   | Service Call                  | Assist invalid Care Home                                   |
| Other   | Service Call                  | Assist police or other governmental agency                 |
| Other   | Service Call                  | Cover assignment, standby, moveup                          |
| Other   | Service Call                  | Defective elevator, no occupants                           |
| Other   | Service Call                  | Lock-out                                                   |

| Program | Call Category                     | Incident Description from RFD Data Dictionary <sup>1</sup> |
|---------|-----------------------------------|------------------------------------------------------------|
| Other   | Service Call                      | Person in distress, other                                  |
| Other   | Service Call                      | Police matter                                              |
| Other   | Service Call                      | Public service                                             |
| Other   | Service Call                      | Public service assistance, other                           |
| Other   | Service Call                      | Ring or jewelry removal                                    |
| Other   | Service Call                      | Service Call, other                                        |
| Other   | Service Call                      | Smoke or odor removal                                      |
| Other   | Service Call                      | Unauthorized burning                                       |
| Other   | Service Call                      | Water evacuation                                           |
| Other   | Service Call                      | Water or steam leak                                        |
| Other   | Service Call                      | Water problem, other                                       |
| Other   | Severe Weather & Natural Disaster | Flood assessment                                           |
| Other   | Severe Weather & Natural Disaster | Lightning strike (no fire)                                 |
| Other   | Severe Weather & Natural Disaster | Severe weather or natural disaster, other                  |
| Other   | Severe Weather & Natural Disaster | Wind storm, tornado/hurricane assessment                   |
| Other   | Special Incident Type             | Citizen complaint                                          |
| Other   | Special Incident Type             | Special type of incident, other                            |
| Unknown | Unknown                           | Various <sup>2</sup>                                       |

<sup>1</sup>Entries are presented verbatim from the data dictionary, except where extraneous spaces following entries were removed to allow definition to fit inside relevant table cell.

<sup>2</sup>Numeric codes reported for "INCIDENTTYPE" variable in the RMS data file were either missing, or had no corresponding code or definition in the data dictionary provided by RFD; unidentifiable codes included the values 11, 15, 32, 44, and 71.



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## Final Standards of Cover



Roseville Fire Department  
Roseville, California

*Prepared by:*



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# CONSULTANT REPORT

# ROSEVILLE FIRE DEPARTMENT STANDARDS OF COVER

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# EXECUTIVE SUMMARY

As part of the ongoing accreditation process and to ensure compliance with adopted standards, the City of Roseville has actively worked to evaluate the fire department's operations, deployment, and staffing. The Roseville Fire Department (RFD) uses risk-based data-driven staffing and deployment plans based upon the specific and unique profile in the City of Roseville. These analyses culminated in a comprehensive deployment and staffing plan referred to as a Standards of Response Coverage.

RFD's **Standards of Cover** is a comprehensive report that highlights community demographics, risk, resource deployment, concentration of personnel, and response reliability. It is the result of a review process known as deployment analysis. This is a process where guidelines and standards from the National Fire Protection Association (NFPA), the Commission on Fire Accreditation International (CFAI) – 9<sup>th</sup> Edition *Fire and Emergency Services Self-Assessment Manual*, the American Heart Association, and the Insurance Services Office – *Fire Suppression Rating Schedule* are used to determine the distribution and concentration of fixed and mobile resources along with an intensive risk analysis of hazards within the City of Roseville. This report provides a valuable review of past performance and offers strategic recommendations aimed at ensuring safe and effective emergency response.

RFD is a paid, career fire department that serves the community of Roseville with various core emergency response services, such as fire suppression, emergency medical services (EMS), hazardous materials mitigation, and technical rescue. In addition to these core services, the Department also provides several other community supportive functions, such as fire prevention and emergency preparedness services. Twenty-four hours a day, 365 days a year, thirty-three personnel are on duty serving the community from eight fire stations. These trained professional firefighters operate eight engine companies staffed with three personnel each; two truck companies staffed with four personnel; and one battalion chief command vehicle. In total, the Department employs 119 dedicated employees.

This Standards of Cover (SOC) report aims to provide elected officials, citizens, customers, cooperating agencies, and department members an overview of the assets at risk (e.g., people, possessions, homes, businesses, cultural assets, environment) and the methods that RFD will employ to assess those fire and non-fire risks. The SOC defines the target baseline emergency response and identifies service delivery performance. It is to be used in conjunction with the RFD Strategic Plan. Developing this report required research, study, and evaluation in a number of key areas including risk, critical tasks, service level objectives, deployment plans, reliability measures, and historical performance.

Like other business units of a municipality, the fire service must adequately define the levels of service for the community it protects based on the unique characteristics of the community and availability of fiscal resources. As part of CFAI's process, an SOC document adopted by the agency having jurisdiction sets the foundation for service level goals. In establishing those goals, RFD used

nationally recognized standards and best practices such as those outlined in NFPA Standards, CFAI – 9<sup>th</sup> Edition Fire and Emergency Services Self-Assessment Manual, the Utstein Reporting Criteria, American Heart Association guidelines, and the Insurance Services Office – Fire Suppression Rating Schedule. It also included input from a representative group of stakeholders from the community on the levels of service they want as residents.

A Community Risk Assessment involves the analysis of risk for fire and non-fire emergencies (i.e., emergency medical services, hazardous materials, and technical rescue); impacts to life safety, assets, and the environment are measured along with an incident’s relative probability. In summary, low risk is defined as incidents having low probability and low consequences; moderate risk is composed of incidents having high probability with low consequences; high risk is defined as incidents having high probability and high consequences.

Within the categories of fire suppression, emergency medical services, hazardous materials, and technical rescue, the Department has established specific risk classifications and has conducted critical task analyses to determine appropriate response levels. Critical tasking analysis determines how many personnel and what apparatus/equipment are necessary to mitigate a variety of emergency situations.

The Department has established both baseline and benchmark performance measures. Baseline measures reflect historical performance and benchmarks are Total Response Time (TRT) goals. TRT is measured in two ways: first-arriving unit and effective response force (ERF; i.e., total number of personnel necessary to address the emergency situation). TRT is composed of call processing time, turnout time, and travel time. The Department observes the 90th percentile of performance as opposed to the average response time (i.e., 50<sup>th</sup> percentile in a normally distributed set of data). This depicts more efficiently what is done the majority of the time as opposed to what is done approximately half the time.

Based on the City of Roseville’s adopted General Plan, comprehensive risk assessment that included historical data sets, fiscal resources, and input from community stakeholders, the SOC document establishes the following three primary benchmark performance measures in terms of deployment and emergency response:

**Fire Department Response Goal:**  
First Unit –Total Response Time – EMS Calls for Service  
**= 7 Minutes at 90<sup>th</sup> Percentile**

**Fire Department Response Goal:**  
First Unit –Total Response Time – Fire, Hazardous Material  
and Technical Rescue Calls for Service  
= **8 Minutes at 90<sup>th</sup> Percentile**

**Fire Department Response Goal:**  
Effective Response Force – Fire Calls for Service  
= **11 Minutes & 30 Seconds at 90<sup>th</sup> Percentile**

EMS 90th percentile performance benchmarks are 7 minutes for the first-arriving unit and 10 minutes and 30 seconds for the ERF. Fire suppression, hazardous materials, and technical rescue benchmarks have been set at 8 minutes for the first-arriving unit and 11 minutes and 30 seconds for the ERF. Baseline performance measures for EMS are 8 minutes and 12 seconds for the first-arriving unit and there were not enough ERF incidents requiring a complete ERF to determine an accurate total response time. Baseline performance measures for Fire suppression are 9 minutes and 36 seconds for the first-arriving unit, 14 minutes and 6 seconds for an initial moderate fire ERF, and 22 minutes and 30 seconds for a high ERF. Baseline performance measures for hazardous materials first-arriving unit are 9 minutes and 30 seconds and ERF is 16 minutes and 48 seconds. Baseline performance measures for technical rescue are 9 minutes and 48 seconds for the first-arriving unit and ERF is 19 minutes and 30 seconds.

**Standards of Cover Team**

Fire Chief Rick Bartee  
Assistant Chief Brian Diemer  
Assistant Chief Greg James  
Division Chief Jason Rizzi  
Division Chief David Dolson  
GIS Specialists Dan Funderburg  
Administrative Analyst Katrina Rostam

**Overall Evaluation and Recommendations**

**Evaluation**

Overall, RFD is performing slightly below proposed baseline performance objectives, which is to be expected. There are some opportunities for performance improvement with modest, yet strategic investments.



The community enjoys high-quality services from a professional and well-trained Department. The Department's current distribution and concentration delivery models are appropriately aligned with their unique risks. However, there are areas that can be improved upon by making incremental system adjustments.

## ***Recommendations***

### ***Monitor Call Processing Time Performance Goals***

Roseville Police Department Dispatch Center is the primary public safety answering point (PSAP) for all 9-1-1 calls. NFPA Standard 1221 recommends that a call be answered at the PSAP within 15 seconds, 90% of the time. This standard also recommends that a call be processed by the dispatch center, and responders notified within 90 seconds from the time at which the call is received, 90% of the time. RFD has established a benchmark of 60 seconds or 1 minute for call processing time.

Call processing is an area over which management has a great deal of control to achieve improvement through policies, procedures, and management practices. It is recommended that the dispatch process be reviewed and areas for improvement be identified. It is also important that personnel are trained on the performance standards and held accountable for meeting the standards.

Reducing the call processing time component reduces total response time. Call processing data show that the Department is currently performing above the benchmark goal of 1 minute.

### ***Monitor Turnout Time Performance Goals***

Turnout time, or the time between when the call is received by the response units (dispatched) and when the unit is en route to the scene (responding), affects overall response times. NFPA Standard 1710 recommends turnout time performance objectives of 80 seconds or less for fire and special operations response, and 60 seconds or less for all other priority responses including EMS. The Department does not meet the nationally recommended benchmarks for turnout time and is currently almost double the national benchmark. It is recommended that this benchmark be reviewed as many accredited fire agencies are unable to meet this benchmark.

Turnout time is an area over which RFD has complete managerial and accountability control, and turnout time is not impacted by outside influences. Like call processing, management can achieve improvement through policies, procedures, and management accountability practices. It is recommended that the Command Staff and Battalion Chiefs monitor turnout time monthly. This includes sharing monthly data with company officers and holding them accountable for meeting performance standards.

Reducing the turnout time component will lead to an overall reduction in total response time.

### **Create a Target Hazard Dispatch for Structure Fire Incidents**

RFD should develop a target hazard dispatch that would send additional fire apparatus and personnel to only high-risk occupancies on initial first alarm structure fire calls. Extra resources would include the second ladder truck and one additional engine company.

The community risk analysis identified occupancies that were classified as high-risk due to needed fire flow, number of stories, and size of the buildings. The goal of the target hazard dispatch is to allocate more personnel to fill the critical tasks on the first alarm dispatch. Additional personnel would limit loss by placing more personnel and apparatus on scene sooner.

### **Add Fire Station 8 and Relocate Fire Station 5 to Optimize System Performance**

After evaluating four different alternatives for fire station configuration, the most improvement for all existing fire stations would occur with the addition of Station 8 and the relocation of Station 5. The results suggest that with all nine RFD fire stations, 92.56% of the incidents could be responded to within 5 minutes or less travel time. This is approximately an 11% improvement over the current configuration prior to the addition of Station 8 or relocation of Station 5.

**Table 1: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S7      | 1,354           | 11,641        | 69.00%          |
| 5    | S1      | 944             | 12,585        | 74.60%          |
| 6    | S5      | 488             | 13,073        | 77.49%          |
| 7    | S9      | 438             | 13,511        | 80.08%          |
| 8    | S4      | 106             | 13,617        | 80.71%          |

### **Evaluate the Use of Medical Priority Dispatch System**

RFD should evaluate the Medical Priority Dispatch System (MPDS). Approximately 60.5% of the Department's response history is associated with providing emergency medical services via Advanced Life Support (ALS) capabilities. Data have shown that approximately 70% to 80% of these calls do not require ALS treatment and time is not a factor in patient outcomes. The County ambulance service provider is also trained to ALS and provides ambulance transport services for the City.

MPDS provides for consideration of possibly implementing a tiered EMS response to lower-acuity medical incidents that are less time-sensitive. This could mean no Department response to very low-acuity calls, responding only with Basic Life Support units, or alternate deployment to these types of calls. MPDS could focus the Department's efforts on making sure units are available for responding to higher-acuity or life-threatening emergencies, where time has a greater impact on the clinical

outcome as well as the need for additional personnel such as with a cardiac arrest, penetrating chest wound, or major trauma injury.

An integral component to MPDS is having a reliable and well-designed medical priority call triage system that is utilized to correctly and accurately prioritize emergency medical service calls at the dispatch center. It would need to be evaluated if the Roseville Dispatch Center is capable of providing this level of service. Currently, the dispatchers are performing ProQA, so determining the priority of a medical emergency incident should be part of this process. If this recommendation is pursued, a nationally recognized MPDS should be utilized.

The adoption of this alternative would create considerable capacity to cost savings on additional resources in the future, as the fastest growing call type is for EMS incidents, as well as provide for a more efficient and effective response to seriously sick and injured patients. Another benefit is the introduction of additional capacity into the system to maintain a high degree of readiness and available concentration of resources for fire prevention, community risk reduction, and fire suppression activities.

# **SECTION 1: THE CITY OF ROSEVILLE**

## **Description of Community Served**

### ***Location***

The City of Roseville is located in California on the southwest edge of Placer County, bordering Sacramento County. The City is located 405 miles north of Los Angeles, 102 miles northeast of San Francisco, and 16 miles north of Sacramento, the State capital. The City of Roseville (the City) began as a railroad junction in 1864 and was called Roseville Junction. Renamed Roseville City and incorporated in 1909, it officially became a chartered city in California in 1955.

### ***Geography/Climate***

The original City had fewer than 2,500 residents and has grown to over 139,643 (as of 1/1/2019, CA Department of Finance) and covers 44.32 square miles. Roseville experiences annual average temperatures of 61.6 degrees Fahrenheit and 21.2 inches of rain. While the average is relatively temperate, summer and winter months can bring extreme weather patterns to the region. During the winter, the high temperatures hover around 53 degrees Fahrenheit. During the summer months, the region receives extended periods of 95+ degrees Fahrenheit days, well above the national average. While the average summer temperature is 94 degrees Fahrenheit, these extended heat waves affect the medically fragile, elderly, and animal populations.

### ***Transportation***

Two highways run through the City: Interstate 80 and State Route 65 (the southern terminus of which connects to I-80). Amtrak, the national passenger rail system, provides service to Roseville at the Roseville Amtrak Station and is part of the Capitol Corridor. Roseville Transit is a public transit service overseen by the City of Roseville and operated by MV Transportation. The system provides a total of 11 regular local routes, as well as the Roseville Transit Dial-A-Ride (DAR) and Roseville Transit Commuter service.

### ***Governance***

In 1907, a fire protection committee was established and thus RFD was born. RFD is legally established as a department in the City of Roseville, which is the largest city in Placer County. The City of Roseville has adopted a “council-manager” form of government. The governing board of RFD is made up of the five-member Roseville City Council (Council) that is responsible for the appointment of the City Manager based on an individual’s executive and administrative qualifications. The City Manager is the administrative head of the City government under the direction and control of the City Council. Council ensures compliance with the basic agency policies

through the annual budget review and approval process that includes program performance reviews.

### ***Legal Basis***

The City of Roseville was legally chartered by the State of California on January 5, 1955 as a local municipality. As a Charter City under the State of California Government Code Section 34101, the voters in the City are given broad local control to determine how their City Government is organized, the authority to establish services to benefit the community and, with respect to municipal affairs, enact legislation different than that adopted by the State. The charter establishes the roles, responsibilities, and powers of the City Council. It also establishes the position of City Manager. RFD is in compliance with the State of California Government Code Section 38600-38611 which outlines the regulations applicable to city fire departments, their formation, powers, and authority. Specifically, California Government Code Section 38611 requires that general law cities provide a fire department. City Charter Section 2.11 enables the City Manager to appoint department directors via administrative policies. Thus, through Administrative Regulation 1.10.1, the City Manager establishes the various departments of the city and duties of department directors. The position of Fire Chief is established, along with his/her responsibilities. The City Charter is reviewed and amended, as needed, every ten years. RFD is also allowed to provide EMS under the California Health and Safety Code 1797.201-1797.227 under the authority of the Local Emergency Medical Services Agency (LEMSA).

### ***Financial Basis***

Roseville receives the majority of its general fund revenue from two primary sources: sales tax and property taxes. Roseville's fiscal outlook will see a significant improvement in Fiscal Year (FY) 2019-20 due to a half-cent sales tax increase (Measure B) approved by voters in November 2018. This increase became effective on April 1, 2019. The City will begin receiving the estimated \$16 million to \$19 million annually in new sales tax revenue. Of the \$158 million General Fund budget, \$34 million of expenditures are offset by restricted revenue, coming from grants, specific fees, and taxes tied to specific programs. Nondiscretionary expenditures and transfers totaling \$23 million are required by Council-approved policies and agreements. Council has discretion over \$102 million that is unrestricted. Over half of this unrestricted funding, approximately \$64 million, will go towards public safety, the City Council's top priority.

During FY2019-20, the City is expected to receive \$72.3 million in sales tax revenues, including a conservative estimate of \$16 million for the new Measure B local sales tax, and \$48.9 million in property tax revenues. Sales and property tax revenues will account for 76% of the City's FY2019-20 General Fund revenues. Sales tax revenue in FY2019-20, other than the new Measure B local sales tax, is forecasted to remain flat compared to the FY2018-19 projections. Sales tax growth in future years is projected to grow at a reduced rate compared to the past several years. This slowing growth rate is primarily due to the transition to a service economy.

The City, by City Charter and State law, may not spend public funds without the legal authorization to do so. Among other things, a budget appropriates public funds, thereby providing the legal authorization from the governing body to expend these funds. The City shall adopt by resolution a final budget for that fiscal year at or before its first regular meeting held in such fiscal year. In addition, the City shall annually establish its appropriations limit related to the proceeds from taxes in compliance with Article XIII B of the California Constitution and Government Code Sec 7910. The appropriations limit is established as part of an annual budget and must be reviewed as part of an annual financial audit.

## **Department Budget**

The City Manager and the City Council approve the administrative structure of the fire department through its annual budget process. The City uses a one-year budget cycle to prepare the annual operating budget and capital improvement plan based on a July through June fiscal year. Quarterly program performance reports are prepared for each program within the Department. The department is funded through the City general fund. Revenue for fire is received through the general revenue of the City primarily from property tax. Additionally, revenue from fees-for-service activities such as plan checking and fire inspections, as well as hazardous materials and driving under-the-influence (DUI) cost recovery reimbursement programs, also contribute to Department revenue.

**Table 2: Council-Approved Budget Breakdown by Fiscal Year**

| <b>Year</b> | <b>Salaries &amp; Benefits</b> | <b>Materials &amp; Supplies</b> | <b>Capital Outlay</b> | <b>Reimbursed Expenditures</b>  | <b>Total</b> |
|-------------|--------------------------------|---------------------------------|-----------------------|---------------------------------|--------------|
| FY 19/20    | 29,069,066                     | 5,129,870                       | 0                     | (13,203) <sup>1</sup> projected | 34,185,733   |
| FY 18/19    | 27,199,445                     | 5,263,323                       | 0                     | (75,552)                        | 32,387,216   |
| FY 17/18    | 27,889,937                     | 4,853,307                       | 56,682                | (82,213)                        | 32,717,713   |
| FY 16/17    | 25,361,094                     | 3,254,328                       | 0                     | (5,000)                         | 28,610,422   |
| FY 15/16    | 25,027,204                     | 2,887,004                       | 12,564                | (0)                             | 27,926,772   |
| FY 14/15    | 24,780,550                     | 2,548,459                       | 60,834                | (9,593)                         | 27,380,250   |

<sup>1</sup>City web page showing last five years budget.

**Table 3: Staffing Totals by Type and Fiscal Year**

| <b>Year</b> | <b>Admin<br/>Personnel</b> | <b>Operations<br/>BC's</b> | <b>Prevention<br/>Personnel</b> | <b>Operations<br/>Personnel</b> | <b>Total<br/>Personnel</b> |
|-------------|----------------------------|----------------------------|---------------------------------|---------------------------------|----------------------------|
| FY 19/20    | 11                         | 3                          | 9                               | 96                              | 119                        |
| FY 18/19    | 11                         | 3                          | 9                               | 96                              | 119                        |
| FY 17/18    | 11                         | 3                          | 9                               | 96                              | 119                        |
| FY 16/17    | 12                         | 3                          | 8                               | 96                              | 119                        |
| FY 15/16    | 12.5                       | 3                          | 8                               | 96                              | 119.5                      |
| FY 14/15    | 11                         | 3                          | 10                              | 96                              | 120                        |

## Population and Demographic Features

RFD serves a total population of approximately 139,643 within a geographic area of approximately 44.32 square miles.

Table 4 below provides various metrics of census data for Roseville and the State of California.

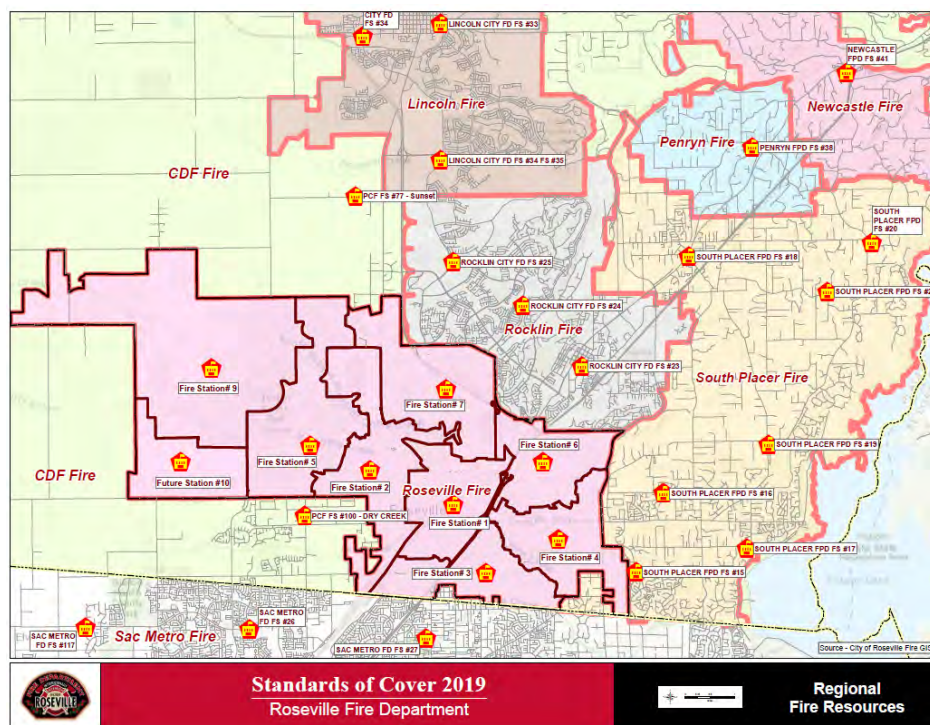
**Table 4: Census Data for City of Roseville and State of California**

| <b>People Quick Facts</b>                                                              | <b>Roseville</b> | <b>California</b> |
|----------------------------------------------------------------------------------------|------------------|-------------------|
| Population estimates, July 1, 2018, (V2018)                                            | 139,643          | 39,557,045        |
| Population estimates base, April 1, 2010, (V2018)                                      | 119,156          | 37,254,523        |
| Population, percent change - April 1, 2010 (estimates base) to July 1, 2018, (V2018)   | 17.2%            | 6.2%              |
| Population, Census, April 1, 2010                                                      | 118,788          | 37,253,956        |
| Persons under 5 years, percent, April 1, 2010                                          | 6.3%             | 6.2%              |
| Persons under 18 years, percent, April 1, 2010                                         | 24.3%            | 22.7%             |
| Persons 65 years and over, percent, April 1, 2010                                      | 15.7%            | 14.3%             |
| Female persons, percent, April 1, 2010                                                 | 52.0%            | 50.3%             |
| White alone, percent, April 1, 2010                                                    | 78.2%            | 57.6%             |
| Black or African American alone, percent, April 1, 2010                                | 1.8%             | 6.5%              |
| American Indian and Alaska Native alone, percent, April 1, 2010                        | 0.6%             | 1.6%              |
| Asian alone, percent, April 1, 2010                                                    | 10.0%            | 15.3%             |
| Native Hawaiian and Other Pacific Islander alone, percent, April 1, 2010               | 0.4%             | 0.5%              |
| Two or More Races, percent, April 1, 2010                                              | 5.3%             | 3.9%              |
| Hispanic or Latino, percent, April 1, 2010                                             | 15.1%            | 39.3%             |
| White alone, not Hispanic or Latino, percent, April 1, 2010                            | 73.7%            | 36.8%             |
| Living in same house 1 year ago, percent of persons age 1 year+, 2010-2014             | 69.2%            | 84.6%             |
| Population per square mile, 2010                                                       | 3,279.4          | 239.1             |
| Language other than English spoken at home, percent of persons age 5 years+, 2013-2017 | 17.1%            | 44%               |
| High school graduate or higher, percent of persons age 25 years+, 2013-2017            | 93.3%            | 82.5%             |
| Bachelor's degree or higher, percent of persons age 25 years+, 2013-2017               | 38.8%            | 32.6%             |
| Veterans, 2013-2017                                                                    | 8,624            | 1,661,433         |
| Mean travel time to work (minutes), workers age 16 years+, 2013-2017                   | 25.8             | 28.8              |
| Owner-occupied housing unit rate, 2010-2014                                            | 64.7%            | 54.5%             |
| Median value of owner-occupied housing units, 2010-2014                                | \$386,300        | \$443,400         |
| Households, 2013-2017                                                                  | 47,851           | 14,277,157        |
| Persons per household, 2013-2017                                                       | 2.71             | 2.96              |
| Per capita income in past 12 months (in 2017 dollars), 2013-2017                       | \$37,623         | \$33,128          |
| Median household income (in 2017 dollars), 2013-2017                                   | \$81,119         | \$67,169          |
| Persons in poverty, percent                                                            | 8.9%             | 13.3%             |



## Community Boundaries/Auto Aid

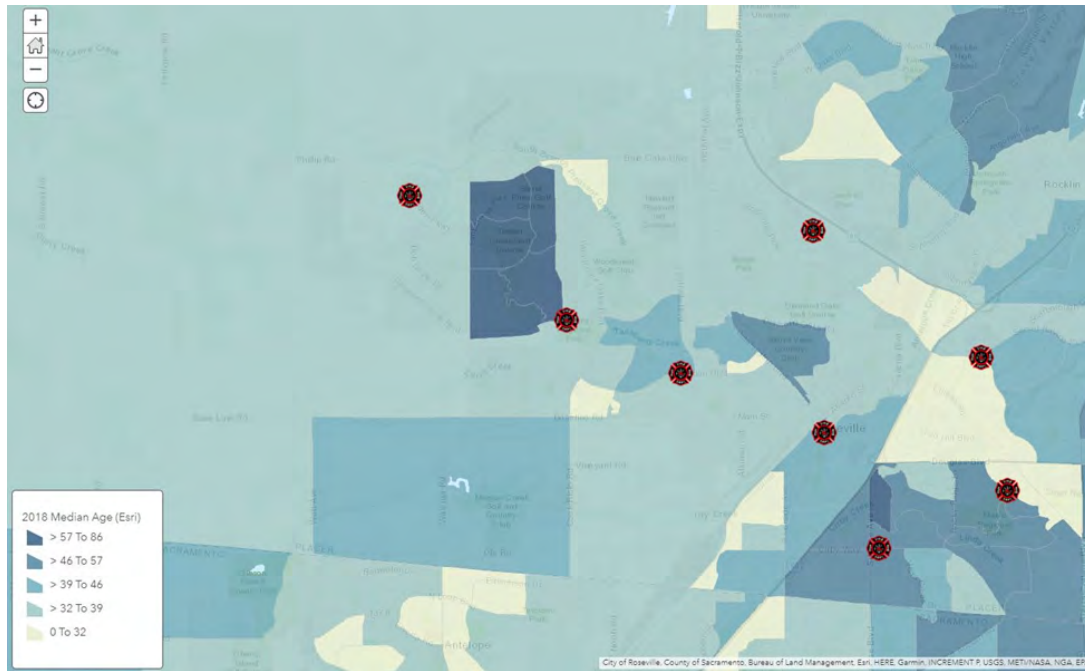
Figure 1: Regional Boundaries



## Population Characteristics

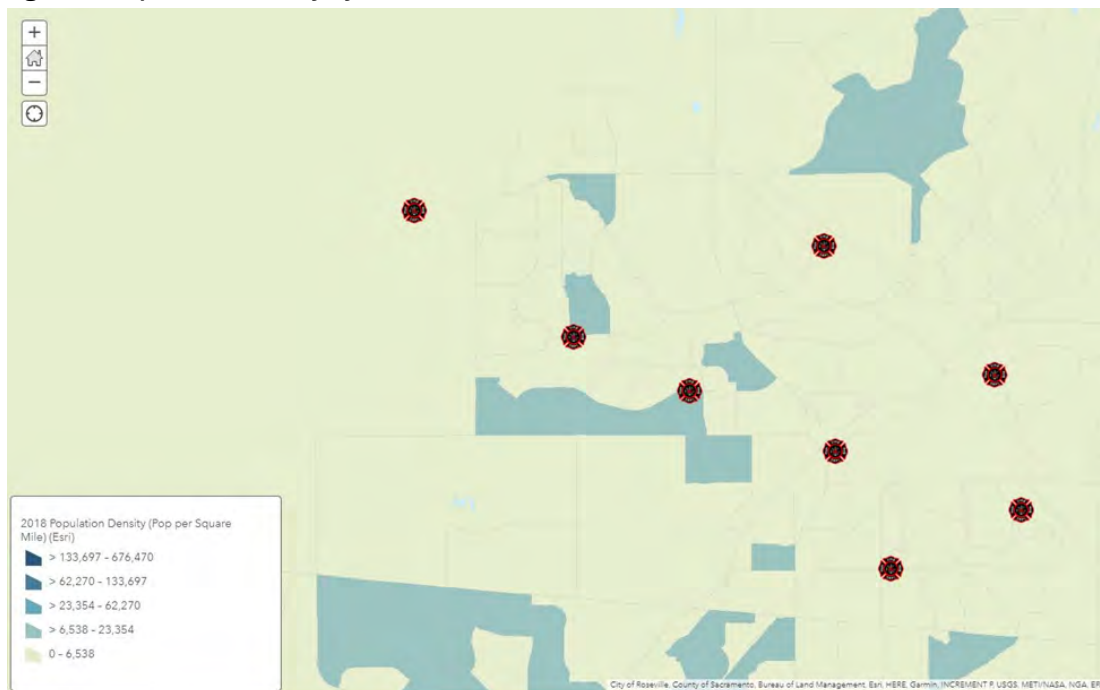
Generally, older populations and very young populations are considered to be most vulnerable to the frequency and incidents of fire. In addition, older populations historically utilize EMS services with greater frequency. It is important to understand, what field crews often recognize intuitively, that the distribution of population risks is not uniform across the jurisdiction. According to census data, the majority of the jurisdiction is less than 57 years of age. Median age for the areas shaded in the darkest blue west and northwest of Station 5 ranges from 73.2 to 79.6 years, and median age for the area shaded in the darkest blue north of Station 3 is 61.1 years (Figure 2).

**Figure 2: Median Age – 2018**



The majority of the census block areas have densities of 0 to 6,538 people per square mile, with some clusters of > 6,538 to 23,354 people per square mile in portions of the jurisdiction (Figure 3).

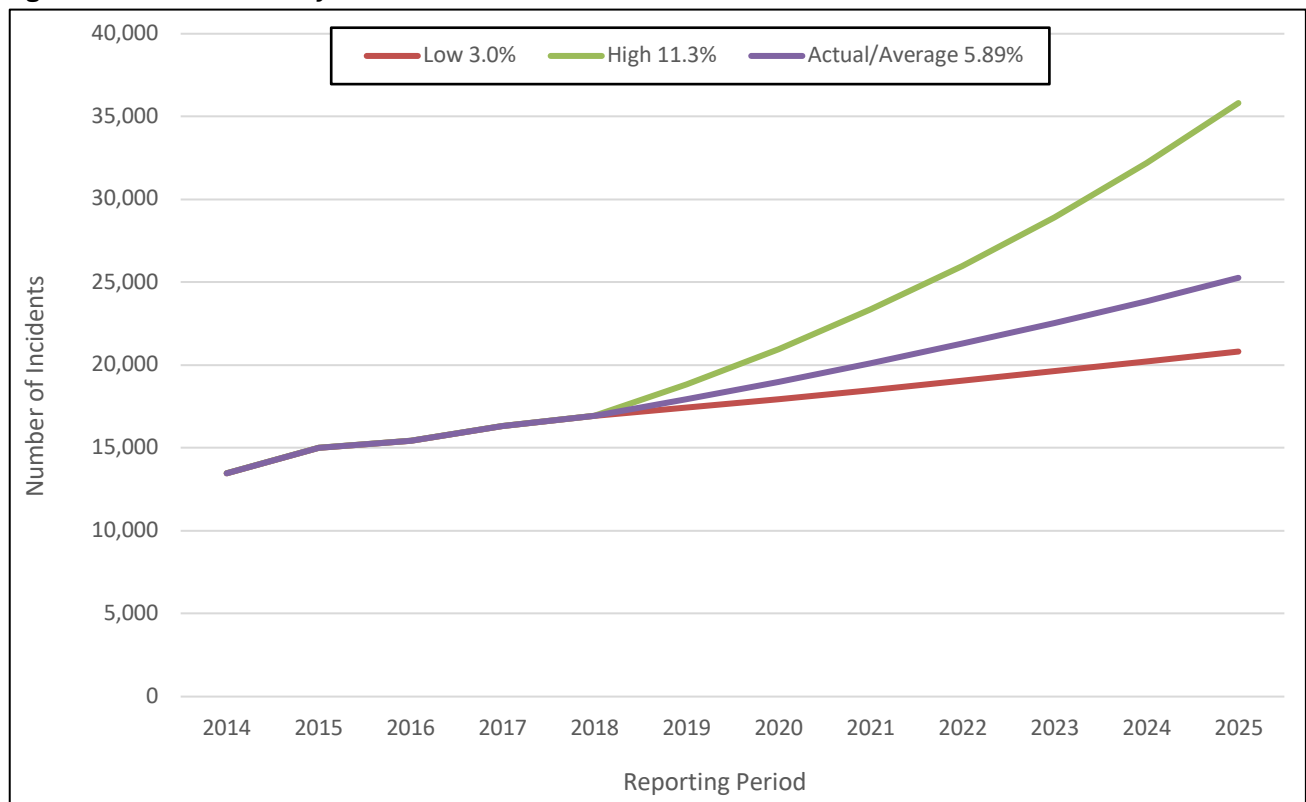
**Figure 3: Population Density by Census Block – 2018**



## Future Population

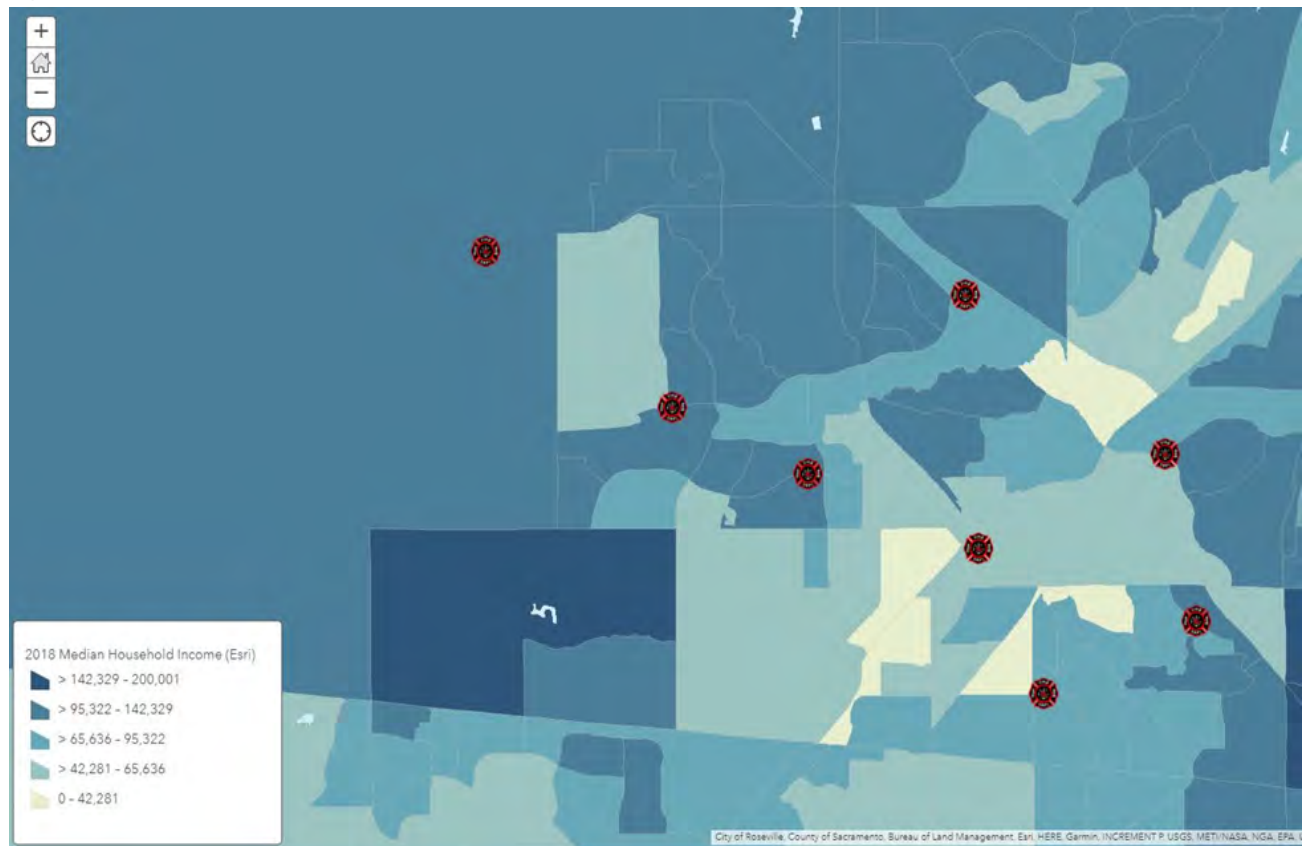
Roseville's current growth rate is approximately 2.5%, which is much higher than California's current rate of 0.60% or the national rate of 0.71%. Placer County continues to be recognized by the Department of Finance as one of the State's fastest growing counties. Current estimates indicate the population of Roseville will surpass 140,000 by the end of 2020.

**Figure 4: Calls for Service by Year**



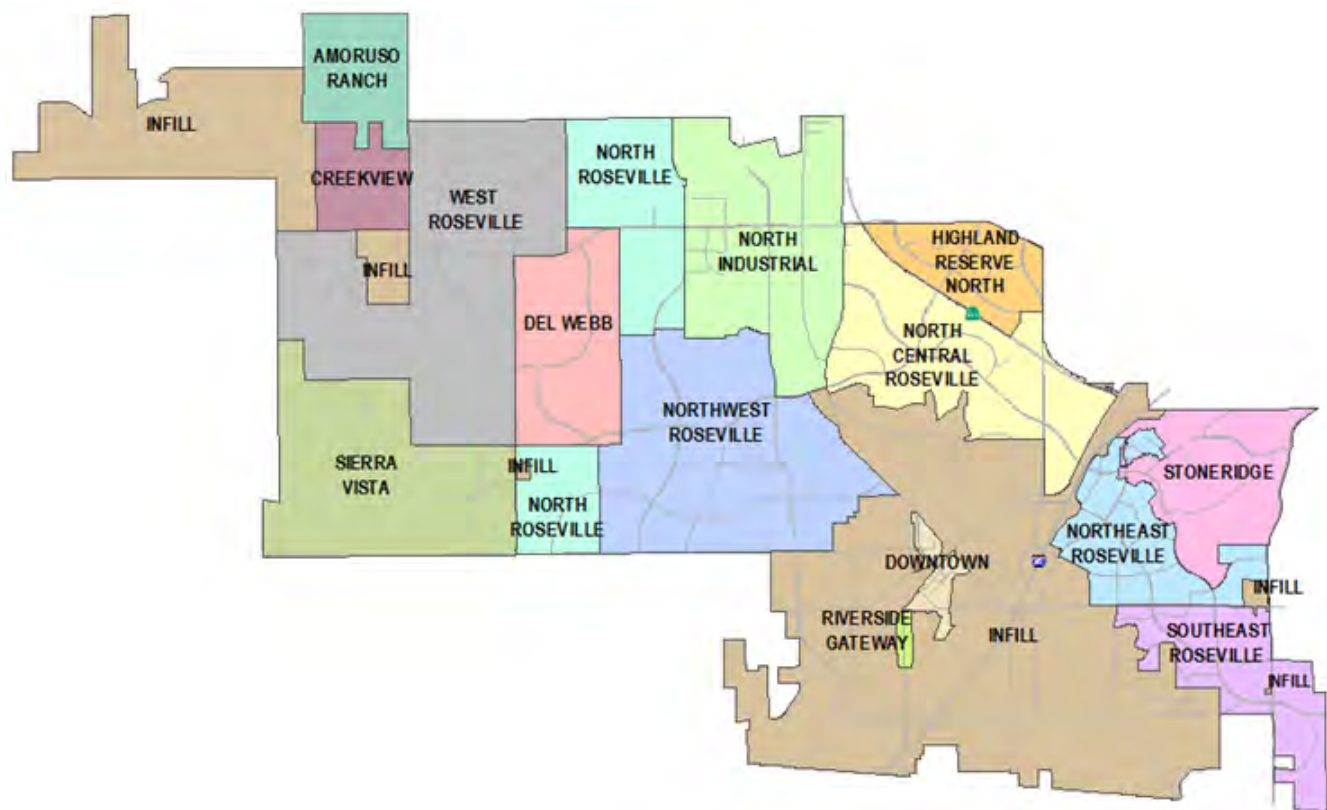
Finally, population alone is not the sole variable that influences demand for services, as socioeconomic and demographic factors have greater influence over demand. Median household income was evaluated to determine the degree to which the community had underprivileged populations. According to the US Census Bureau, the 2017 national median household income is reported at \$61,372. Median household income values for the off-white shaded areas are as follows: northeast of Station 6, \$35,433; northwest of Station 6, \$40,557; west of Station 1, \$35,695; southwest of Station 1, \$29,806; west-northwest of Station 3, \$32,255; and north-northeast of Station 3, \$42,009.

**Figure 5: Median Household Income – 2018**



**Specific Plans**

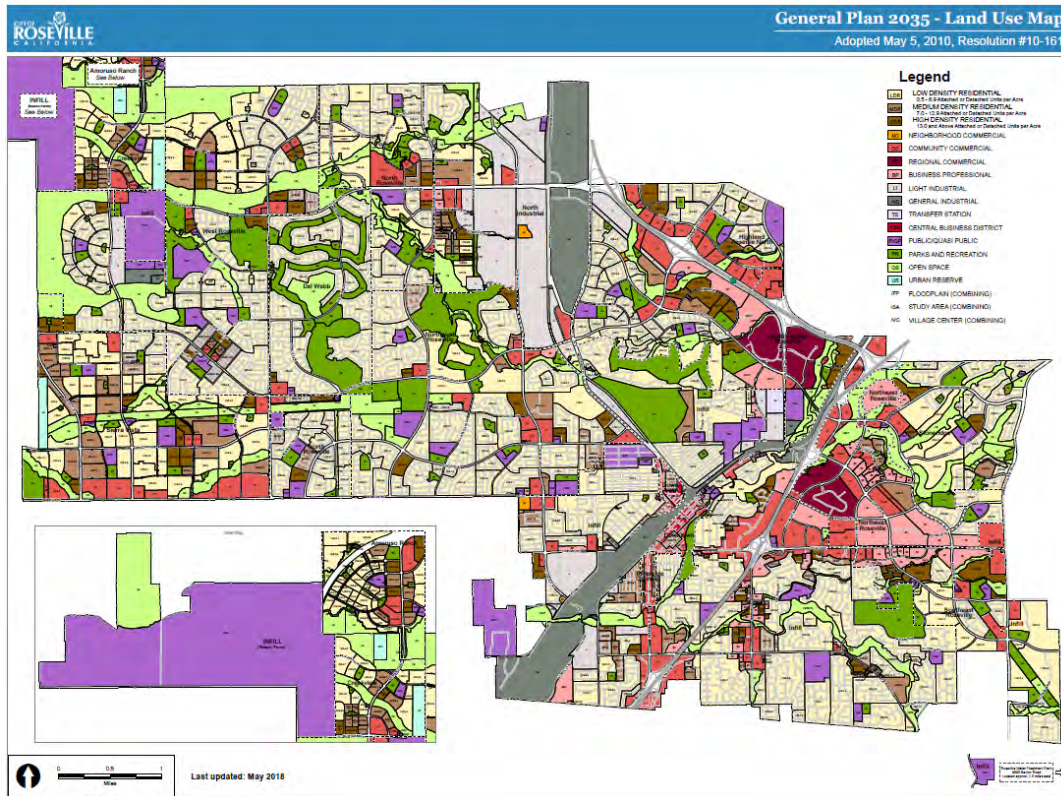
*Figure 6: City of Roseville Specific Plan Map*





## Land Use Map

Figure 7: General Plan – Land Use Map Adopted May 5, 2010

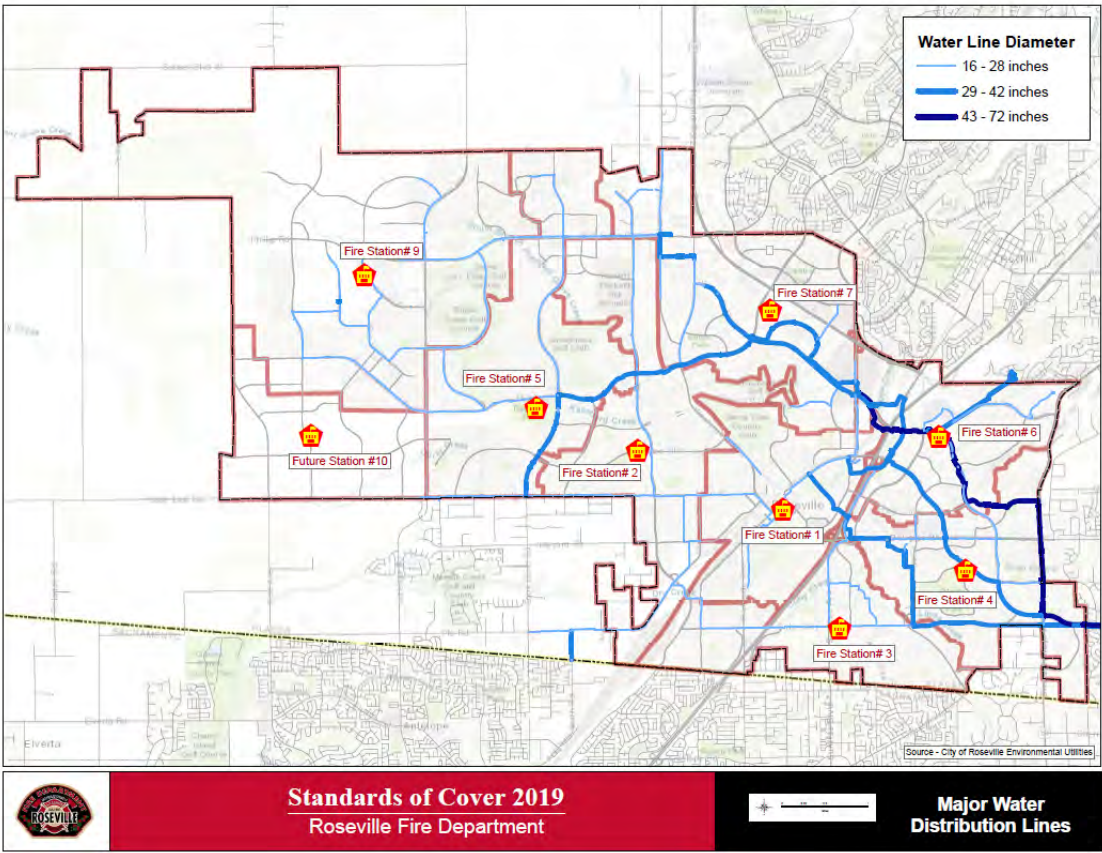


## City Water Supply

The City of Roseville's municipal water system is operated by the Environmental Utilities Department. They are responsible for the operation and maintenance of the City's water transmission and distribution facilities through the groups of construction, meter/backflow, meter retrofit, preventative maintenance, and field service. These facilities include water mains, water storage tanks, pump stations, water wells, pressure-reducing stations, and interties. The water system consists of approximately 600 miles of water mains ranging in size from 4 to 66 inches in diameter. There are over 4,500 fire hydrants, 10,000 valves, 4,000 backflow devices, and 35,000 services within the system. Roseville's water supply comes from multiple sources, the primary is Folsom Lake, and is treated by a City-operated treatment plant. In order to provide reliability in time of water shortage or emergency outages, the City also maintains five groundwater wells and several interties with surrounding water agencies.

Water Supply Map

Figure 8: Water Supply by Line Diameter



## SECTION 2: SERVICES PROVIDED BY RFD

### Roseville Fire Department

RFD is a full-service, all-hazards department, capable of responding to any type of fire, EMS, rescue, or hazardous materials call. The Department maintains a modern fleet of well-equipped apparatus that are distributed throughout the service area and are staffed with highly-trained, motivated employees. Paramedics are staffed on every apparatus. RFD utilizes a variety of resources to deliver a full range of services including:

- Fire suppression, including wildfire response
- Emergency medical services (Advanced Life Support - ALS)
- Hazardous materials emergency response
- Technical rescue (high-angle, confined space, trench, vehicle extrication, and water rescue)
- Public assistance and education
- Community Risk Reduction (Fire & Life Safety Division)
- Tactical EMS paramedics supporting Roseville PD SWAT Team
- Paramedic Bike Team

The Department operates from eight stations and currently staffs eight engine companies, two ladder companies, and one Battalion Chief. These personnel cross staff three brush engines, two grass engines, one hazmat company, and one rescue company. There are three platoons, working 48 hours on, followed by 96 hours off. The staffing matrix is done via a constant staffing framework (meaning no extra bodies are hired to float out to open positions). Long-term vacancies, training, vacation, and other open positions are filled using scheduled overtime via our TeleStaff™ system. Minimum daily staffing for eight stations, including one 24-hour Battalion Chief, is 33 persons per day.

### Fire Service Response

RFD is appropriately staffed and equipped to respond to fire incidents in the City as well as providing automatic and mutual aid to neighboring agencies throughout the State of California. The **Low-Level** fire response for a reported vehicle fire, small grass fire, and dumpster fire consists of one engine. A **Moderate-Level** response to an unconfirmed or possible structure fire consists of two engines, one truck, and one Battalion Chief, providing a total of 11 firefighters. A working fire incident, either residential or commercial, sends a **High-Level** response for all working structure fires consisting of four engines, two trucks, two Battalion Chiefs, and one ambulance, providing 21 firefighters. All Roseville Firefighters are certified by the State of California to the “Firefighter II” level and each holds current Emergency Medical Technician I certification or Paramedic licensure.



Every Type I fire engine carries three firefighters (Captain, Engineer, and a Firefighter/Paramedic (FF/P)), is a 1,500 gallons per minute (gpm) rated pumper with foam capability, holds 500 gallons of water, carries 1,000 feet of supply hose and 1,950 feet of attack hose (in varying diameters), has scene lighting, and a full assortment of basic and advanced life support equipment. Fire engines are operated out of Stations 1 through 9.

The typical fire truck carries four firefighters (Captain, Engineer, and two FF/Ps), a hydraulically-powered 100-foot aerial ladder, and hydraulic, pneumatic, and electric heavy rescue tools. Fire trucks carry no water and have no fire pump. Fire trucks are currently operated out of Stations 1 and 7 and they cross staff either a rescue or hazardous materials unit.

### ***Wildfire / Vegetation Fire Service***

The Department operates three Type III Brush Engines and two Type VI Grass Engines in the areas that are prone to wildland fires. In addition, RFD has a Type I engine from the California Office of Emergency Services for use through the California Master Mutual Aid system. All firefighters are trained to fight wildland and urban interface fires and complete annual RT-130 training. The Type III and Type VI apparatus are capable of getting in tight areas along our bike trails and ravines that Type I structure apparatus cannot access. Type III Brush rigs are heavily utilized during Statewide Mutual Aid fires throughout California. The Department participates fully with the California Master Mutual Aid System by sending any of our capabilities to those in need. All apparatus are typed and registered with the California Office of Emergency Services (OES) and subject to deployment when requested.

### ***Emergency Medical Service***

In 2018, RFD responded to approximately 10,247 EMS calls. RFD operates one of the most progressive EMS systems in the United States, utilizing cutting edge technology and current treatment protocols and procedures, including Advanced Cardiac Life Support and medication administration for the heart attack victim, various advanced airways tools, and intraosseous insertion for fluid and medications. Electronic patient care reporting (ePCR) and transmission of EKGs directly to the hospital during patient treatment are just two examples of the progressive and innovative approaches to patient care. In addition, RFD participates in the STEMI (ST Elevation Myocardial Infarction) Critical Trauma and Stroke programs supported by local hospitals.

All apparatus in RFD are staffed 24/7 with California State Certified Paramedics (EMT-P) capable of providing care to critical patients requiring invasive procedures such as IVs, 12 lead EKGs, medication administration, and airway intubations. In addition to the ALS equipment carried on the engines and trucks, limited ALS equipment is also carried on three brush units located at Stations 5, 6, and 9. The Division Chief of EMS oversees all areas of EMS while the EMS Quality Assurance Coordinator delivers EMS training to the Department's Paramedics and Emergency Medical Technicians. The EMS Division not only encompasses a field operations component, but incorporates an extensive EMS Education and Quality

Assurance Program. Training includes a variety of disciplines including EMT, American Heart Advanced Cardiac Life Support, Pediatric Advanced Life Support, and current standards of practice for emergency medicine. The EMS Division also partners with the Training Division to offer EMS learning opportunities throughout the year during company evolutions and the new hire fire academy.

### ***Technical Rescue Service***

Rescue 7 is the Department's Type II-Medium rescue vehicle. The vehicle carries equipment capable of providing the means to perform high angle (above ground), trench (below ground), confined space, collapse, and swift water rescues. All personnel assigned to Station 7 are State Fire Marshal certified in Confined Space Rescue, Trench Rescue, and Rescue Systems I and II. Numerous members at outlying stations are also trained in these rescue disciplines and they attend required trainings to keep their skill levels proficient. For a large or complex event, these additional rescue technicians may be pulled from other fire apparatus to supplement those already assigned to Station 7.

### ***Hazardous Materials Service***

RFD operates one of three Type I Hazardous Materials Teams located in the Sacramento Region. Task Force 1 personnel are trained to the Hazmat Specialist level of capability. In addition to the seven hazmat specialists assigned to Task Force 1, many other hazmat specialists are assigned around the City and may be mobilized to assist Task Force 1 if the need arises. All operational personnel are trained to the First Response Operations (FRO) level, and may assist with certain hazardous materials incident tasks, such as decontamination.

The Department also staffs a mass decontamination trailer that was provided from regional grants. The equipment/personnel provide the capability to decontaminate large numbers of contaminated people while providing for their modesty. The trailer is one of seven similar resources located throughout the Sacramento region. Personnel assigned to Station 2 are responsible for this resource and deployment when needed.

### ***Tactical EMS***

To assist with immediate care and increase survivability on critical incidents such as an active shooter scenario, one Roseville Fire Engineer/Paramedic and two Firefighter/Paramedics participate on the Roseville Police Special Weapons and Tactics (SWAT) Team providing immediate medical attention for officers, citizens, and suspects that might be injured in a tactical environment. Tactical medics train ten hours every month with the Police SWAT Team and meet annual certification and qualifications.

### ***Paramedic Bike Team***

For special events that involve large crowds or difficult access, RFD deploys two paramedics on bicycles. This crew carries advanced life support (ALS) equipment so paramedic-level care can be provided instantly while waiting for additional responders to arrive.

### ***Fire Investigation Team***

RFD has a six-person investigation team. The team operates under the Fire Life Safety Division. Staffing includes four shift personnel and two 40-hour personnel, which are at the battalion chief and fire inspector rank. The Division Chief manages and coordinates the program and provides 24/7 fire investigation for cause and origin.

RFD investigates all fires occurring within City limits and assists neighboring jurisdictions when requested. Roseville Police Department assists when a fire is determined “criminal” in nature after a cause and origin investigation is conducted. Arrests are made by Roseville Police and they also book and hold evidence. To help facilitate training and knowledge sharing within the investigation community, all Roseville Fire Investigators are members of the Sacramento/Sierra Arson Taskforce, California Conference of Arson Investigators, and the International Association of Arson Investigators.

### ***Fire Administration***

Fire Administration is overseen by the Fire Chief and includes an Administrative Analyst and Administrative Assistant who directly report to the Fire Chief. There are two Assistant Chiefs, one for Support Services and one for Operations. There is a Division Chief of Life Safety, a Battalion Chief for Safety, a Battalion Chief for Training/EMS, GIS Analyst, Fire Inspection Supervisors, Fire inspectors, PIO, and Office Assistant positions.

Roseville Fire Battalion Chiefs operate out of Station 1 in the Battalion 1 command vehicle. One Battalion Chief covers eight stations and ten companies on the same 48 hours on-duty followed by 96 hours off-duty for each A, B, and C shift.

## ***Fire & Life Safety Division***

The Fire & Life Safety Division is composed of eleven full-time staff members and two part-time staff member. The Division oversees a wide variety of programs and services which include the inspection and plan review of commercial construction projects, annual fire inspections on occupancies requiring State-Mandated inspections, and administration of the Certified Unified Program Agency (CUPA), or hazardous materials program. Additionally, the Division provides public education and outreach services to the community through its public education program, and oversees the Department's Public Information Officer.

RFD's Fire & Life Safety Division contracts with South Placer Fire District for plan check and other various prevention duties. The contract is renewable on a semi-annual basis.

This Division also coordinates the City's emergency preparedness program which oversees city-wide preparedness planning in the areas of prevention, preparedness, response, recovery, and mitigation. The Division plans and leads City- and County-wide disaster drills, trains City personnel on Emergency Operations Center (EOC) operations, and handles emergency notification delivery systems to warn citizens of impending emergencies. The City's Emergency Operations Plan and Multi-Hazard Mitigation Plan are reviewed and updated annually.

## ***Public Safety Outreach and Public Education***

RFD actively participates to spread its mission throughout the community. Using news releases, public service announcements, and direct contact, the Department assures public education reaches its intended audience. Administrative personnel, suppression personnel, and volunteers are all used in a continuing program to educate and train the public in essential lifesaving skills. Other programs include smoke detector checks and installation for those in need. RFD also hosts car seat inspections.

Quarterly, RFD opens up one fire station to meet the community and show them the Department's capabilities. Each event has a different safety theme and allied public safety educators are encouraged to participate.

Roseville Firefighters host an annual week-long Kids Fire Camp where children between 12 and 14 years of age have the opportunity to spend six days immersed in learning lifesaving skills and fire service careers. At the conclusion of the camp week, participants show their parents the skills they learned during a graduation ceremony.

## ***Training Division***

Training is the keystone to effective emergency response. During emergency operations, time is always of the essence and an effective training program can mean the difference between a fire contained to the area of origin and one that causes great damage.

Training in the fire service has two parts: (1) vocational training, which teaches the skill sets necessary to do the “hands-on” type of work that firefighters do; and (2) education, which teaches the knowledge necessary to do the mental work. The Training Division maintains Standard Operating Evolutions, thus ensuring a well-trained, effective, and aggressive response capability.

NFPA has several recommended standards that apply to fire service training. RFD has adopted the following standards by reference, as they represent best practices for the fire service.

- **NFPA 1403** - *Standard on Live Fire Training Evolutions*. This standard outlines the procedures required for safe live-fire training. This is a particularly important standard as live-fire training is demonstrably the most dangerous training activity undertaken by the fire service. RFD conducts live-fire training at its training facility in specially designed burn rooms.
- **NFPA 1410** - *Standard for Initial Emergency Scene Operations*. Standard Company Evolutions are the minimum acceptable standards for the performance of critical firefighting tasks. These NFPA Standards have been incorporated into the RFD Standard Operating Evolutions Manual. All line personnel (firefighter through captain) train regularly on these evolutions so they can effectively, efficiently, and safely operate as part of an emergency response company.

RFD utilizes the State Fire Training - Office of State Fire Marshal (OSFM) certification standards for its entry and promotional training requirements. Positions which meet or exceed State Fire certification and training standards include Firefighter, Apparatus / Operator, and Fire Officer. There is a consistent sanctioned career development program through all levels in the OSFM certification program and the California State Fire Training - OSFM training certification program is compliant with national standards.

RFD participates in the “Red Card” system through the California Incident Command Certification System (CICCS). This program ensures that Incident Command and wildland fire training requirements are met. Training is under the auspices of the OSFM’s Fire Service Training and Education Program. All RFD instructors are certified Fire Instructors through State Fire Training – OSFM and/or are qualified subject matter experts with extensive training in instructional methodology. The Training Division is staffed with a Division Chief of Training and supplemented with designated Department instructors used as needed for specialized training in Hazmat, Technical Rescue, Wildland Firefighting, Pump Operations, Emergency Vehicle Driving, and Fire Officer Development. Didactic training can often be delivered directly

to fire stations via online learning tools such as Target Solutions and GoTo Meeting. The fire stations also have a standard International Fire Service Training Association (IFSTA) training library.

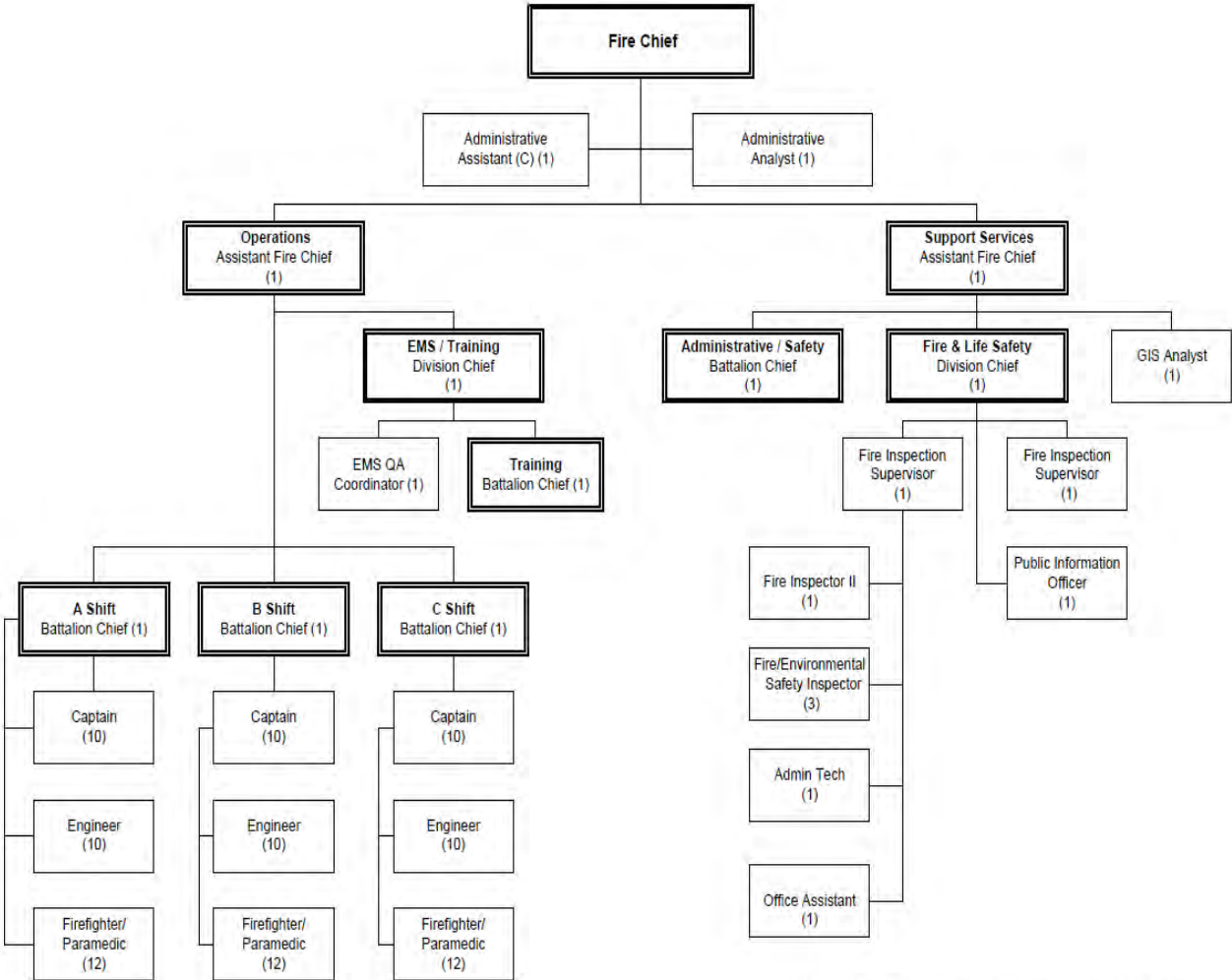
Manipulative training is conducted at the Roseville Fire Training Center, a state-of-the-art training facility that includes a six-story training tower with computerized burn rooms, classrooms, drafting pit, above/below grade technical rescue props, and fully functional hazardous materials props.

The RFD Training Division manages the following required training and associated activities:

- Insurance Services Office required drills – live-fire drills, multi-company drills, regional drills, driver / pump operator, emergency vehicle operator, and new hire firefighter academy training.
- Interagency mutual aid drills.
- California Code of Regulations required training – Hazardous Materials, Technical Rescue, annual wildland fire refresher, Blood-Borne Pathogen, and SCBA.
- Code of Federal Regulations – Confined Space and Trench Rescue training. The Fire Training Center (FTC) provides facilities for effective drills and classroom presentations which are essential to the development of skills.

A Training Advisory Committee meets monthly to help identify and guide training priorities in the Department's two-year training plan. This committee comprises lead instructors, program managers, and members-at-large.

Figure 9: Fire Department Organizational Chart



Roseville Fire Department (119 FTE)

## Population History and Calls for Service

**Table 5: Staffing and Population by Year**

| Year | Population | Total Calls | Operations Response Personnel | FF's Per 1,000 Population | Shift Staffing |
|------|------------|-------------|-------------------------------|---------------------------|----------------|
| 2014 | 127,153    | 13,113      | 99                            | .78                       | 23             |
| 2015 | 131,433    | 14,655      | 99                            | .75                       | 33             |
| 2016 | 134,073    | 15,071      | 99                            | .74                       | 33             |
| 2017 | 135,868    | 15,939      | 99                            | .73                       | 33             |
| 2018 | 137,213    | 16,582      | 99                            | .72                       | 33             |

\*Budget and staffing numbers from FY 2019 Budget.

## Fire Department Staffing

**Table 6: Administrative Positions**

| Positions                 | Number |
|---------------------------|--------|
| Fire Chief*               | 1      |
| Assistant Fire Chief*     | 2      |
| Division Chief*           | 2      |
| Battalion Chief*          | 5      |
| EMS QA Coordinator        | 1      |
| Administrative Analyst    | 1      |
| Administrative Assistant  | 1      |
| Office Assistant          | 1      |
| GIS Analyst               | 1      |
| Pub Ed Coordinator        | .5     |
| Fire Inspector Supervisor | 2      |
| Fire Inspectors*          | 4      |
| Fire Technician           | 1      |
| Fire PIO                  | 1      |
| Office Assistant          | 1      |
| Total                     | 23.5   |
| * Sworn positions         | 12     |



**Table 7: Emergency Response Personnel 2018**

| Positions              | Number |
|------------------------|--------|
| Fire Chief             | 1      |
| Assistant Fire Chief   | 2      |
| Division Chief         | 2      |
| Battalion Chief        | 5      |
| Fire Captain           | 30     |
| Fire Engineer          | 30     |
| Firefighter Paramedics | 36     |
| TOTAL                  | 106    |

**Table 8: Minimum Daily Staffing**

| Positions                  | Number |
|----------------------------|--------|
| 8 Engines @ 3 FF's per Day | 24     |
| 2 Trucks @ 4 FF's per Day  | 8      |
| 1 Battalion Chief          | 1      |
| TOTAL                      | 33     |

## Unit Staffing

Each unit is staffed by career personnel, with wildland units (Grass and Brush), HazMat, and Rescue cross staffed by the same personnel from that station. If a wildland fire is dispatched, the crew will respond in the wildland unit and place the engine out of service.

**Table 9: Unit Identifications with Type and Staffing**

| Unit        | ID  | UNIT TYPE | BC                       | Captain | Engineer | FF Medic | FF or FF Medic | TOTAL |
|-------------|-----|-----------|--------------------------|---------|----------|----------|----------------|-------|
| Battalion 1 | B1  |           | 1                        |         |          |          |                | 1     |
| Engine 1    | E1  | I         |                          | 1       | 1        | 1        |                | 3     |
| Truck 1     | T1  |           |                          | 1       | 1        | 1        | 1              | 4     |
| Hazmat 1    | HM1 | II        | Cross Staffed by E1 / T1 |         |          |          |                |       |
| Engine 2    | E2  | I         |                          | 1       | 1        | 1        |                | 3     |
| Grass 2     | G2  | VI        | Cross Staffed by E2      |         |          |          |                |       |
| Engine 3    | E3  | I         |                          | 1       | 1        | 1        |                | 3     |
| Engine 4    | E4  | I         |                          | 1       | 1        | 1        |                | 3     |
| Grass 4     | G4  | VI        | Cross Staffed by E4      |         |          |          |                |       |
| Engine 5    | E5  | I         |                          | 1       | 1        | 1        |                | 3     |
| Brush 5     | BR5 | III       | Cross Staffed by E5      |         |          |          |                |       |
| Engine 6    | E6  | I         |                          | 1       | 1        | 1        |                | 3     |
| Brush 6     | BR6 | III       | Cross Staffed by E6      |         |          |          |                |       |
| Engine 7    | E7  | I         |                          | 1       | 1        | 1        |                | 3     |
| Truck 7     | T7  |           |                          | 1       | 1        | 1        | 1              | 4     |
| Rescue 7    | R7  | MED       | Cross Staffed by E7 / T7 |         |          |          |                |       |
| Engine 9    | E9  | I         |                          | 1       | 1        | 1        |                | 3     |
| Brush 9     | BR9 | III       | Cross Staffed by E9      |         |          |          |                |       |

## Community Response History

### Methodology

Data were collected and reviewed from both call data-processing applications utilized by the Department spanning January 1, 2016 to December 31, 2018 for CAD and January 1, 2014 to December 31, 2018 for RMS. All reporting periods were based on the calendar year from January 1 to December 31. As such, this report presents five full reporting periods of RFD baseline workload and response time performance data, where available and applicable.

In this report, the Department utilizes two distinct measures: call volume and workload. Call volume is the number of requests for service that are defined as either “dispatches” or “calls.” Dispatches/calls are the number of times a distinct incident was created involving RFD units or calls in RFD’s jurisdiction. Workload is the number of times that an individual unit (or units) responded to a call. Responses will be utilized on all unit- and station-level analyses, which account for all elements of workload and performance. Responses were classified based on call status and the role of the responding unit. Call status as emergency (lights and sirens) was obtained from the RMS call-level data file.

The following chart demonstrates workload by call type. During the 2018 reporting period (i.e., January 1, 2018 to December 31, 2018; hereinafter referred to as 2018), RFD received a total of 16,930 unique requests for service (Figure 9; Table 6). Incidents reflect requests for service within RFD’s demand zones, as well as from other agencies outside of the demand zones through automatic and mutual aid. EMS related requests totaled 10,247, accounting for 60.5% of the total call volume, and fire related requests totaled 325, accounting for 1.9% of the total call volume.

Figure 10: Percentage of Total Incidents by Program

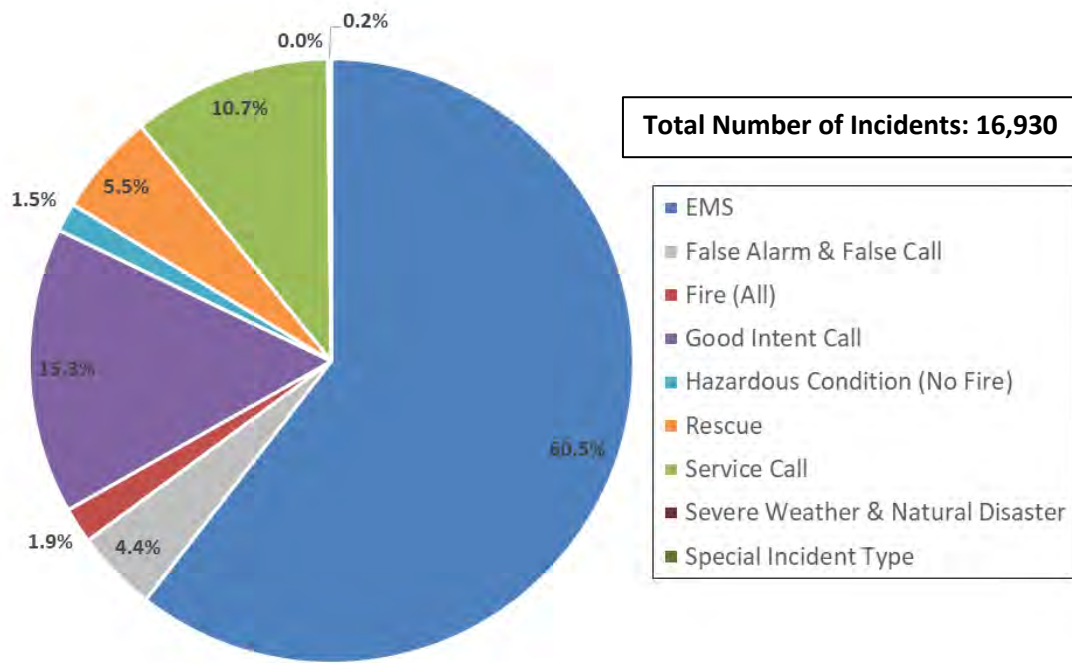


Table 10: Number of Incidents by Call Category

| Call Category <sup>1</sup>                   | Number of Calls | Average Calls per Day | Call Percentage |
|----------------------------------------------|-----------------|-----------------------|-----------------|
| <b>EMS</b>                                   | <b>10,247</b>   | <b>28.1</b>           | <b>60.5</b>     |
| <b>False Alarm &amp; False Call</b>          | <b>739</b>      | <b>2.0</b>            | <b>4.4</b>      |
| Fire (Not Building or Wildland)              | 92              | 0.3                   | 0.5             |
| Building Fire                                | 130             | 0.4                   | 0.8             |
| Wildland Fire                                | 103             | 0.3                   | 0.6             |
| <b>Fire (All)</b>                            | <b>325</b>      | <b>0.9</b>            | <b>1.9</b>      |
| <b>Good Intent Call</b>                      | <b>2,594</b>    | <b>7.1</b>            | <b>15.3</b>     |
| <b>Hazardous Conditions (No Fire)</b>        | <b>261</b>      | <b>0.7</b>            | <b>1.5</b>      |
| <b>Rescue</b>                                | <b>928</b>      | <b>2.5</b>            | <b>5.5</b>      |
| <b>Service Call</b>                          | <b>1,804</b>    | <b>4.9</b>            | <b>10.7</b>     |
| <b>Severe Weather &amp; Natural Disaster</b> | <b>3</b>        | <b>0.0</b>            | <b>0.0</b>      |
| <b>Special Incident Type</b>                 | <b>29</b>       | <b>0.1</b>            | <b>0.2</b>      |
| <b>Total</b>                                 | <b>16,930</b>   | <b>46.4</b>           | <b>100.0</b>    |

<sup>1</sup>Classifications of incident types from the data file into call category are presented in the Appendix of the data report.

**Table 11: Number of Calls, Number of Responses, and Total Busy Time by Reporting Period**

| Reporting Period <sup>1</sup> | Number of Calls <sup>2</sup> | Number of Responses <sup>3</sup> | Average Responses per Call | Total Busy Hours | Responses with Time Data <sup>4</sup> | Average Busy Minutes per Response | Average Calls per Day <sup>5</sup> | Average Responses per Day <sup>5</sup> |
|-------------------------------|------------------------------|----------------------------------|----------------------------|------------------|---------------------------------------|-----------------------------------|------------------------------------|----------------------------------------|
| 2014                          | 13,466                       | 16,487                           | 1.2                        | 5,672.4          | 16,413                                | 20.7                              | 36.9                               | 45.2                                   |
| 2015                          | 14,969                       | 18,123                           | 1.2                        | 6,173.6          | 17,431                                | 21.3                              | 41.0                               | 49.7                                   |
| 2016                          | 15,402                       | 17,942                           | 1.2                        | 6,190.4          | 17,105                                | 21.7                              | 42.1                               | 49.0                                   |
| 2017                          | 16,277                       | 19,839                           | 1.2                        | 6,236.6          | 19,444                                | 19.2                              | 44.6                               | 54.4                                   |
| 2018                          | 16,908                       | 20,847                           | 1.2                        | 6,624.4          | 20,546                                | 19.3                              | 46.3                               | 57.1                                   |

<sup>1</sup>Reporting periods reflect full calendar years, from January 1 to December 31 of each respective year.

<sup>2</sup>“Number of Calls” reflects an adjusted number of unique incidents to correspond with responses made by RFD units as available in the unit-level data file. For example, for 2018, 11 unique incident keys appeared in the call-level data file, but not in the unit-level data file, and within the unit-level data file, 11 additional unique calls reported only AMR unit responses.

<sup>3</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>4</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix of data report).

<sup>5</sup>Reporting period 2016 contained 366 days due to inclusion of leap year date February 29, 2016; all other reporting periods contained 365 days.

**Table 12: Number of Incidents Dispatched by Category, Reporting Period, and Demand Zone (Roseville Only)**

| Demand Zone | Call Category                      | Reporting Period <sup>1</sup> |        |        |        |        |
|-------------|------------------------------------|-------------------------------|--------|--------|--------|--------|
|             |                                    | 2014                          | 2015   | 2016   | 2017   | 2018   |
| Roseville   | EMS                                | 8,618                         | 9,614  | 9,561  | 9,769  | 10,190 |
|             | False Alarm & False Call           | 474                           | 576    | 675    | 685    | 734    |
|             | Fire (Not Building or Wildland)    | 133                           | 121    | 121    | 123    | 89     |
|             | Building Fire                      | 109                           | 112    | 109    | 101    | 120    |
|             | Wildland Fire                      | 66                            | 54     | 62     | 64     | 91     |
|             | Fire (All)                         | 308                           | 287    | 292    | 288    | 300    |
|             | Good Intent Call                   | 1,345                         | 1,582  | 1,833  | 2,336  | 2,447  |
|             | Hazardous Conditions (No Fire)     | 201                           | 215    | 220    | 237    | 258    |
|             | Rescue                             | 772                           | 806    | 922    | 876    | 918    |
|             | Service Call                       | 1,386                         | 1,567  | 1,563  | 1,731  | 1,703  |
|             | Severe Weather & Natural Disaster  | 6                             | 2      | 1      | 2      | 3      |
|             | Special Incident Type              | 3                             | 1      | 4      | 14     | 29     |
|             | Unknown                            | 0                             | 5      | 0      | 1      | 0      |
|             | Total <sup>2</sup>                 | 13,113                        | 14,655 | 15,071 | 15,939 | 16,582 |
|             | Average Calls per Day <sup>2</sup> | 35.9                          | 40.2   | 41.2   | 43.7   | 45.4   |
|             | YoY Growth                         | N/A                           | 11.8%  | 2.8%   | 5.8%   | 4.0%   |

<sup>1</sup>Reporting periods reflect full calendar years, from January 1 to December 31 of each respective year.

<sup>2</sup>Reporting period 2016 contained 366 days due to inclusion of leap year date February 29, 2016; all other reporting periods contained 365 days.

**Table 13: Overall Workload by Station**

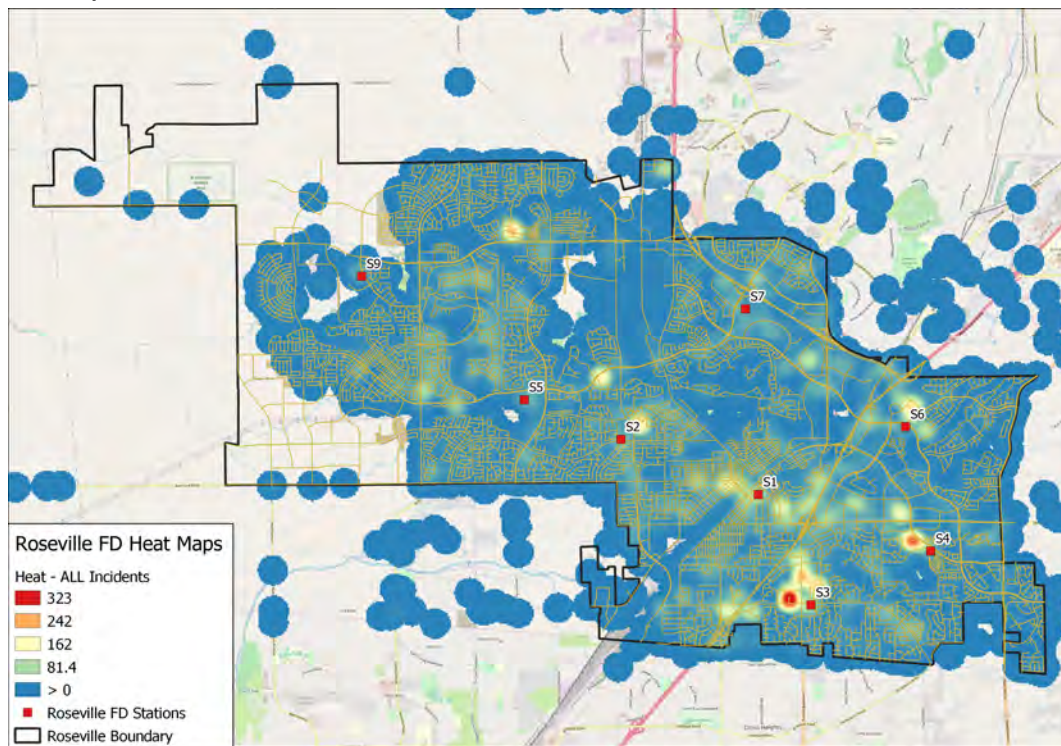
| Station                | Number of Calls Responded to by Units Assigned to Station | Number of Responses Made by Units Assigned to Station <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response | Percentage of Total Busy Hours |
|------------------------|-----------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------|------------------|-----------------------------------|--------------------------------|
| Station 1              | 3,446                                                     | 4,544                                                              | 4,452                                 | 1,370.0          | 18.5                              | 20.7                           |
| Station 2              | 2,054                                                     | 2,057                                                              | 2,035                                 | 674.9            | 19.9                              | 10.2                           |
| Station 3              | 2,989                                                     | 2,989                                                              | 2,963                                 | 928.1            | 18.8                              | 14.0                           |
| Station 4              | 2,100                                                     | 2,100                                                              | 2,078                                 | 635.4            | 18.3                              | 9.6                            |
| Station 5              | 2,220                                                     | 2,225                                                              | 2,198                                 | 766.0            | 20.9                              | 11.6                           |
| Station 6              | 2,096                                                     | 2,108                                                              | 2,078                                 | 593.0            | 17.1                              | 9.0                            |
| Station 7              | 2,523                                                     | 2,950                                                              | 2,906                                 | 940.0            | 19.4                              | 14.2                           |
| Station 9              | 1,825                                                     | 1,831                                                              | 1,810                                 | 685.7            | 22.7                              | 10.4                           |
| RFD Admin              | 35                                                        | 38                                                                 | 24                                    | 30.5             | 76.1                              | 0.5                            |
| RFD Other <sup>3</sup> | 5                                                         | 5                                                                  | 2                                     | 0.8              | 23.9                              | 0.0                            |
| <b>Total</b>           | --                                                        | <b>20,847</b>                                                      | <b>20,546</b>                         | <b>6,624.4</b>   | <b>19.3</b>                       | <b>100.0</b>                   |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix of data report).

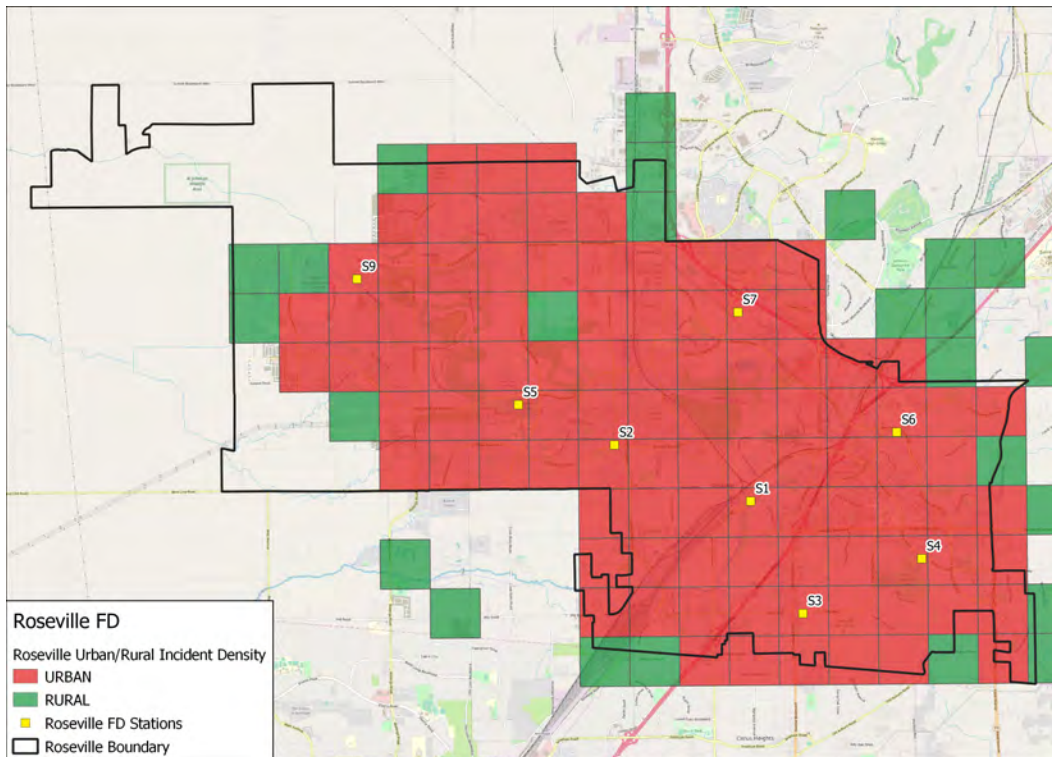
<sup>3</sup>Reflects only the unit OES364, a state resource staffed by RFD for state or federal incidents; not otherwise typically staffed.

**Figure 11: Heat Map for All Incidents**





**Figure 12: Urban and Rural Call Density Map with Current Stations**



## Distribution of Resources

The term distribution describes resource locations needed to ensure a rapid initial response to emergencies. Distribution is measured by the percentage of the jurisdiction covered by the first-in response company within adopted response time goals.

This view of the response system analyzes fire and EMS resource deployment in terms of a static placement of resources and their theoretical response potential. By taking this theoretical view of the system, it is possible to determine whether or not response standards can be met from existing infrastructure with current staffing levels when all companies and units are in quarters and available for emergency response.

The Department uses a variety of factors to determine optimal locations for fire stations from pertinent national standards, including NFPA (NFPA 1710 –*Standard for Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operations to the Public by Career Fire Departments*, 2010 Edition), the Insurance Services Office (ISO), and the American Heart Association, covering both response time and deployment standards (including number and type of resources needed on scene). In addition, GIS mapping uses time and distance studies that are performed to measure actual distances and travel times across the service area. The results help determine response areas and response order for RFD.

The Department's current fire station positioning provides for an efficient distribution of the available emergency response resources. In developing this infrastructure, the goal was to balance elements that include a favorable fire station site configuration and three additional areas of consideration, as follows:

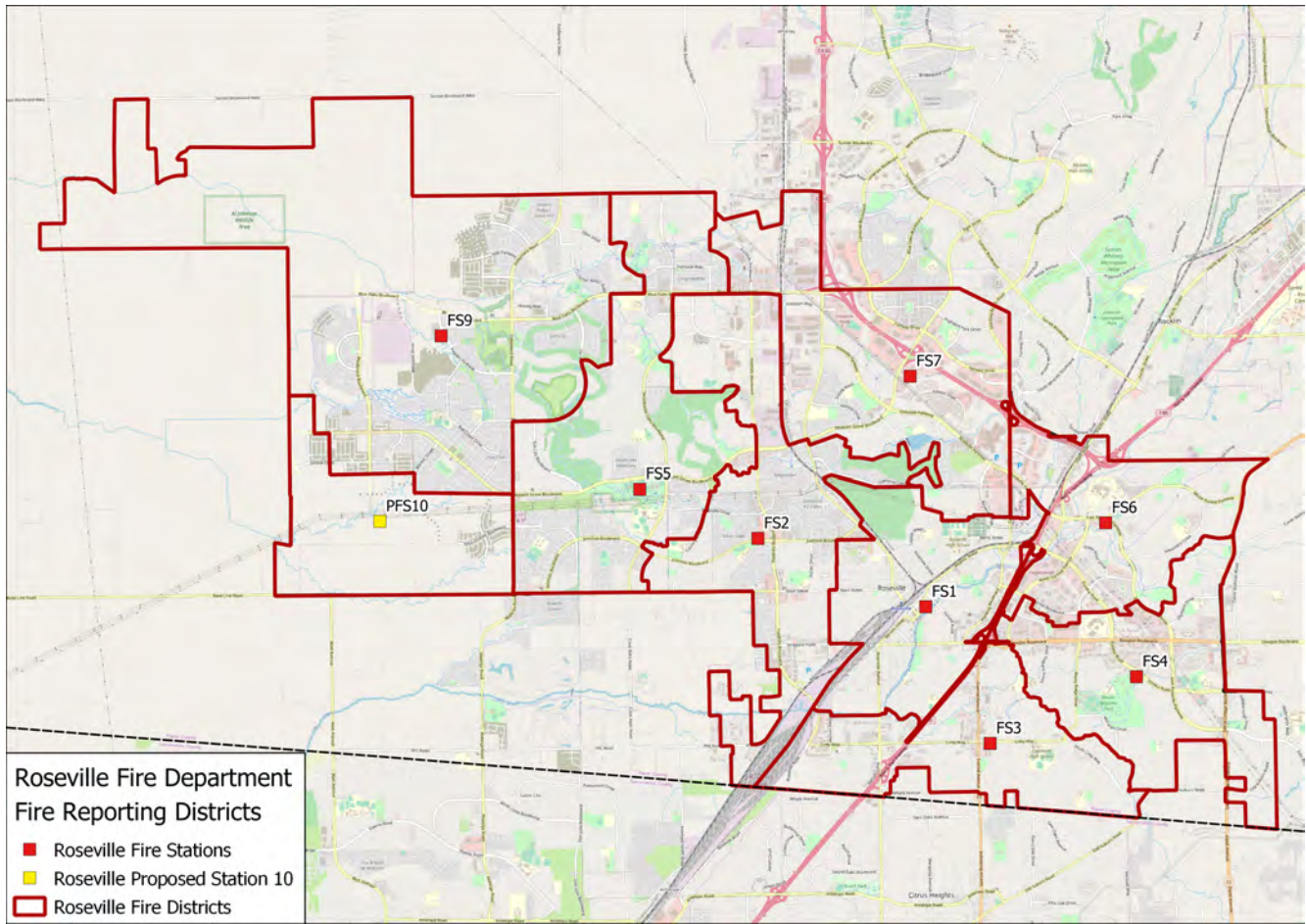
- Placement - Geographic spacing between fire stations taking into consideration natural and human-made obstacles or barriers, and provides for coverage efficiency balanced with depth of coverage through limited response zone overlap.
- Response Routes - Proximity and access to multi-directional transportation corridors sized appropriately for fire apparatus and referred to as run streets.
- Property Acquisition - Availability, lot size, and the cost of suitable sites within the parameters of factors noted above.

Currently, RFD operates out of eight fire stations divided into one geographically defined battalion, composed of nine first due response districts containing a total of 210 fire-reporting districts. All CAD data are reviewed from the response district perspective. However, the Department can focus on the smaller fire reporting district if needed to make smaller adjustments to response districts.



## **Fire Response First Due Districts and Fire Reporting Districts**

**Figure 13: City of Roseville Response Districts by First Due**



### **Staffing, Station Location, and Equipment Analysis**

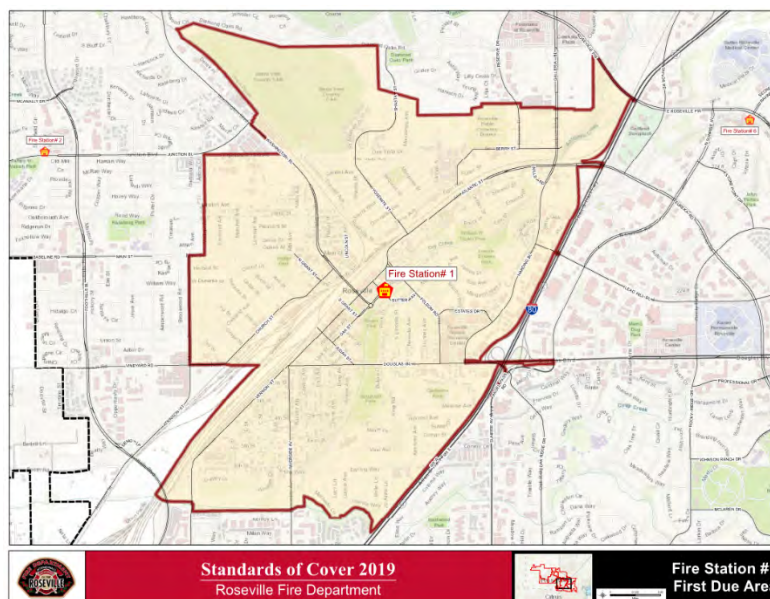
A critical factor in developing this SOC is review of the overall system to see if it is meeting the established service-level objectives. It is common for fire and EMS response that distinctive geographic areas are built upon the first due response areas of the fire stations located throughout the City. This approach allows the fire department to analyze the workload and measure the performance of those stations based upon the identified service-level objectives. By doing so, it assists in identifying areas of weakness, where additional stations may be warranted, and/or where additional companies should be placed in service based upon the workload.

## Fire Station 1 & Administration Headquarters

800 Lincoln Street  
Roseville, CA 95678



| Apparatus   | Apparatus Type | Number of Personnel Assigned |
|-------------|----------------|------------------------------|
| Engine 1    | Engine         | 3                            |
| Truck 1     | Truck          | 4                            |
| Battalion 1 | SUV            | 1                            |
| Hazmat 1    | Specialty      | Cross-staffed                |

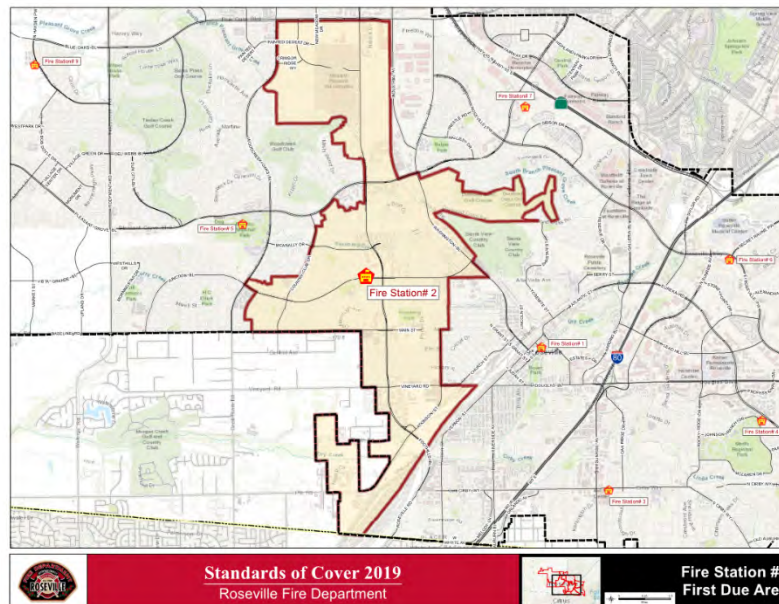




**Fire Station 2**  
1398 Junction Blvd  
Roseville, CA 95747



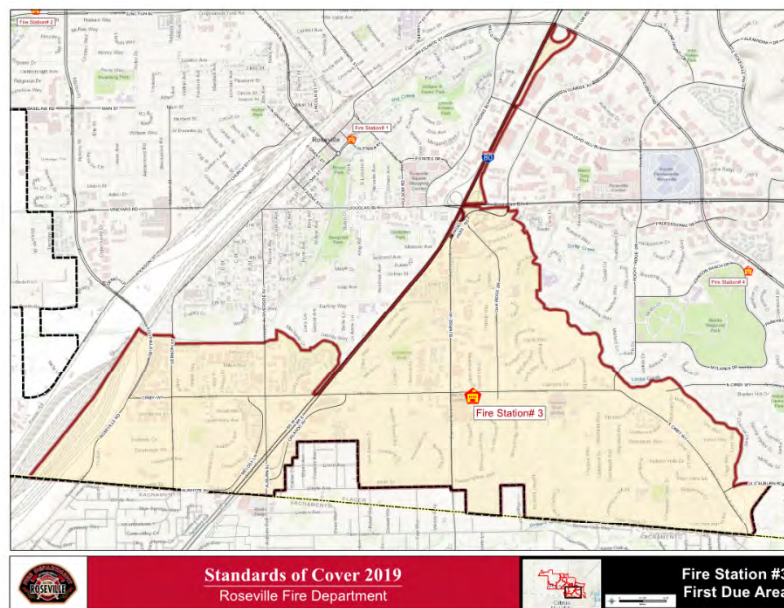
| Apparatus | Apparatus Type | Number of Personnel Assigned |
|-----------|----------------|------------------------------|
| Engine 2  | Engine         | 3                            |
| Grass 2   | Specialty      | Cross-staffed                |



**Fire Station 3**  
1300 Cirby Way  
Roseville, CA 95661



| Apparatus         | Apparatus Type | Number of Personnel Assigned |
|-------------------|----------------|------------------------------|
| Engine 3          | Engine         | 3                            |
| Reserve Engine 3B | Engine         | Reserve                      |

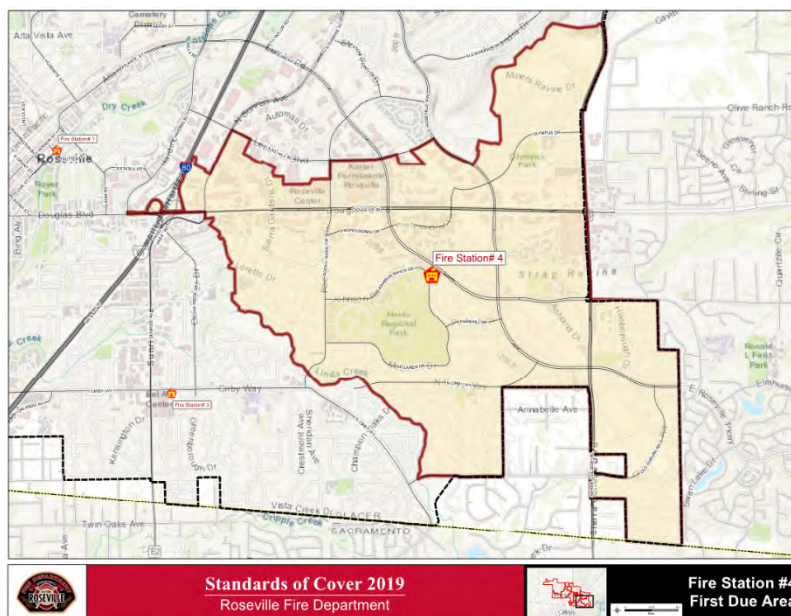




**Fire Station 4**  
1900 Eureka Rd  
Roseville, CA 95661



| Apparatus | Apparatus Type | Number of Personnel Assigned |
|-----------|----------------|------------------------------|
| Engine 4  | Engine         | 3                            |
| Grass 4   | Specialty      | Cross-staffed                |

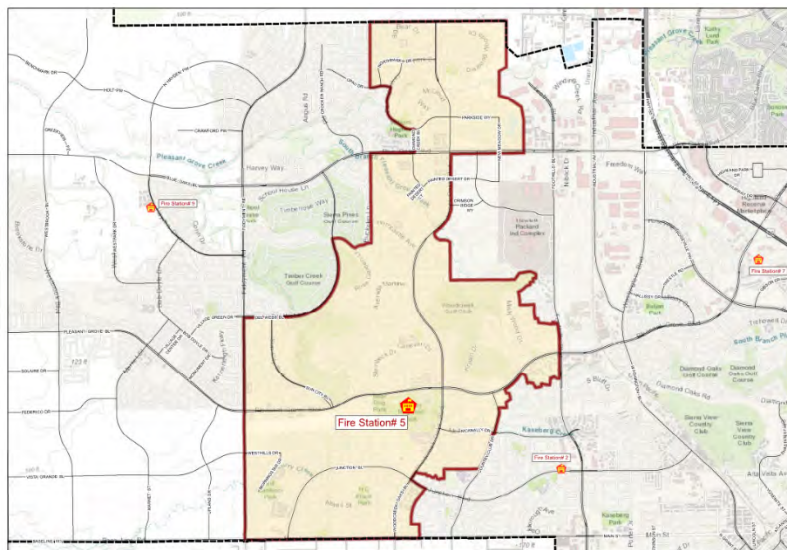


## Fire Station 5

1565 Pleasant Grove Blvd.  
Roseville, CA 95747



| Apparatus         | Apparatus Type | Number of Personnel Assigned |
|-------------------|----------------|------------------------------|
| Engine 5          | Engine         | 3                            |
| Reserve Engine 5B | Engine         | Reserve                      |
| Brush 5           | Wildland       | Cross-staffed                |



Standards of Cover 2019  
Roseville Fire Department



Fire Station #5  
First Due Area

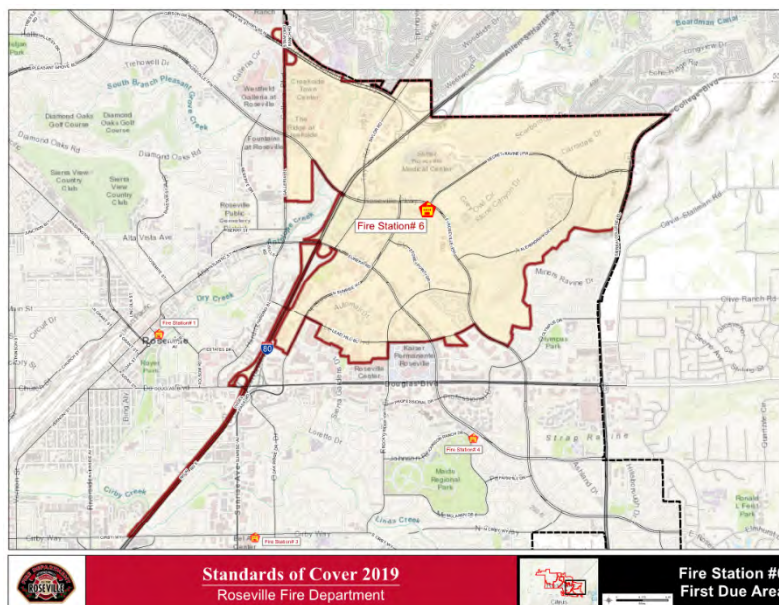


## Fire Station 6

1430 East Roseville Pkwy  
Roseville, CA 95661



| Apparatus                      | Apparatus Type | Number of Personnel Assigned |
|--------------------------------|----------------|------------------------------|
| Engine 6                       | Engine         | 3                            |
| Reserve Engine 6B              | Engine         | Reserve                      |
| Brush 6<br>*2004 International | Wildland       | Cross-Staffed                |
| Paramedic Bike 1               | Bicycle        | 1                            |

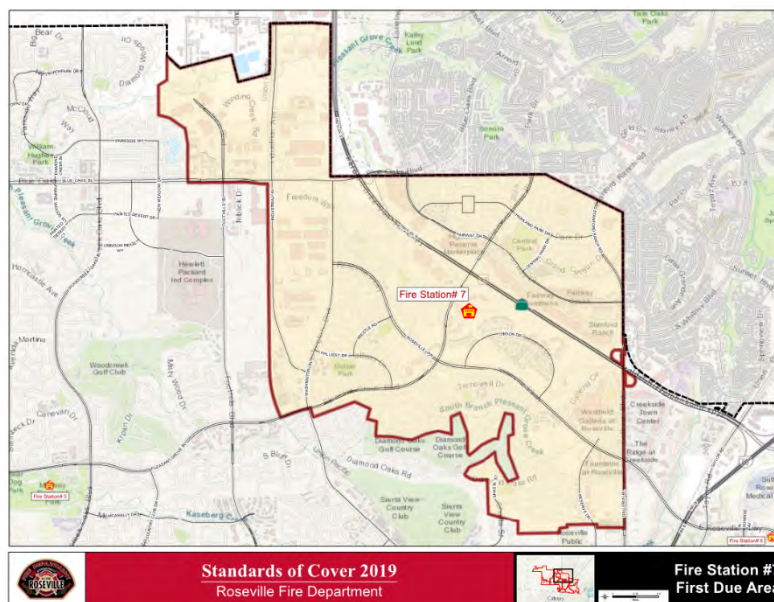


## Fire Station 7

911 Highland Pointe Dr.  
Roseville, CA 95661



| Apparatus       | Apparatus Type | Number of Personnel Assigned |
|-----------------|----------------|------------------------------|
| Truck 7         | Truck          | 4                            |
| Reserve Truck 7 | Truck          | Reserve                      |
| Engine 7        | Engine         | 3                            |
| Rescue 7        | Specialty      | Cross-staffed                |

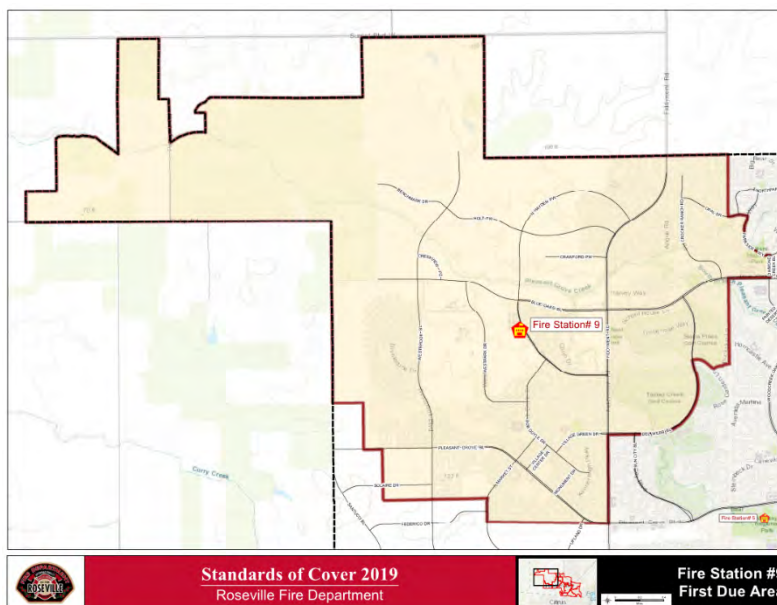




**Fire Station 9**  
2451 Hayden Parkway  
Roseville, CA 95747



| Apparatus | Apparatus Type | Number of Personnel Assigned |
|-----------|----------------|------------------------------|
| Engine 9  | Engine         | 3                            |
| Brush 9   | Wildland       | Cross-staffed                |



## Fire Training Center

2030 Hilltop Circle  
Roseville, CC 95678



| Apparatus                         | Apparatus Type | Number of Personnel Assigned |
|-----------------------------------|----------------|------------------------------|
| Bauer Air Trailer                 | Trailer        | -                            |
| Training 1<br>*97.425 Spartan     | Engine         | -                            |
| MCI<br>Decontamination<br>Trailer | Trailer        | -                            |

The Fire Training Center sits on five acres and serves as a regional training hub providing state certified technical rescue, hazardous materials, and command training programs for Roseville and other public safety agencies. Twice a year, the Roseville Fire Training Center hosts a pre-service Firefighter I Academy in partnership with Sierra College.

The six-story tower contains Class A burn rooms, anchors for high-angle rappelling, forcible entry props, an elevator shaft, SCBA confidence course, simulated building fronts (retail and center hallway), and various search and rescue rooms. Other on-site props include a train derailment prop, multiple hazmat props for rail, transport, and fixed facility simulations, and a roof ventilation prop. The site also houses two multi-use classrooms with office space and a large apparatus building with two bays that house the training engine and the air trailer.

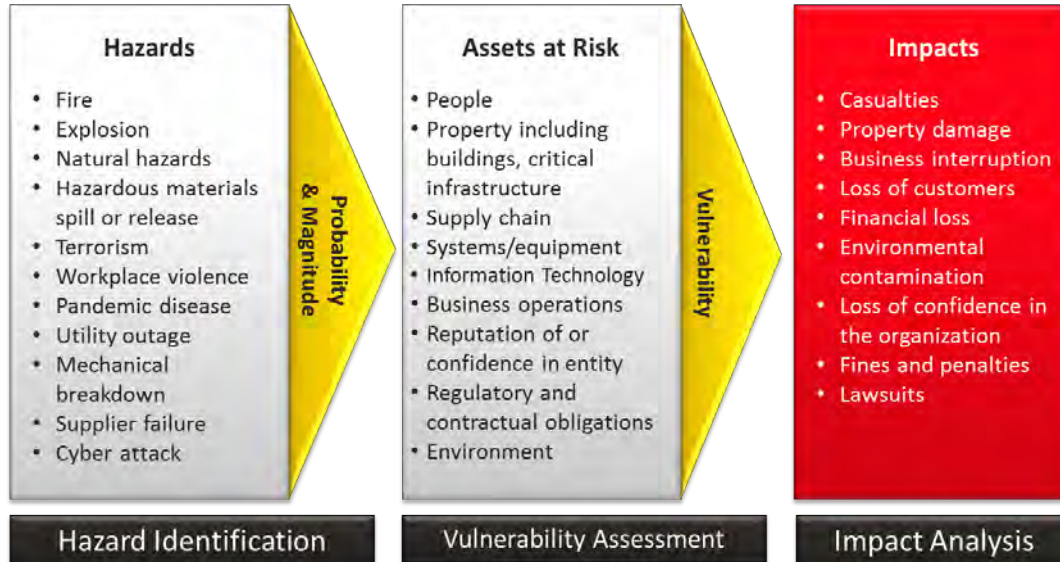
## SECTION 3: COMMUNITY RISK ASSESSMENT METHODOLOGY

### Risk Assessment Methodology

The City must assess risks based upon the potential frequency (probability of an incident occurring) and consequence (potential damage should an event occur). For example, a dike breach at Folsom Lake has a low probability; however, if a dike breach occurs, it is estimated that numerous areas of Roseville, south of Douglas Boulevard and east of Sunrise, could be 10+ feet under water. The damage and the economic impact are potentially very high. The overall potential damage from routine medical emergencies to the community as a whole is not nearly as significant as that from an earthquake or other natural disaster, although these individual incidents greatly affect those requiring our service. To design future deployment strategies, the Department must be able to compare the potential frequency and damage of events that may affect the community and service area.

Risk assessment is the analysis of the chance of an event occurring and the resulting damage that could occur as a result of the event. Risk management is the practice of committing sufficient resources to address the hazards in the most effective and efficient manner available.

**Figure 14: Hazard Identification, Vulnerability Assessment, and Impact Analysis**



The relationships between probability and consequence, and the community's adopted service-level goals determine the needed concentration and distribution of resources.

Distribution is the number of resources placed throughout the City. Currently, this can be best described as deploying sufficient resources to provide a 5:00 (300 seconds) travel time 90% of the time

to all residents. Concentration is the number of resources needed in a given area within the City depending on many factors, including the number of calls for service, the risk factors of the area, the availability, reliability, and time of arrival of secondary responding units.

The risk assessment process utilizes a systematic methodology to evaluate the unique risks that are specific to RFD. This process evaluates risk from two broad perspectives. First, risk is identified through retrospective analyses of historical data. Second, risk is evaluated prospectively providing the necessary structure to appropriately allocate personnel, apparatus, and fire stations that allow sufficient distribution and concentration of resources to mitigate those risks. This methodology also provides information for the Department to consider alternative solutions to assist in the mitigation of risks.

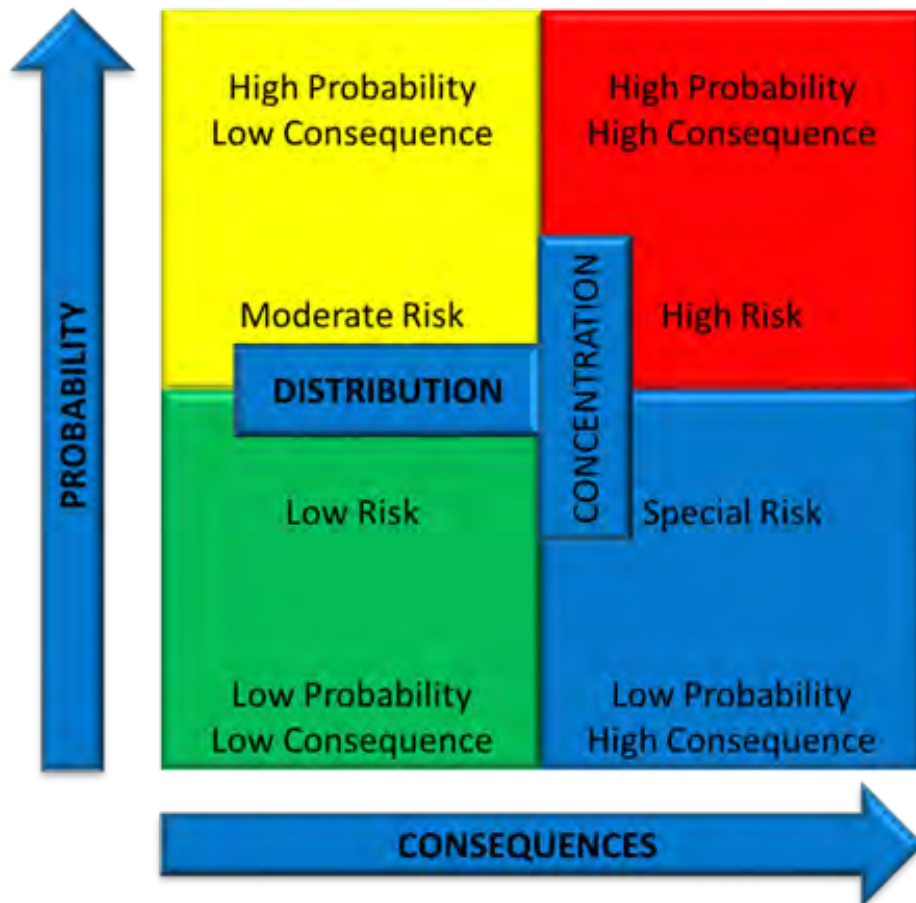
The overall community risk assessment process and methods utilized by RFD is outlined below.

**Figure 15: Community Risk Assessment Process**





Figure 16: Probability and Consequence Matrix



Community service demands were analyzed by the incident history, type, locations, and incident frequencies. Within this process, a temporal analysis was completed for each major program area and evaluated by station demand zone and the frequency of incidents. Community risks were evaluated by each program area and risks were identified in each demand zone. This methodology not only provides for sufficient allocation of resources to manage the readiness or preparedness aspects of the deployment strategy, but also balances the costs of readiness with an in-depth understanding of the probability of events through historical analyses. The combined results of this process were utilized to classify risk by severity utilizing a probability and consequence matrix for each program/risk area. Finally, the critical tasks required for each level of risk were identified. An example of the overall probability and consequence matrix is provided above (Figure 16).

## Resource Management

A critical element in the assessment of any emergency service delivery system is the ability to provide adequate resources for anticipated fire combat situations, medical emergencies, and other anticipated events. Each emergency requires a variable amount of staffing and resources to be effective. Properly trained and equipped fire companies must be notified, respond, arrive, and deploy at the event within specific timeframes and in proper numbers to mitigate the event.

The objective is to have a distribution of resources that is able to reach a majority of events in the timeframe as stated in the service-level goals. There are many factors that make up the risk level, which would indicate the need for a higher concentration of resources.

Risk Factors:

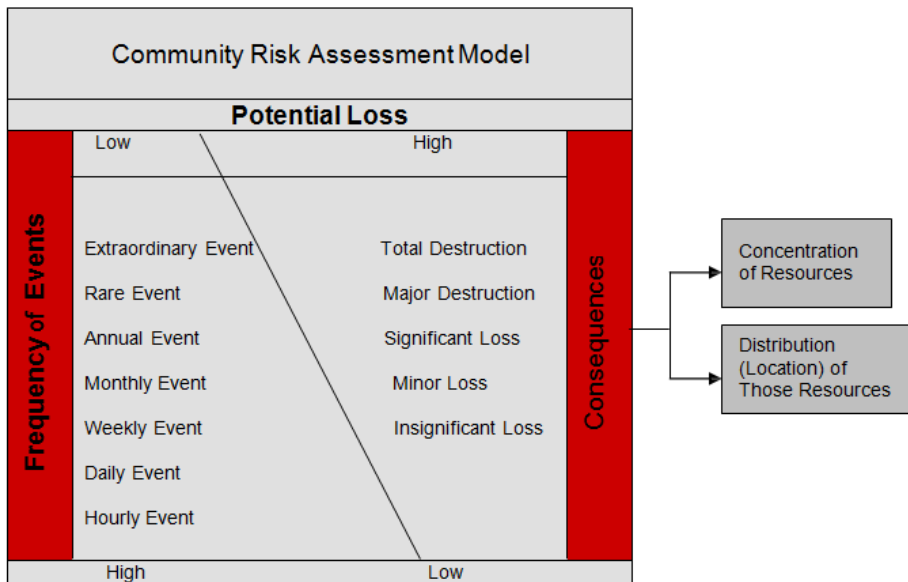
- Inability of occupants to take self-preserving actions
- Construction features
- Lack of built-in fire protection
- Hazardous structures
- Lack of needed fire flow
- Nature of the occupancy or its contents

Evaluation of such factors leads to the number of personnel needed to conduct the critical tasks necessary to contain the event in an acceptable timeframe. The level of service provided by an agency should be based on the agency's ability to cope with various types and sizes of emergencies that the agency can reasonably expect after conducting a risk assessment.

This process starts with examining the most common community risk, the potential fire problem, target hazards, critical infrastructure, and an analysis of historic call data.

Community risk assessment incorporates the various elements of risk among the community as a whole, the frequency of events that occur, the severity of potential losses, and the distribution of those risks. Overall, Roseville and its service areas are likely to have a wide range of potential risks, and there will be an inverse relationship between risk and frequency. The daily event is usually the routine calls that result in minimal losses, while significant events are less frequent. Toward the highest risk levels on the chart, the events are less frequent. If the risk management system is working in the community, a catastrophic loss should be an extraordinary event. The objective of a risk assessment is to reduce the truly serious loss to a very unusual event for the area served and involves trying to keep routine emergencies from becoming serious loss situations.

**Figure 17: Community Risk Assessment Model**



The purpose of risk assessment is not only to evaluate risks and hazards in the fire department's response area but also to provide a basic methodology to evaluate existing response coverage. The process begins with the identification of community hazards and risks.

- **Hazard** - a source of potential danger or an adverse condition
- **Risk** - the possibility of loss or injury
- The probability of an event multiplied by the significance of the consequence (impact) of the event = Risk.
- Risk = Probability x Impact

To determine the overall community risk and vulnerability, several areas must be assessed.

## Evaluating Community Risk

The City of Roseville routinely responds to a variety of risks. Roseville is the economic hub of the region with areas of greatest concentration of retail in the County, the largest railway marshaling yard west of the Mississippi, and two large hospital campuses. The service area encompasses over 44 square miles, not including areas served through automatic and mutual aid. These areas include both a structural and non-structural risk. Non-structural risks include emergency medical, hazardous materials, technical rescue, water rescue, wildland/urban interface, and disasters. Structural risks evaluated included all structures within the service area, major highways, railways and roadways that transverse the area, water, power, communications and other critical infrastructure, as well as items of historical and cultural significance. In order to determine the extent of various risk factors, the Department analyzed the

demographics in the area protected, the building stock, historical call volume, and the existing deployment of resources.

## **Evaluating Fire Suppression Capabilities**

Firefighters encounter a wide variety of conditions at each fire. Some fires will be at an early stage and others may have already spread throughout the structure. This variation in conditions complicates attempts to compare fire department capability. A common reference point must be used so that the comparisons are made under equal conditions. In the area of fire suppression, service-level objectives are intended to prevent the occurrence of flashover, a particular point of a fire's growth that makes a significant shift in its threat to life and property. Fire suppression tasks required at a typical fire scene can vary a great deal. What fire companies must do, simultaneously and quickly if they are to save lives and limit property damage, is to arrive within a short period of time with adequate resources (ERF) to do the critical tasks required. Matching the arrival of resources within a specific time period is the objective of developing a comprehensive SOC.

## ***The Stages of Fire Growth***

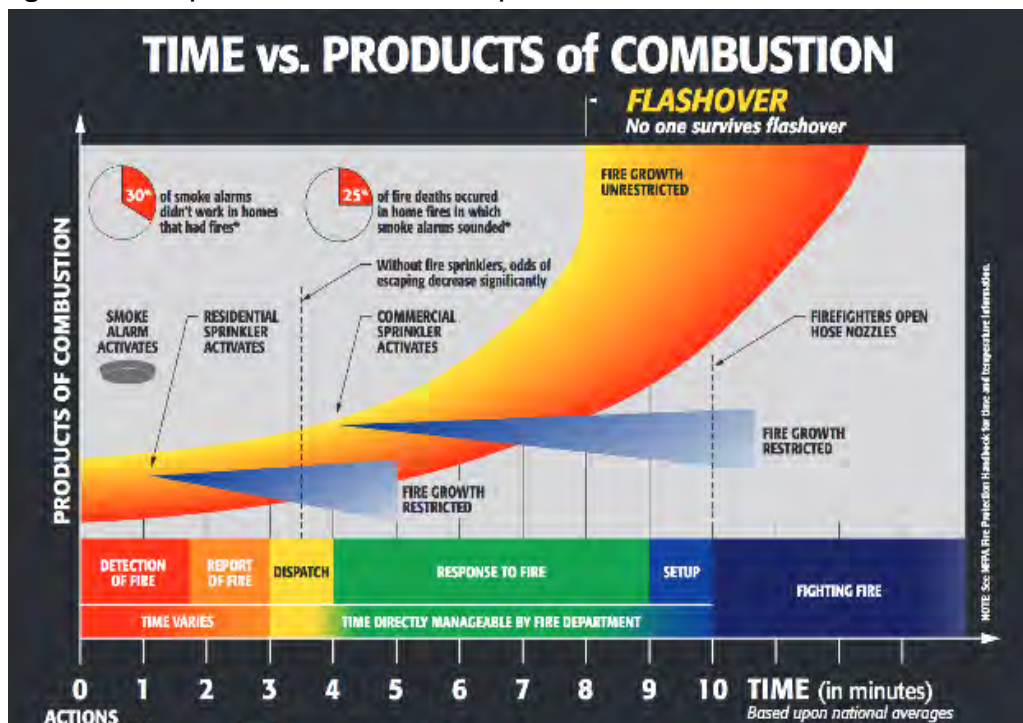
Virtually all structure fires progress through a series of identifiable stages.

- **Ignition** - the inflammation of a fuel source takes place. Ignition may be caused by any number of factors—from natural occurrences, such as lightning, to premeditated arson.
- **Growth Stage** - during this stage of a fire, heat breaks down the fuel source so that it turns into a gas which is capable of combustion. A fire in this stage is typically considered to be fuel-limited meaning that there is less fuel available for consumption than there is oxygen. The primary method of heat transfer during this stage is through convection. Inhaling the products of combustion is the primary life hazard during this stage.
- **Flashover Stage** - as a fire continues to grow and produce more fuel, it begins to pre-heat all of the material in the room—furniture, wall coverings, floor coverings, window coverings, all begin to off-gas and produce pre-heated fuel. Once all of the fuel, or smoke, in the room reaches its ignition temperature (which varies depending upon the material, anywhere from 400-900 degrees Fahrenheit), it will all simultaneously ignite. Temperatures during flashover can range from 800-1,700 degrees Fahrenheit. Both scientific tests and field observations have shown that when flashover is experienced, fire growth is exponential and can quickly overwhelm firefighting resources. Human survival after this point is highly improbable without specialized protective equipment. Flashover can occur multiple times during a structure fire.



- **Fully Developed Stage** – all of the available fuel is involved in combustion. A fire in this stage can free-burn until it becomes fuel-limited or ventilation-limited. One breath of the superheated air can sear the lungs.
- **Decay Stage** - A fire in this stage may be either fuel-limited or ventilation-limited. In a fuel-limited fire, the fire has either burned all of the available fuel or it is no longer producing enough fuel to support combustion. In ventilation-limited fires, the fuel no longer has enough oxygen available to support combustion. Understanding fuel-limited and ventilation-limited fires allows firefighters to use tactics to extinguish fires. For example, by applying water to a fire, one is able to cool the fuel which decreases the amount of fuel being produced to the point where combustion is no longer supported. This would be an offensive tactic based on the premise of a fuel-limited fire. During the decay stage, large volumes of smoke and toxic gases are produced. Most fire deaths occur as a result of inhaling these gases. Temperatures rise throughout this stage to over 1,000 degrees Fahrenheit in compartmentalized spaces, creating the hazard of "backdraft" or smoke explosion. This stage can vary in time from a few minutes to several hours. When sufficient oxygen is present, the fire will progress to the free-burning phase.

Figure 18: Example of Traditional Time Temperature Curve



## Dynamics of Fire in Buildings

Most fires within buildings develop in a predictable fashion unless influenced by highly flammable material. Ignition, or the beginning of a fire, starts the sequence of events. It may take several minutes or even hours from the time of ignition until a flame is visible. This smoldering stage is very dangerous, especially during times when people are sleeping, since large amounts of highly toxic smoke may be generated during this phase; hence the importance of smoke alarms to provide early notification to the occupants.

Once flames do appear, the sequence continues rapidly. Combustible material adjacent to the flame heat and ignite which in turn heats and ignites other adjacent materials if sufficient oxygen is present. As the objects burn, heated gases accumulate at the ceiling of the room. Some of the gases are flammable and highly toxic.

Soon the flammable gases at the ceiling, as well as other combustible material in the room of origin, reach ignition temperature. At that point, an event termed “rollover” occurs; the gases near the ceiling level ignite and cause increased pre-heating of materials and gases. Once pre-heated gases have been produced, an event termed “flashover” occurs; the gases from ceiling to floor ignite, which in turn ignites everything in the room. Once flashover occurs, damage caused by the fire is significant and the environment within the room can no longer support human life.

Due to the high heat release rates of modern furnishings and building materials, flashover may occur in as little as two to three minutes from ignition. Since flashover has such a dramatic influence on the outcome of a fire event, the goal of any fire agency is to apply water to a fire before flashover occurs. This is where quick response times are pivotal.

Although modern building codes tend to make fires in newer structures more infrequent, today’s energy-efficient construction, specifically designed to hold heat during the winter, also tends to confine the heat of a hostile fire. In addition, research has shown that due to the use of synthetics, modern furnishings generally burn hotter.

In the 1970s, scientists at the National Institute of Standards and Technology (NIST) found that after a fire broke out, building occupants had about 17 minutes to escape before being overcome by heat and smoke. Today, that estimate is as short as three minutes. The necessity of effective early warning from smoke alarms, early suppression from fire sprinklers, and the proper number of firefighters arriving on the scene of a fire in the shortest span of time is more critical now than ever.

Perhaps as important as preventing flashover is the need to control a fire before it does damage to the structural framing of a building. Materials used to construct buildings today are often less fire resistive than the heavy structural skeletons of older frame buildings. Roof trusses and floor joists are commonly made with lighter materials that are more easily weakened by the effects of fire. Light weight roof

trusses fail after five to seven minutes of direct flame impingement. Plywood I-beam joists can fail after as little as three minutes of flame contact. This creates a dangerous environment for firefighters.

In addition, the contents of buildings today have a much greater potential for heat production than in the past. The widespread use of plastics in furnishings and other building contents rapidly accelerate fire spread and increase the amount of water needed to effectively control a fire. All of these factors make the need for early application of water essential to a successful fire outcome. A number of events must take place quickly to make it possible to achieve fire suppression prior to flashover. The following table illustrates the sequence of events.

**Table 14: Sequence of Events Pre-Flashover to Post-Flashover**

| <b>Pre-Flashover = 0 to 6 minutes</b>                | <b>Post-Flashover = 6 to 10 minutes</b>         |
|------------------------------------------------------|-------------------------------------------------|
| Limited to one room                                  | May spread beyond one room                      |
| Requires smaller attack line                         | Requires larger, more attack lines              |
| Rescue of trapped occupants more likely              | Trapped occupants not likely to survive         |
| Less firefighters are needed                         | More firefighters are needed                    |
| Structure and possessions more likely to be salvaged | Structure and possessions damaged beyond repair |

## **Impact of Residential Fire Sprinklers**

In January 2010, California adopted the 2009 International Residential Code, including its requirements for automatic fire sprinkler systems in new one- and two-family dwellings. The sprinkler requirement became effective statewide on January 1, 2011.

The complete impact of residential sprinklers on deployment models may take years to fully realize, but reasonable assumptions can be made with regard to the deployment of future Department resources. NFPA data on reported fires in the U.S. from 2007 – 2011 show that for fires reported in single-family homes, the risk of death decreases by about 80% and direct property damage is reduced by about 70% when sprinklers are present.

With increasing numbers of new homes being built in Roseville, all of which are equipped with automatic fire sprinkler systems, the Department needs to continue its fire safety education and outreach.

Facts that should be communicated include:

- Sprinkler systems are designed to keep fire contained long enough to allow occupants to exit, not to fully extinguish the fire. A fire department response is still necessary.
- Sprinkler systems do not control fires outside the home.
- Sprinkler systems do not lessen the need for fire stations, but will lessen the need for multiple units responding.

## **Evaluation of EMS Capabilities**

The morbidity and mortality rates of critically ill or injured patients in an emergency system is directly proportional to the time of rapid access to the 9-1-1 system, accurate assessment of needs, and timely intervention with ALS skills.

Human body systems cannot survive without adequate oxygen being delivered to each body cell by a heart that is functioning properly and blood vessels that are supporting the transfer of oxygenated blood. Those organs most readily affected are the brain, heart, and kidneys. Timely emergency response is key to keeping those organs alive and oxygenated to prevent further destruction and ultimate death.

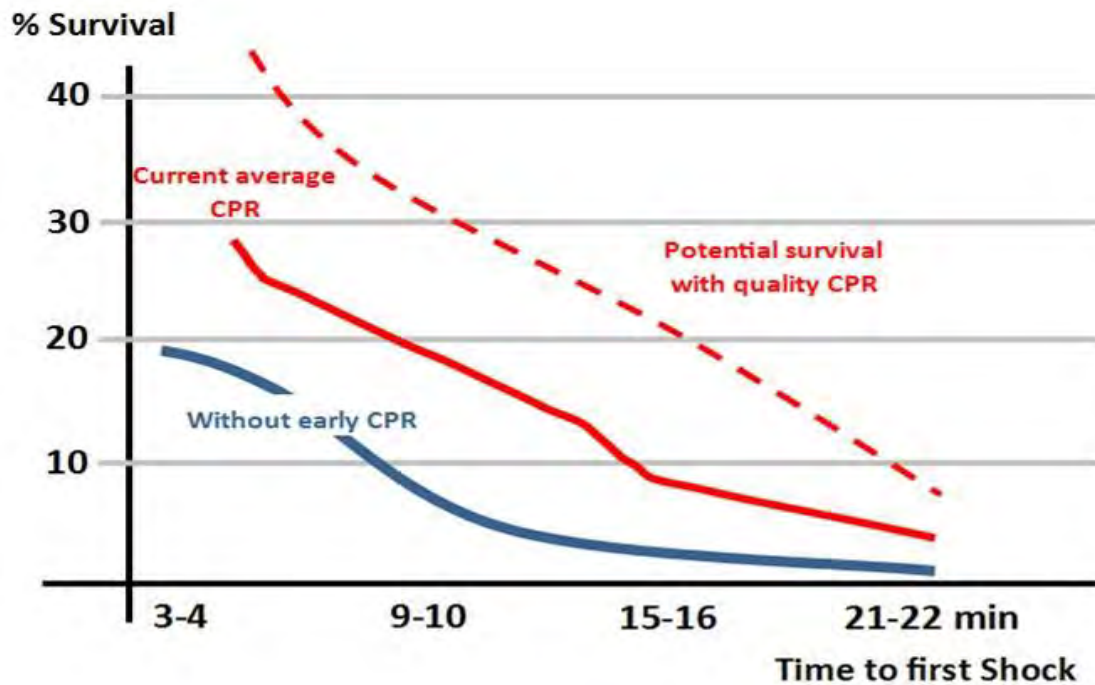
Cardiac arrest, stroke, critical trauma, and shock are all known as "time-sensitive" diseases that, without rapid response and intervention, will result in severe disability or death. Fire department rapid response is crucial in an EMS system aimed at serving the community to promote a safe and healthy environment.

Cardiac arrest is the leading cause of death in the United States with 424,000 deaths annually. Early CPR and early defibrillation are often called the critical links in the chain of survival because they are the only way to successfully treat most incidents of sudden cardiac arrests. When cardiac arrest occurs, the heart starts to beat chaotically (fibrillation) and cannot pump blood efficiently. Time is critical. If a normal heart rhythm is not restored within minutes, the person will die. In fact, for every minute without defibrillation, the odds of survival drop 7%-10%.

Figure 19: Survival Rate by Time to Defibrillation



Figure 20: Survival Rate by Time to First Shock

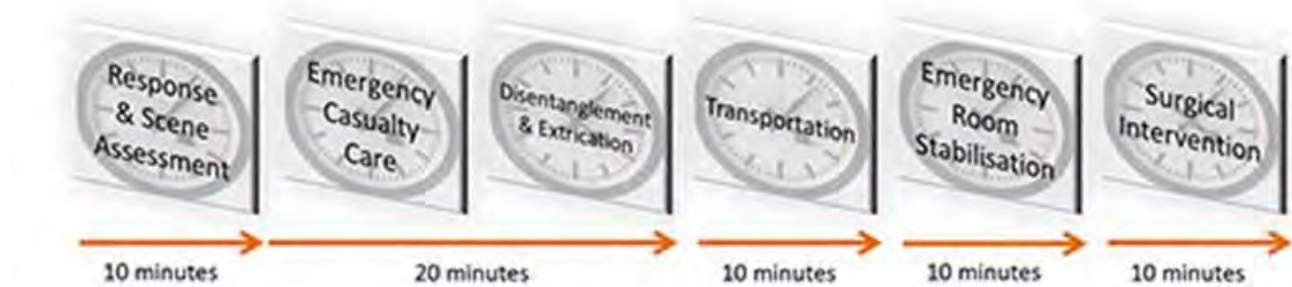


The shortest possible response times create the highest probabilities of resuscitation. An important evaluation point lost on most agencies is the amount of time it takes a crew to reach the patient's side. Often the clock stops when the vehicle arrives or stops at the address. The key to a successful outcome is the point the patient is actually contacted. Consideration of actual patient contact must be made when evaluating total response time for EMS calls. This time period can be substantial and can most certainly affect patient outcome due to delayed intervention.

### **Critical Trauma**

Critical trauma is the fourth leading cause of death in the United States, and requires prompt treatment on scene and rapid transport to a trauma center for best patient outcome.

**Figure 21: Critical Trauma Timeline**



### **Response Time Importance**

Timely arrival of appropriately equipped firefighters and paramedics is essential to saving lives and controlling fires before they escalate. The importance of processing 9-1-1 calls, alerting the appropriate personnel, and sending the closest, most appropriate resource cannot be over emphasized. Timely arrival of well-trained and equipped personnel can make a big difference in the outcome.

Two commonly referred to criteria used to quantify the importance of a timely fire department response include:

- The time of flashover in a structure fire where a fire goes beyond control capability of a single alarm.
- The time on an EMS call where irreversible brain damage and chances for successful resuscitation are greatly reduced for patients who are pulseless and non-breathing.

## SECTION 4: ROSEVILLE RISK ASSESSMENT

### Risk Assessment

Risk assessment is the process of measuring the potential loss of life, personal injury, economic injury, or property damage resulting from hazards. The SOC document reviews the hazards identified in the 2011 Roseville Multi-Hazard Mitigation Plan (RMHMP), which have been identified as likely to occur in Roseville. It meets the requirements of Title 44 of the CFR (Section 201.6.c.2) for risk assessment of hazards, and it also looks at the possible impacts of human-caused and human-health hazards.

Chapters 10 through 18 of the RMHMP describe the risks associated with the identified hazards of concern for the City of Roseville. Each chapter elaborates on one hazard, the City's vulnerability to that hazard, and probable event scenarios. The 2016 Progress Report to the RMHMP assesses the progress made since the plan was approved by FEMA on March 28, 2011. As of the most recent reporting period, 63 hazard mitigation initiatives were pursued during this five-year performance period.

The RMHMP addresses the probable impact of the following natural hazard events in the City of Roseville along with in-depth reports on loss estimates, impacts, and secondary hazards. Appendix B has maps of various risks identified in the RMHMP.

1. Dam Failure
2. Drought
3. Earthquake
4. Flood
5. Human-Caused Hazards
  - Terrorism and Weapons of Mass Destruction
  - Technological Hazards
  - Hazardous Materials
  - Industrial Fixed-Facility Hazardous Materials
  - Hazardous Materials Transportation
  - Pipeline Facilities
  - Agricultural
  - Radioactive
  - Utility Losses
  - Data and Telecommunications
  - Water/Wastewater Disruption
  - Air and Transportation Accidents Facilities
  - Infrastructure Threats
  - Business and Industrial Areas
6. Human-Health Hazards
7. Influenza, H1N1, H5N1, Small Pox, Vital Hemorrhagic Fever, Plague, Tularemia, Encephalitis, Malaria, West Nile, Lyme Disease, Anthrax, Severe Acute Respiratory Syndrome
8. Severe Weather
9. Structure/Wildland Fires
10. Landslides

## **Roseville Emergency Operations Plan**

The City of Roseville Emergency Operations Plan (EOP), directs the City of Roseville Emergency Management Organization, coordinates the actions of the Emergency Operations Center (EOC) staff, establishes operational priorities, ensures development and implementation of strategies to meet the needs of the emergency, works with local elected officials on issues related to emergency response and recovery, identifies procedures for evacuation, communicates with the media, coordinates response with outside agencies, and ensures the safety of the responders. The EOP follows the Standardized Emergency Management System (SEMS) format required under Government Code § 8607. SEMS is a standardized system that enhances the ability of local jurisdictions to coordinate emergency response activities. City and special district EOCs are required to use the same SEMS management functions (management, operations, planning, logistics, and finance) in order to facilitate interagency communication and coordination.

Management staff from all departments within the City of Roseville participate in EOC drills twice annually. A County-wide Web EOC platform is utilized during EOC activations and practiced with during each EOC drill. In addition, every two years the City of Roseville participates in a regional, large-scale training that challenges various components of emergency response.

## **Roseville Property Types and Risk Breakdown**

### ***Fire Risk Assessment***

The Department has identified risk hazards for each type of occupancy within the City based upon NFPA business occupancy codes. Premise information and pre-fire plans are established for risks that pose a high life hazard, high property loss, conflagration hazard, or contain hazardous materials. The assessment of each commercial building is completed during annual inspections by Fire & Life Safety personnel.

Many factors were considered when defining the types of fires that fall into the risk categories of low, moderate, high, and maximum, including:

- Hazards – Hazards pose or create a threat to life, health, property, or environment. The known presence of hazards may increase risk. This includes the potential for high-risk activities or human behavior.
- Mitigating factors – There are factors that can affect the probability and consequences of an incident. Positive factors include engineered systems, regular fire inspections, proper maintenance, proper storage, and awareness by occupants (fire drills, evacuation plans). Negative factors are the absence of any of these.



- Population – The time of day when structures are primarily occupied can influence an effective response, as well as whether or not the occupants are ambulatory.
- Potential loss – Loss can include the value of the structure and contents damaged or destroyed (direct loss), as well as loss of revenue, employment, historical significance, infrastructure, or government continuity (indirect loss).
- Occupancy type – Certain occupancy classes are inherently high risk. Considering the other factors above, RFD placed occupancy classes in each risk category.

**Table 15: Descriptions of Fire Risk Categories**

| <b>Fire Risk Category</b> | <b>General Description of Associated Risk</b>                                                                                                                                                                                                                                                                                                                                                                                                                            |
|---------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Low</b>                | Car fires, dumpster fires, small outside structure fires, and other small fires that do not endanger occupied structures.                                                                                                                                                                                                                                                                                                                                                |
| <b>Moderate</b>           | Small to medium commercial occupancies with fire suppression systems, multi-family residence or hotels with fire suppression systems, single family residence, business and assembly with fire suppression systems, and large businesses with fire suppression systems.<br>CFC Occupancy classes: A-4, A-5, B (with fire suppression systems), E, H-4, I-3, I-4, F-2, R-2 (with fire suppression systems), R-4, S-2, M (with fire suppression systems), & U occupancies. |
| <b>High</b>               | Assisted living facilities, large industrial/manufacturing, assemblies without fire suppression systems, large commercial/big box, and small to medium commercial without fire suppression systems.<br>CFC Occupancy classes: A-1, A-3, B (without fire suppression systems), F-1, H-1, H-2, H-3, H-5, I-1, I-2, M (without fire suppression systems), and S-1 occupancies.                                                                                              |

**Table 16: California Fire Code Occupancy Classifications**

| <b>California Fire Code Occupancy Classifications</b> |                        |
|-------------------------------------------------------|------------------------|
| A-1, A-2, A-3, A-4, A-5                               | Assembly               |
| B                                                     | Business               |
| E                                                     | Educational            |
| F-1, F-2                                              | Factory and Industrial |
| H-1, H-2, H-3, H-4, H-5                               | High Hazard            |
| I-1, I-2, I-3, I-4                                    | Institutional          |
| M                                                     | Mercantile             |
| R-1, R-2, R-3, R-4                                    | Residential            |
| S-1, S-2                                              | Storage                |

## **Occupancy Level Risk**

Occupancy risk was evaluated across the jurisdiction utilizing data provided by ISO that independently rates buildings within a community.

The occupancy level risk assessment process utilized the following variables:

- Needed fire flow
- Presence of a sprinkler system
- Construction classification type
- Building combustion classification
- Number of stories
- Total square footage

The risk ratings were adjusted if the building had an automatic sprinkler system. Ultimately, a risk-rating matrix was developed that categorized 1,060 occupancies within the jurisdiction into high, moderate, and low risks.

Due to the relatively higher demands for personnel and apparatus required for fire events that have occupancy classifications deemed high risk, these risks garnished the highest ratings. Conversely, the presence of an automatic sprinkler system elicited a moderating value. In this manner, the fact that 96% of the fires are controlled with sprinkler activation is included in the matrix for a more realistic risk factor rating. The results of the risk assessment process categorized the 1,060 occupancies into 23 high-risk structures, 869 moderate-risk structures, and 168 low-risk structures.

Geospatial analyses were completed to map the locations of each of the commercial occupancies included in the risk matrix process and specifically overlaid within each of the fire station locations. This analysis lends validity to the risk assessment matrix and the process utilized by the Department, as the concentration of risks is correlated with the historical demand for fire related services. The results of the geospatial analyses of high-, moderate-, and low-risk structures are presented on the following pages. From a broad perspective, this provides validation to the risk assessment process developed within the Department as well as the necessary deployment strategy to cover the historical demand for services.

**Table 17: Occupancy Level Risk Matrix**

| Risk Class | Fire Flow |                      | Number of Stories |             | Square Footage |                      | Construction Class |                                                           | Building Combustion Class |                              | Full Credit Sprinkler System | Total Risk Score |
|------------|-----------|----------------------|-------------------|-------------|----------------|----------------------|--------------------|-----------------------------------------------------------|---------------------------|------------------------------|------------------------------|------------------|
|            | Value     | Scale                | Value             | Scale       | Value          | Scale                | Value              | Scale                                                     | Value                     | Scale                        | (Yes/No)                     | Scale            |
| High       | 3         | ≥ 1500 gpm           | 5                 | ≥ 4         | 5              | ≥ 100k GPM           | 5                  | Combustible or Frame                                      | 5                         | Quick Free and Rapid Burning | -10/0                        | ≥ 16             |
| Moderate   | 2         | > 499 and < 1500 gpm | 3                 | > 1 and < 4 | 3              | > 10k gpm < 100k GPM | 3                  | Joisted Masonry                                           | 3                         | Combustible                  | -10/0                        | > 6 and < 16     |
| Low        | 1         | ≤ 499 gpm            | 1                 | 1           | 1              | < 10k GPM            | 1                  | Non-Combustible Masonry<br>Non-Combustible Fire Resistive | 1                         | Slow Non/Limited Combustible | -10/0                        | ≤ 6              |

**Figure 22: High-Risk Occupancies by Station Demand Zone**

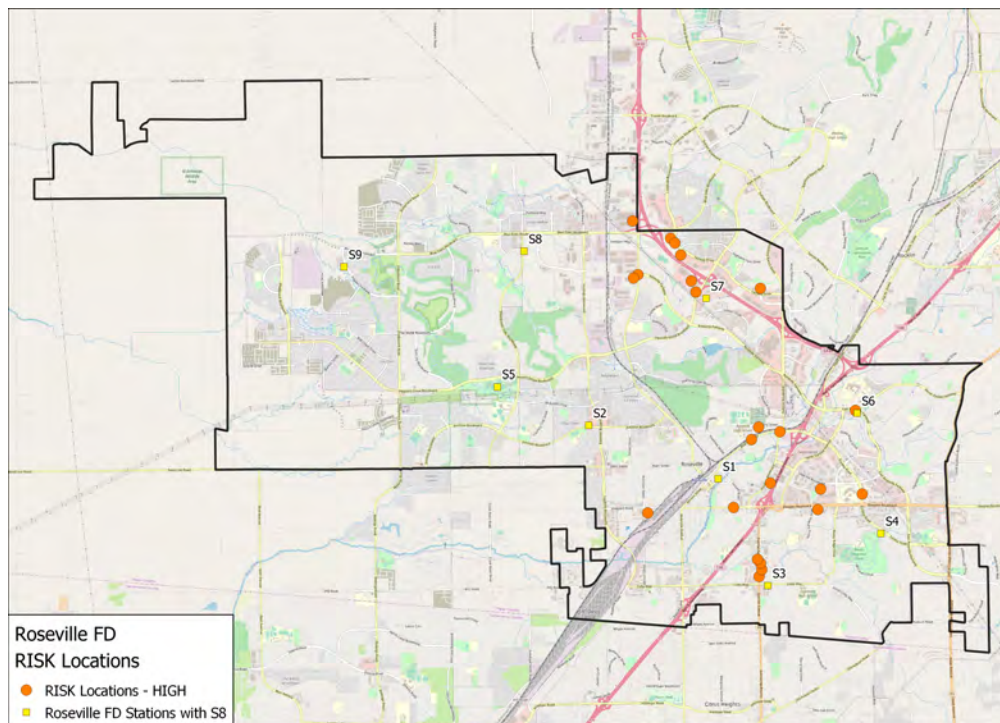


Figure 23: Moderate-Risk Occupancies by Station Demand Zone

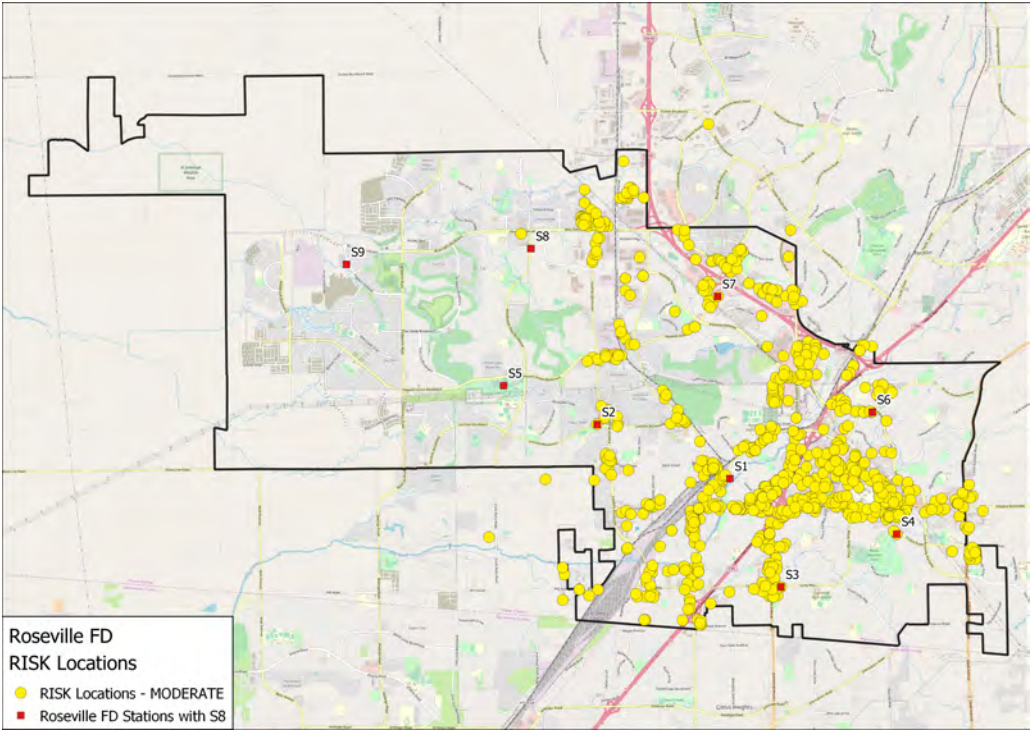
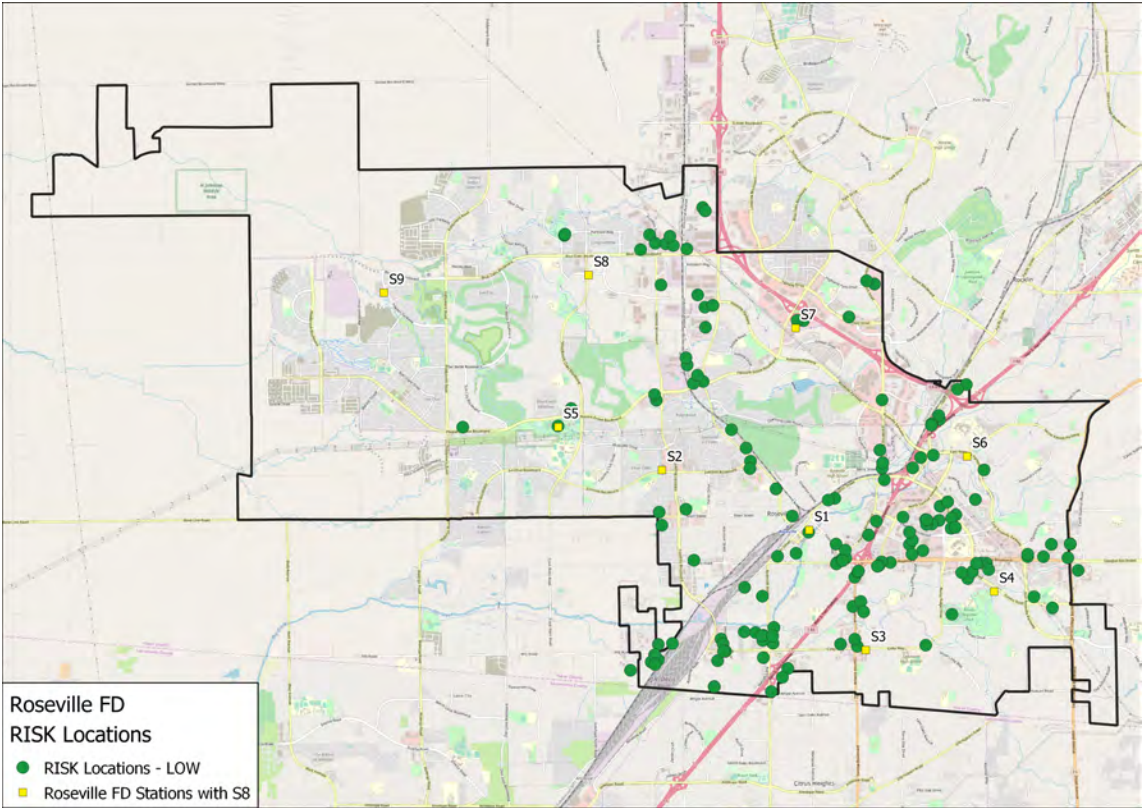


Figure 24: Low-Risk Occupancies by Station Demand Zone





### **Concentration of Risks by Station Demand Zone**

Analyses were conducted to describe and measure the relative concentration of risks in each of the fire station demand zones. Therefore, a station demand zone risk matrix was developed to quantitatively evaluate the relative risk by including measures for the frequency of moderate- and high-risk occupancies in each fire demand zone that are directly correlated with the necessity of higher concentrations of resources. In addition, several measures were used that both serve the distribution aspect of the risk evaluation, and contribute to the need for higher concentrations of resources. For example, a higher call volume may drive the need for additional resources to cover the community's demand.

The variables included in the risk matrix are the demand for services for each station demand zone, the number of high- and moderate-risk occupancies, and the impact of simultaneous events in each station demand zone. All measures were weighted equally; however, two variables have surrogate relationships with historical community demands and one variable is dedicated to prospective occupancy risk. Community demands were rated more heavily in an effort to provide a realistic balance between the potential risk and historical experience. The risk tool and the scoring template are provided below.

**Table 18: Station Demand Zone Risk Concentration Matrix**

| Station Demand Zone | Community Demand | Call Concurrency | High/Moderate Risk Occupancies | Total risk Score | Risk Rating |
|---------------------|------------------|------------------|--------------------------------|------------------|-------------|
| 1                   | 6                | 3                | 5                              | 26.92            | Moderate    |
| 2                   | 4                | 2                | 1                              | 6.48             | Low         |
| 3                   | 5                | 4                | 4                              | 22.98            | Moderate    |
| 4                   | 4                | 3                | 2                              | 11.05            | Low         |
| 5                   | 4                | 3                | 1                              | 9.19             | Low         |
| 6                   | 4                | 2                | 4                              | 13.86            | Low         |
| 7                   | 5                | 3                | 4                              | 19.61            | Moderate    |
| 9                   | 4                | 2                | 1                              | 6.48             | Low         |

Overall, the risk assessment identified that the majority of station demand zones are of low risk (Stations 2, 4, 5, 6, and 9) and that there are three moderate-risk stations (Stations 1, 3, and 7).

### **Emergency Medical Services Risk Assessment**

Requests for EMS are the most frequent type of service provided by RFD. EMS incidents account for approximately 65% of emergency activities and correspondingly have the greatest impact on the

Department's resources. The residential and daytime population is a significant factor in assessing the probability of EMS incidents. There is a range of EMS incident types from single-patient single-unit response to multi-casualty incidents with six or more patients. Residences and specialized buildings house at-risk populations that require a greater response both under fire and EMS conditions. Less than 1% of EMS responses require additional personnel; the majority are handled by a single engine and ambulance.

Certain building types have inherent risks to life due to the age of occupants, such as care homes, or patient mobility issues, such as in hospitals, where self-evacuation would not be possible. Emergencies within these buildings would require numerous additional resources. Risk assessments are conducted to identify these buildings that pose response challenges and provide for response augmentation.

**Table 19: EMS Building Risk Classifications and Examples**

| <b>Risk</b>   | <b>Building Classification</b>         | <b>Example</b>                                                                                       |
|---------------|----------------------------------------|------------------------------------------------------------------------------------------------------|
| <b>Low</b>    | R-1 /R-3.1                             | Best Western/ Holiday Inn / Bonita Home Care / Estera's Home Care (RCFE's)                           |
| <b>Medium</b> | R-2 (Large Apartments & Senior Living) | Mistywood Living / Roseville Commons / Autumn Oaks Apts./ Cirby Oaks Apts./ Vintage Square Sr. Apts. |
| <b>High</b>   | I-2 / I-2.1/ I-3 /I-4                  | Sutter Hospital /Terraces of Rsvl / Emeritus Sr. Living / PC Jail / Aim Higher                       |

**Table 20: EMS Building Risk Count**

| <b>Structure Count</b> |             |                 |            |                    |
|------------------------|-------------|-----------------|------------|--------------------|
| <b>Station</b>         | <b>HIGH</b> | <b>MODERATE</b> | <b>LOW</b> | <b>Grand Total</b> |
| 1                      | 3           | 83              | 10         | 96                 |
| 2                      | 2           | 14              | 17         | 33                 |
| 3                      | 10          | 46              | 17         | 73                 |
| 4                      | 4           | 11              | 5          | 20                 |
| 5                      |             | 5               | 16         | 21                 |
| 6                      | 3           | 6               | 15         | 24                 |
| 7                      | 2           | 7               | 21         | 30                 |
| 9                      | 1           | 3               | 6          | 10                 |
| <b>Grand Total</b>     | <b>25</b>   | <b>175</b>      | <b>107</b> | <b>307</b>         |

## Hazardous Materials Risk Assessment

The City contains several large industrial firms, three of which are classified as high-risk based on the risk assessment model and are required to complete release plans based on the California Accidental Release Prevention (CalARP) program. CalARP facilities are those that require that an owner or operator of a business handling more than the threshold quantity of a regulated substance, evaluate the use of the substance to determine the potential for, and impacts of, an accidental release. Under the CalARP regulations, these facilities must submit a Risk Management Plan (RMP). The RMP is used to determine potential accident factors and to implement measures to reduce the accident potential. Information contained within an RMP includes the following: safety information, process hazard analysis/hazard review, operating procedures, training, maintenance, compliance audits and incident investigations. Documents and records showing that the facility is implementing the program are also required to be regularly provided.

Eleven industrial fixed-facilities categorized as high risk based on the risk assessment model are included in the map section of Appendix B. There are approximately 667 Certified Unified Program Agency (CUPA)

sites within the City. The Union Pacific switchyard in Roseville, the largest rail marshaling yard west of the Mississippi, presents many serious hazards. The site encompasses 106 miles of track and 60 miles of main line. Not only does it split the City, it is very close in proximity to the heavily populated retail and residential districts. Additionally, one million shipments of hazardous materials are transported in bulk through the City of Roseville annually.

Occupancy level data for hazardous materials sites were geocoded by station response area. Overall, the highest number of hazardous materials occupancies were located in the response area of Station 7 at 186, followed by Station 3 at 135, and Station 1 at 109.

**Table 21: Hazardous Materials Building Risk Classifications and Examples**

| Risk   | Building Classification | Example                                                                        |
|--------|-------------------------|--------------------------------------------------------------------------------|
| Low    | B / S / M               | Cell Site / Cleaners                                                           |
| Medium | H-1 / H-2 / H-3         | Metal Finishing                                                                |
| High   | H-4 / H-5               | Union Pacific Rail Yard / CalARP Sites (TSI, SaveMart Distribution, HB Fuller) |

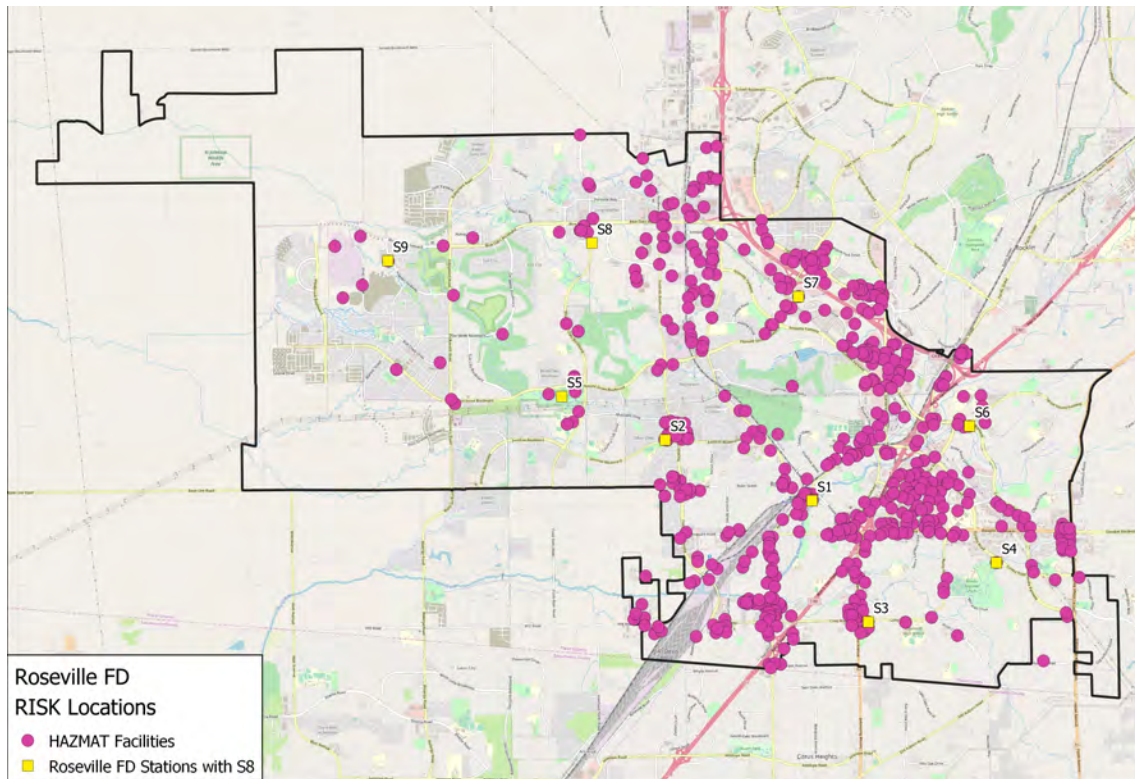
**Table 22: Summary Count of Hazardous Materials Sites by Station Area**

| Current Stations | Stations |    |     |    |    |     |     |    |             |
|------------------|----------|----|-----|----|----|-----|-----|----|-------------|
| Type             | S1       | S2 | S3  | S4 | S5 | S6  | S7  | S9 | Grand Total |
| HAZMAT           | 109      | 68 | 135 | 31 | 14 | 115 | 186 | 19 | 677         |
| Grand Total      | 109      | 68 | 135 | 31 | 14 | 115 | 186 | 19 | 677         |

In addition, all hazardous materials locations were plotted on a map that includes all station locations plus Station 8. If Station 8 is included, Stations 2, 5, 7, and 9 reduce their respective number of hazmat sites and Station 8 would have 69 locations within its jurisdiction.



**Figure 25: Hazardous Materials Sites by Station Area**



## Critical Facilities and Infrastructure

Critical and essential facilities and infrastructure are those that are critical to the health and welfare of the population. These become especially important after a hazard event. For the purpose of this document, a definition specific to Roseville considers the following criteria:

Facilities which are vital for the City's ability to provide essential services and protect life and property.  
Facilities whose loss would have a severe economic or catastrophic impact.

A database of critical facilities in Roseville was created to identify vulnerabilities to each hazard addressed in this plan. The Department has created a database of senior and childcare facilities so responders are aware of the special fire hazard that might require additional assistance in the event of a fire or mass-casualty incident. These special populations typically cannot self-extricate and require additional assistance.

Maps of critical infrastructure are provided in Appendix B.

## **SECTION 5: CRITICAL TASK ANALYSIS**

On-scene operations, identification of critical tasks, and an effective emergency response force are the key elements in determining appropriate staffing levels, the number of companies needed, optimal deployment strategies, and the priority duties to be performed on the fire ground or emergency incident scene. Effective all-hazards fire departments must be able to determine what tasks need to be completed and in what order, the number of personnel needed, and the type of apparatus required to complete the identified tasks to have a positive influence on the outcome of the situation.

### **On-Scene Operations**

The variables of fire growth dynamics along with property and life risks combine to determine the fire ground tasks that must be accomplished, and to a certain extent, the order in which they must be accomplished, to preserve life and mitigate loss. Critical tasks are interrelated, but can be separated into two basic types: 1) fire control and property conservation and 2) life safety.

Fire control tasks are those related to applying a fire suppression agent, generally water, on the fire and removing the products of combustion from an enclosed environment. Life safety tasks are those related to finding trapped, disoriented, or incapacitated victims, and safely removing them from the structure or shielding them from the hazard.

Fire control tasks are generally accomplished by using one of two methods: hand-held hose lines or master streams. Handheld hose lines are mobile and produce water flows up to 250 gpm. These are generally used during interior, offensive firefighting activities. Master streams are generally used from stationary positions, and produce flows up to 1,000 gpm. They are primarily used during exterior, defensive firefighting activities.

The decision to use either hand-held lines or master streams depends upon the stage of the fire, the identified threat to life safety and adjoining property, and the specific strategy and tactics employed by the fire incident commander when sufficient firefighting resources have reached the scene. If the fire is in a pre-flashover stage, firefighters can make an offensive fire attack into a building by using hand lines to attack the fire and shield trapped victims until they can be safely removed from the structure.

If a fire is in a post-flashover stage and has extended beyond the capacity or mobility of hand-held hoses, or if the structural damage and the threat of building collapse present a significant risk to the safety of firefighters on scene, the structure may be declared a loss. In this situation, master streams are positioned to extinguish the fire and keep it from advancing to surrounding exposures.

Life safety tasks assigned are based upon the number of occupants, their location, their status (e.g., awake, unconscious), and their ability to take effective self-preserving action. For example, ambulatory

adults need less assistance than non-ambulatory adults or children. The very young and old generally require more assistance, which requires greater resource utilization.

The key to any fire department's success at a fire incident always includes a rapid response and efficient fire scene deployment, as well as adequate staffing and coordinated teamwork. These key elements are relevant regardless of whether the fire ground tasks are all fire flow related or a combination of fire flow and life safety.

## ***Critical Tasks and On-Scene Performance for Fires***

### ***Fires***

Critical tasks are those that must be conducted in a timely manner by firefighters at structure fires in order to control the fire prior to flashover, or to extinguish the fire in a timely manner. Fire departments are responsible for ensuring that responding companies are capable of performing all of the required tasks in a prompt and proficient manner.

The rapid and effective performance of highly coordinated assigned tasks is the hallmark of a successful ERF. Time and on-scene performance expectations are the target indicators established for measuring the operational elements including individuals, crews, and work units that make up the Department's response-ready resources. RFD has developed Standard Operating Evolutions that are sub-categorized into: Individual, Engine, Truck, RIC, Pumping, NFPA, and Medical Evolutions. All companies train regularly on these Standard Operating Evolutions to develop proficiency as well as a means to time and evaluate company performance for critical fire ground tasks. Cumulative data collection from Standard Operating Evolutions also allows for the development of standard expected times to complete a task, based on the average time of completion.

SOG 1.08.0050 - *Standard Company Evolutions*, outlines the importance of doing critical tasks on fire emergencies in a timely manner.

The initial fire ground actions begin with the arrival of the first company and continue, sequentially or in parallel, as tasks are completed and additional resources arrive. Initial deployment tasks are fairly standard, but are based on the difficulty of the situation faced. The table below outlines the minimum number of personnel to begin basic deployment tasks on a typical residential structure fire within the first 5 to 15 minutes after arriving.

**Table 23: Critical Tasks for a Low-Risk Fire**

| Task                     | Personnel | Units                  |
|--------------------------|-----------|------------------------|
| Size-Up/Command          | 1         | 1 <sup>st</sup> Engine |
| Attack Line              | 1         | 1 <sup>st</sup> Engine |
| Pump Operator            | 1         | 1 <sup>st</sup> Engine |
| Initial Attack Personnel | 3         | 1 Fire Apparatus       |

**Table 24: Critical Tasks for a Moderate-Risk Unconfirmed Working Structure Fire**

| Task                     | Personnel | Units                  |
|--------------------------|-----------|------------------------|
| Size-Up and Command      | 1         | Battalion Chief        |
| Attack Line              | 2         | 1 <sup>st</sup> Engine |
| Pump Operator            | 1         | 1 <sup>st</sup> Engine |
| Rescue or Primary Search | 2         | 2 <sup>nd</sup> Engine |
| Water Supply or FDC      | 1         | 2 <sup>nd</sup> Engine |
| Two Out /Back Up Line    | 2         | 1 <sup>st</sup> Truck  |
| RIC/Utilities & Safety   | 2         | 1 <sup>st</sup> Truck  |
| Initial Attack Personnel | 11        | 3 Fire Apparatus + BC  |

If the fire continues beyond initial attack, then the scope of personnel necessary to provide immediate task-level duties escalates rapidly and can quickly overwhelm any department. The high-risk response for a working structure fire in Roseville sends 21 firefighters on four engines, two trucks, and one Battalion Chief. The table below reflects a high-risk large residential structure fire or a basic commercial fire. Eleven personnel are the minimum needed to complete the basic initial critical tasks for a working fire; however, it is RFD's policy that more than 11 personnel respond to all confirmed working fires.

**Table 25: Critical Tasks for a Confirmed Working or High-/Special-Risk Structure Fire**

| Task                         | Personnel | Units                  |
|------------------------------|-----------|------------------------|
| Size-Up/Command              | 1         | Battalion Chief        |
| Attack Line                  | 2         | 1 <sup>st</sup> Engine |
| Pump Operator                | 1         | 1 <sup>st</sup> Engine |
| Back Up Line                 | 2         | 4 <sup>th</sup> Engine |
| Rescue/Primary Search        | 2         | 2 <sup>nd</sup> Engine |
| Water Supply/FDC             | 1         | 2 <sup>nd</sup> Engine |
| Two Out / Utilities & Safety | 3         | 3 <sup>rd</sup> Engine |
| Forcible Entry / Ventilation | 4         | 1 <sup>st</sup> Truck  |
| Rapid Intervention Team      | 4         | 2 <sup>nd</sup> Truck  |
| Air/Lights/Rehab             | 1         | 4 <sup>th</sup> Engine |
| Initial Attack Personnel     | 21        | 6 Fire Apparatus + BC  |

## EMS

The following hazard levels have been established for EMS risk:

- **Low-Risk:** Injured and ill persons, without airway, breathing, or circulatory problems.
- **Moderate-Risk:** Pin-in, multiple vehicles, patients meeting trauma center criteria, or other specialty center criteria.
- **High-Risk:** Multi-victim incidents with five or more patients.

**Table 26: Critical Tasks for Low-Risk EMS**

| Task                                   | Personnel | Units                  |
|----------------------------------------|-----------|------------------------|
| Number of Staff Command / Safety       | 1         | 1 <sup>st</sup> Engine |
| Patient Assessment / Patient Interview | 1         | 1 <sup>st</sup> Engine |
| Documentation / Medical Control        | 1         | 1 <sup>st</sup> Engine |
| Patient Care / Handling / Equipment    | 2         | Ambulance              |
| Total ERF Low EMS                      | 5         | 1 Fire Apparatus       |

**Table 27: Critical Tasks for Moderate- and High-Risk EMS**

| Tasks                                  | Personnel | Units                        |
|----------------------------------------|-----------|------------------------------|
| Number of Staff Command / Safety       | 1         | Battalion Chief              |
| Scene Safety                           | 1         | 1 <sup>st</sup> Engine       |
| Patient Assessment / Patient Interview | 2         | 1 <sup>st</sup> Engine       |
| Extrication                            | 2         | 1 <sup>st</sup> Truck        |
| Hose Line                              | 2         | 2 <sup>nd</sup> Engine       |
| Patient Care / Handling / Equipment    | 2         | 1 <sup>st</sup> Truck & Amb. |
| Total ERF Moderate EMS                 | 11        | 3 Fire Apparatus + BC        |

For high-risk EMS incidents, the incident commander will call for specific types and numbers of response personnel based upon the number of patients and/or special needs.

## Hazardous Materials

The following hazard levels have been established for Hazardous Materials incidents:

- **Low-Risk:** Odor check without patients, small fuel or oil spill, and CO detector.
- **Moderate-Risk:** Incidents requiring Level C entry to for identification or mitigation.
- **High-Risk:** Incidents requiring a Level A or B entry to mitigate or determine the source.

**Table 28: Critical Tasks for Low-Risk Hazardous Materials**

| Tasks                            | Personnel | Units                  |
|----------------------------------|-----------|------------------------|
| Command/Control                  | 1         | 1 <sup>st</sup> Engine |
| Investigate & deny Entry         | 2         | 1 <sup>st</sup> Engine |
| Total ERF Low Hazardous Material | 3         | 1 Fire Apparatus       |

**Table 29: Critical Tasks for Moderate- and High-Risk Hazardous Materials**

| Tasks                                 | Personnel | Units                  |
|---------------------------------------|-----------|------------------------|
| Command / Control                     | 1         | Battalion Chief        |
| Assistant Safety Officer              | 1         | 1 <sup>st</sup> Engine |
| Entry Team                            | 2         | 2 <sup>nd</sup> Engine |
| Back Up Team                          | 2         | 1 <sup>st</sup> Truck  |
| Decon                                 | 2         | 1 <sup>st</sup> Truck  |
| Isolate and Deny Entry / Evacuation   | 2         | 1 <sup>st</sup> Engine |
| Medical (Private Ambulance)           | 2         | Ambulance              |
| Total ERF Moderate Hazardous Material | 13        | 3 Fire Apparatus + BC  |

**Technical Rescue**

The following hazard levels have been established for Technical Rescue risk:

- **Low-Risk:** Child locked in a vehicle or person stuck in an elevator.
- **Moderate or High-Risk:** Swift water rescue, high angle, or trench rescue.

**Table 30: Critical Tasks for Low-Risk Technical Rescue**

| Task                              | Firefighters | Company                |
|-----------------------------------|--------------|------------------------|
| Size-Up/Command                   | 1            | 1 <sup>st</sup> Engine |
| Locate/Access                     | 1            | 1 <sup>st</sup> Engine |
| Stabilize, Lock Out, Patient Care | 1            | 1 <sup>st</sup> Engine |
| Personnel                         | 3            | 1 Fire Apparatus       |

**Table 31: Critical Tasks for Moderate- and High-Risk Technical Rescue**

| Task                       | Firefighters | Company                |
|----------------------------|--------------|------------------------|
| Size-Up/Command            | 1            | Battalion Chief        |
| Safety                     | 1            | 1 <sup>st</sup> Engine |
| Locate/Access              | 2            | 1 <sup>st</sup> Engine |
| Stabilize/Extricate/Rescue | 4            | 1 <sup>st</sup> Truck  |
| Transport                  | 3            | 2 <sup>nd</sup> Engine |
| Patient Care               | 2            | Ambulance              |
| Personnel                  | 13           | 3 Fire Apparatus + BC  |

### **Wildland/Vegetation Fire**

The following hazard levels have been established for Wildland/Vegetation Fire risk:

- **Low-Risk:** Small grass fire in a contained area.
- **Moderate or High-Risk:** Vegetation fire in an open area.

**Table 32: Critical Tasks for Low-Risk Wildland/Vegetation Fire**

| Task            | Firefighters | Company                |
|-----------------|--------------|------------------------|
| Size-Up/Command | 1            | 1 <sup>st</sup> Engine |
| Hose Line       | 2            | 1 <sup>st</sup> Engine |
| Personnel       | 3            | 1 Fire Apparatus       |

**Table 33: Critical Tasks for Moderate- and High-Risk Wildland/Vegetation Fire**

| Task                  | Firefighters | Company                |
|-----------------------|--------------|------------------------|
| Size-Up/Command       | 1            | Battalion Chief        |
| Safety                | 1            | 1 <sup>st</sup> Engine |
| Water Supply          | 2            | 1 <sup>st</sup> Engine |
| Hose Line Left Flank  | 3            | 2 <sup>nd</sup> Engine |
| Hose Line Right Flank | 3            | 3 <sup>rd</sup> Engine |
| Personnel             | 10           | 3 Fire Apparatus + BC  |

## SECTION 6: PERFORMANCE MEASURES

### Time Points and Intervals – The Cascade of Events

Over the years, response time data have been analyzed by the fire service industry using a variety of methods. In order to standardize the terminology used by departments around the United States and Canada, CFAI has developed the following set of definitions to be used for describing the individually recognized components of response time. These elements can be appropriately viewed as an interrelated cascading sequence of events consisting of a series of points in time separated by intervals. RFD has adopted the following definitions which are consistent with those given by CFAI.

- **Event Initiation** – the point at which events occur that may ultimately result in an activation of the emergency response system. Precipitating events can occur seconds, minutes, hours, or even days before a point of awareness is reached. It is rarely possible to pinpoint the time at which event initiation occurs.
- **Emergency Event Awareness** – the point at which an individual or technological sentinel (e.g., smoke or heat detector) becomes aware that conditions exist which require an activation of the emergency response system.
- **Alarm** – the point at which awareness triggers an effort to notify the emergency response system. An example of this is the transmittal of a local or central alarm to a designated PSAP.
- **Notification** – the point at which an alarm or call for assistance is received by the PSAP. This transmittal may take the form of an electronic or mechanical notification process to the point at which a call is received and answered within the jurisdictional PSAP.
- **Call Processing Time** – the interval between the first ring of the 9-1-1 telephone at the PSAP and the time the dispatcher activates station, crew, and/or individual alerting devices. This interval can also be further divided into two additional sub-intervals: 1) **call-taker interval**, which is the time from the first ring of the 911 telephone until the call-taker subsequently transfers the call information to the dispatcher; and 2) **dispatcher interval**, which is the interval from the time when the call-taker transfers the call to the dispatcher until the dispatcher activates all applicable alerting devices for emergency responders.
- **Turnout Time** – the interval between the activation of station and/or crew alerting devices with the delivery of specific dispatch information to emergency personnel and the time when the responding crew notifies the dispatcher that the company is enroute. During the turnout interval, crews immediately cease all other activities, don appropriate protective clothing, determine the



location of the call, board and start the appropriate response vehicle. The enroute notification to dispatch is made when all personnel are aboard the apparatus, and the vehicle begins traveling toward the call location.

- **Enroute Time** – the point at which the responding unit signals the dispatcher that they are responding to the call for service or traveling toward the hospital or other appropriate receiving facility. On calls in which a patient is transported, there are two enroute times: enroute to the call and enroute to the medical receiving facility.
- **Travel Time** – the interval that begins at the time of the enroute notification and ends when the responding unit notifies the dispatcher that it has arrived on scene.
- **Arrival (On-Scene) Time** – the point at which the first responding unit arrives on scene or the transport unit arrives at the receiving facility. Arrival is determined by actual physical arrival at the address or location of the emergency. Arrival time also includes stage time, which is when an apparatus is staged or standing by near the incident location.
- **On-Scene Interval** – the interval which begins at the arrival time on scene and ends with one of the following situations: 1) the official termination of the incident; 2) the point at which an ambulance is enroute transporting the patient to a receiving facility; or 3) when one or more units have completed the response assignment and are made available to respond to other requests for service. This time interval can be lengthy and may include a variety of fire ground and emergency incident activities. Other factors to consider are access problems associated with campuses, malls, complexes, high-rise buildings, or rural locations, and other incidents where a significant amount of area or terrain must be traversed in order to reach the patient or specific location of the incident.
- **Transport Time** – the second travel time interval for a medical transport call, which begins at the termination of on-scene time and ends upon arrival at the hospital or other designated medical receiving facility.
- **Termination of Incident (Shut Off)** – the point at which the designated incident commander notifies the dispatcher that the assignment has been completed and the units assigned are available to respond or otherwise commit.
- **Task Time** – the total time interval from dispatch through termination of the incident. It reflects the period of time response resources are committed and unavailable for other service requests.
- **Response Time** – includes the elements of responding to an incident that are directly under the control of the responding agency (i.e., turnout time plus travel time).

The ultimate goal of any emergency service delivery system is to provide sufficient resources (personnel, apparatus, and equipment) to the scene of an emergency in time to take effective action to minimize the impacts of the emergency. This need applies to fires, medical emergencies, and any other emergency situations to which the fire department responds. RFD has established response performance measures based on its current capabilities and resources.

**Table 34: Benchmark Response Goals**

| First 5 RFD Units or min. 14 FF |         |                   |         |         |             |
|---------------------------------|---------|-------------------|---------|---------|-------------|
| Minutes                         | Fire    | Building Fire ERF | EMS     | Hazmat  | Tech Rescue |
| Call Process                    | 0:01:00 | 0:01:00           | 0:01:00 | 0:01:00 | 0:01:00     |
| Turnout                         | 0:02:00 | 0:02:00           | 0:01:00 | 0:02:00 | 0:02:00     |
| Travel                          | 0:05:00 | 08:30             | 0:05:00 | 0:05:00 | 0:05:00     |
| Dispatch-Arrival                | 0:07:00 | 10:30             | 0:06:00 | 0:07:00 | 0:07:00     |
| Total Response Time             | 0:08:00 | 11:30             | 0:07:00 | 0:08:00 | 0:08:00     |

The following six benchmark response goal statements provide the specific areas where annual analysis is conducted to measure how well our organization is performing in relation to these response time goals. This helps determine if the Department has sufficient resources to meet the demands of a growing community. These performance measures are reported on the program quarterly budget reports sent to the City Council and City Administration.

### **Response Goal Statement #1: First Due Fire**

For 90% of all **low-risk** structure fires, the goal for total response time for arrival of the first due unit, staffed with three personnel (one Captain, one Engineer, and one FF/P) shall be: **8 minutes**. The first due unit shall be able to: provide 500 gallons of water and 1,500 gallons per minute (gpm) pumping capacity, provide a size-up, conduct a 360° evaluation, initiate command, request additional resources, establish an uninterrupted water supply, establish and advance an attack line flowing a minimum of 150 gpm in a defensive or transitional capacity, contain the fire, and rescue immediately at-risk victims. These operations shall be done in accordance with Departmental standard operating procedures.

## ***Response Goal Statement #2: Effective Response Force of 21 Personnel for Moderate and High Working Fires***

For 90% of all **moderate- and high-risk** structure fires, the goal for total response time for arrival of the ERF, staffed with 21 firefighters and officers, shall be **11 minutes and 30 seconds**. The ERF shall be able to: establish command, appoint a site safety officer, provide an uninterrupted water supply, advance an attack line and backup line for fire control, comply with the Occupational Safety and Health Administration (OSHA) requirements for two-in and two-out, complete forcible entry, search and rescue at-risk victims, ventilate the structure, control utilities, and perform salvage and overhaul.

The ERF for **high- and special-risk** structure fires shall also be capable of placing elevated streams into service from aerial ladders. These operations shall be done in accordance with Department standard operating procedures while providing for the safety of responders and the general public. There is not a calculated response time for high- and special-risk structure fires due to infrequent calls of this severity.

## ***Response Goal Statement #3: EMS***

To treat **low- and moderate-risk** medical patients, the goal for total response time for arrival of the first due unit, staffed with three personnel (including a minimum of one Paramedic) shall be **7 minutes**, 90% of the time from receipt of the 9-1-1 call. The first due unit shall be able to: assess a patient, administer basic and advanced life support including oxygen, IVs, and medication, stop bleeding, splint and bandage wounds, and prepare the patient for transportation to a hospital.

## ***Response Goal Statement #4: Special Operations Hazardous Materials***

For 90% of all **low-risk** Hazardous Materials responses, the goal for total response time for arrival of the first due unit, staffed with three personnel (one Captain, one Engineer, and one Firefighter) shall be **8 minutes**. The first due unit shall be able to: establish command, complete a size-up and assess the situation to determine the presence of a potential hazardous material or explosive device, determine the need for additional resources, provide 500 gallons of water and 1,500 gallons per minute (gpm) pumping capacity for emergency decontamination, rescue victims that are down in the line of sight, conduct a 360° evaluation, initiate command, request additional resources, isolate the area, establish perimeters, and rescue at-risk victims. These operations shall be done in accordance with Departmental standard operating procedures.

For 90% of all **moderate- and high-risk** hazardous materials response incidents, the goal for total response time for the arrival of the ERF including the hazardous materials response team, staffed with 14 firefighters and officers, shall be **20 minutes** in all areas. The ERF shall be able to: appoint an incident safety officer and provide the equipment, technical expertise, knowledge, skills, and abilities to mitigate a hazardous materials incident in accordance with Departmental standard operating procedures.

### **Response Goal Statement #5: Technical Rescue**

For 90% of all **low-risk** rescue responses, the goal for total response time for arrival of the first due unit, staffed with three personnel (one Captain, one Engineer, and one Firefighter) shall be **8 minutes**. The first due unit for all risk levels shall be able to: provide a 360° evaluation and scene size-up, incident stabilization, secure utilities, establish command, rescue at-risk victims that might be trapped, utilize special extrication tools carried on apparatus, request additional resources, isolate the area, and establish perimeters. These operations shall be done in accordance with Departmental standard operating procedures.

The ERF for **moderate- and high-risk** special operations requiring a rescue response shall be able to: provide additional equipment including rescue apparatus and additional task force members in accordance with Departmental policy. There is not a calculated response time for high-risk hazmat or rescue operations due to infrequent calls of this severity.

### **Response Goal Statement #6: Response Reliability**

Maintain a Response Reliability greater than 80% for each district.

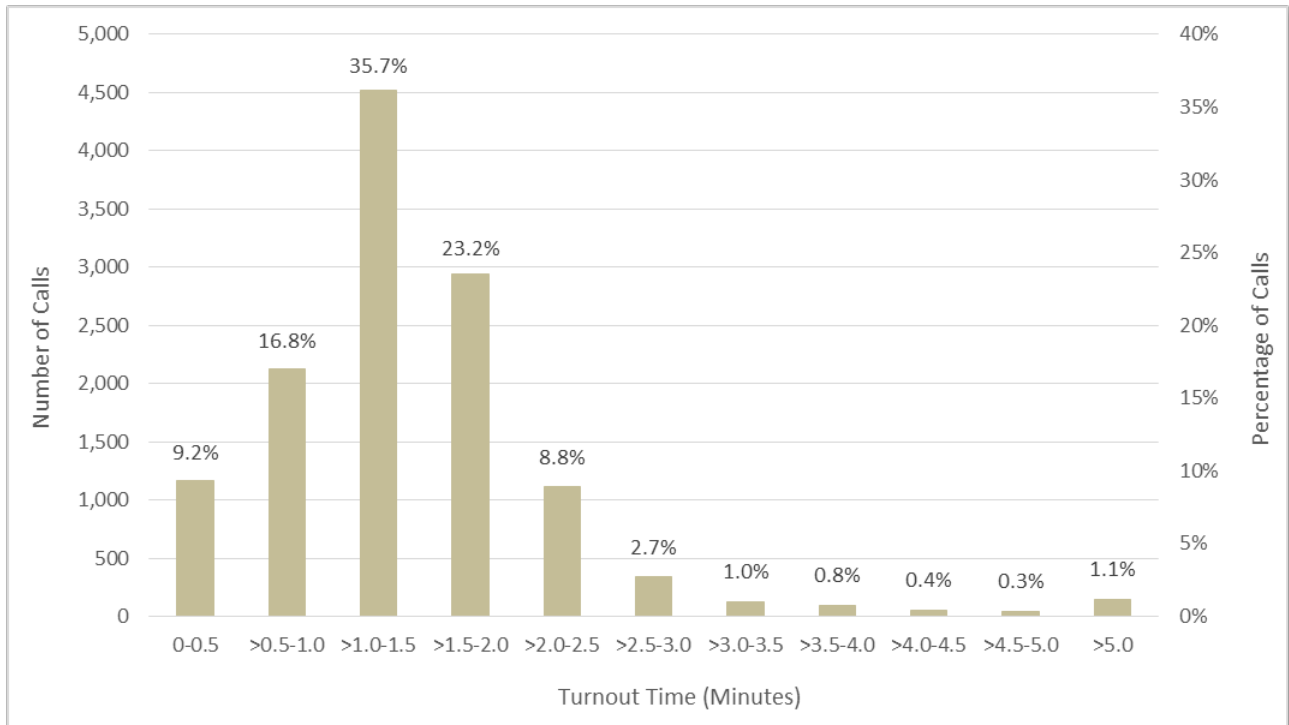
## **Current Baseline Performance Measures**

The data from the previous five years of response times are broken out by call processing, turnout, travel, and call to arrival. Evaluation is done at every step in the process so deficient areas can be analyzed individually and improvements implemented. All response times are for priority responses only. The chart below shows **overall baseline response times** for each response component for priority incidents.

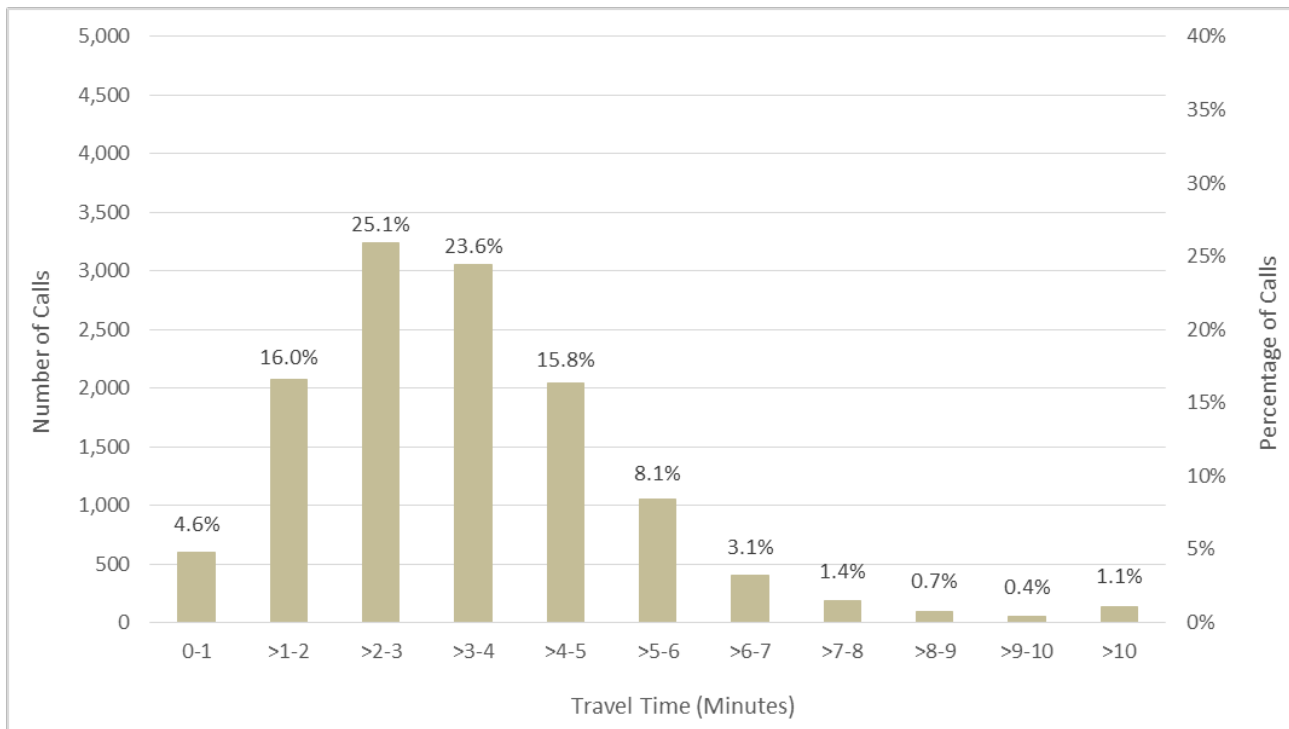
**Table 35: Overall Baseline Response Times for All Emergency Calls**

| Measure       | Average | Median | 90th Percentile |
|---------------|---------|--------|-----------------|
| Dispatch Time | 1.5     | 1.0    | 2.4             |
| Turnout Time  | 1.4     | 1.3    | 2.2             |
| Travel Time   | 3.4     | 3.2    | 5.5             |
| Response Time | 6.2     | 5.7    | 8.6             |

**Figure 26: Distribution of Turnout Time of First Arriving Unit – All Emergency Calls**



**Figure 27: Distribution of Travel Time of First Arriving Unit – All Emergency Calls**



National recommendations provide differentiation between EMS and fire/special operations incidents. For example, the best practice for an EMS incident is a turnout time of 60 seconds or less 90% of the time. Due to the necessity to don personal protective equipment prior to responding to fire related incidents, best practices provide either 80 seconds (NFPA) or 90 seconds (CFAI) or less at the 90th percentile for turnout times associated with fire calls. Therefore, turnout and travel times are also reported by the major program areas of EMS and fire.

**Table 36: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-Line Arriving Units for Low-Risk EMS Incidents by Reporting Period**

| 90 <sup>th</sup> Percentile Time (Minutes) |                 |           |       |       |       |       |       |
|--------------------------------------------|-----------------|-----------|-------|-------|-------|-------|-------|
| Performance Metric                         | Arriving Unit   | 2015-2018 | 2014  | 2015  | 2016  | 2017  | 2018  |
| Dispatch Time                              | 1 <sup>st</sup> | 1.9       | 1.6   | 1.8   | 1.8   | 2.0   | 2.1   |
| Turnout Time                               | 1 <sup>st</sup> | 2.0       | 1.9   | 2.0   | 2.1   | 2.1   | 2.2   |
| Travel Time                                | 1 <sup>st</sup> | 5.4       | 5.2   | 5.3   | 5.4   | 5.5   | 5.4   |
| Response Time                              | 1 <sup>st</sup> | 8.0       | 7.5   | 7.8   | 8.1   | 8.3   | 8.2   |
| Sample Size <sup>1</sup>                   | 1 <sup>st</sup> | 46,503    | 8,407 | 9,340 | 9,285 | 9,553 | 9,918 |

For EMS incidents, RFD had an average turnout time of 1:24 minutes, a median turnout time of 1:18 minutes, and a turnout time of 2:12 minutes at the 90th percentile during 2018. A total of 2,550 of 9,550 (26.7%) calls reported turnout times of one minute or less, and 86.2% of calls (8,231/9,550) experienced turnout times of two minutes or less. The average travel time for EMS incidents was 3:24 minutes (median = 3:12 minutes) and performance at the 90th percentile for travel time was 5:24 minutes. A total of 4,474 of 9,765 (45.8%) experienced travel times of three minutes or less, and 70% of calls (6,838/9,765) experienced travel times of four minutes or less. The average response time for EMS calls was 6 minutes (median = 5:36 minutes) and performance at the 90th percentile for response time was 8:12 minutes.

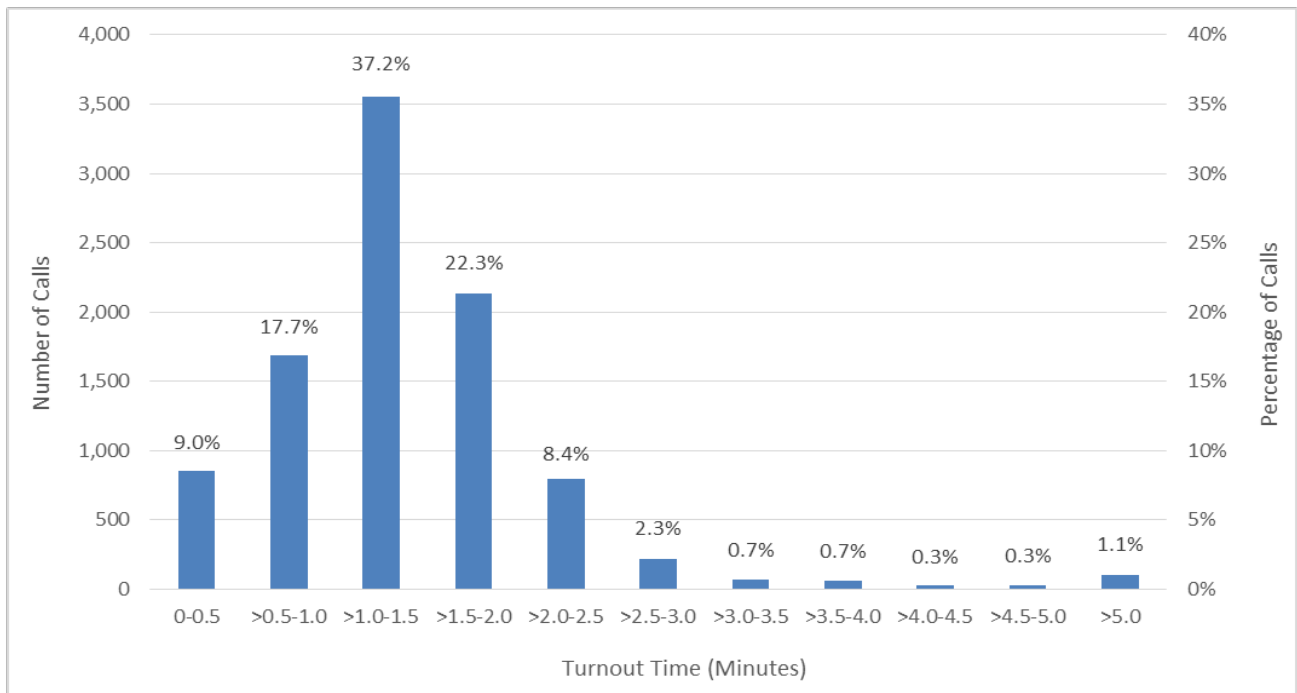
**Table 37: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-line Arriving Units for Low-Risk Fire Incidents by Reporting Period**

| 90 <sup>th</sup> Percentile Time (Minutes) |                 |           |      |      |      |      |      |
|--------------------------------------------|-----------------|-----------|------|------|------|------|------|
| Performance Metric                         | Arriving Unit   | 2014-2018 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time                              | 1 <sup>st</sup> | 2.7       | 3.1  | 2.5  | 2.1  | 2.9  | 2.5  |
| Turnout Time                               | 1 <sup>st</sup> | 2.6       | 2.4  | 2.5  | 2.7  | 2.6  | 2.4  |
| Travel Time                                | 1 <sup>st</sup> | 6.7       | 7.2  | 5.8  | 7.8  | 6.5  | 6.0  |
| Response Time                              | 1 <sup>st</sup> | 9.9       | 10.5 | 9.1  | 10.7 | 10.0 | 9.7  |
| Sample Size <sup>1</sup>                   | 1 <sup>st</sup> | 1,323     | 276  | 262  | 261  | 250  | 274  |

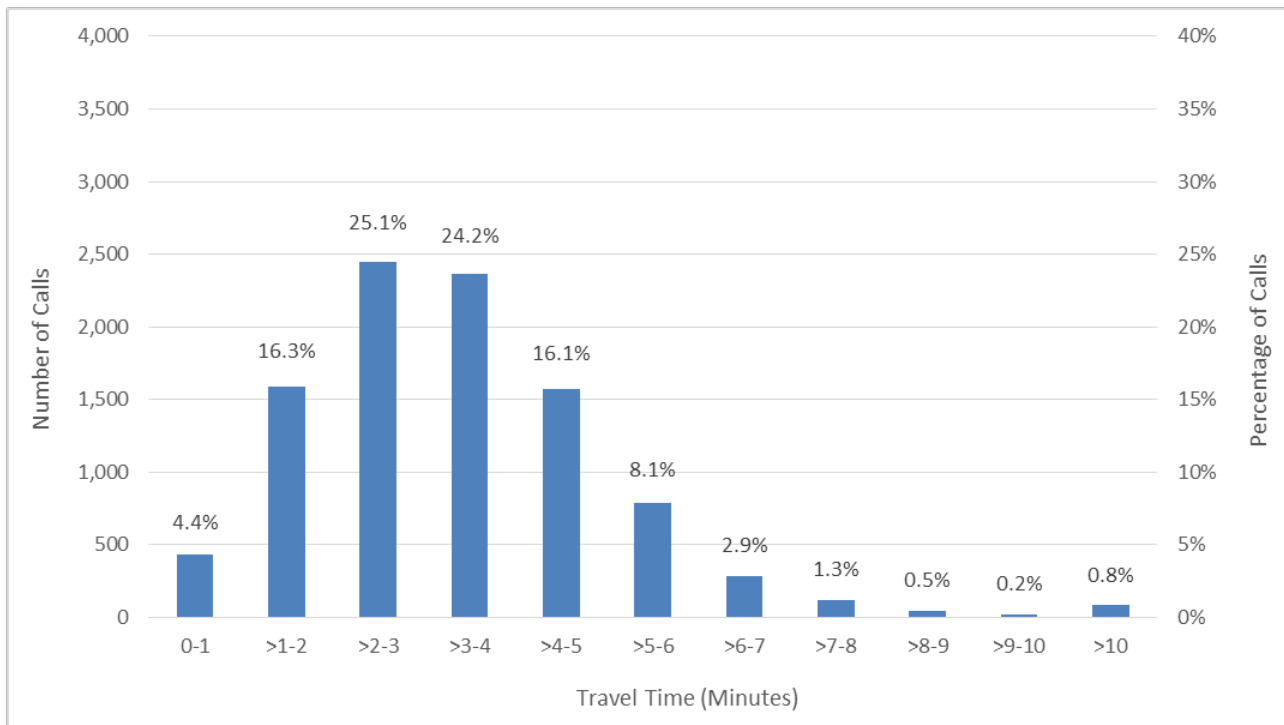
For fire related incidents, RFD had an average turnout time of 1:42 minutes, a median turnout time of 1:42 minutes, and a turnout time of 2:24 minutes at the 90th percentile during 2018. A total of 46 of 285 (16.1%)

experienced turnout times of one minute or less, and 71.6% of calls (204/285) experienced turnout times of two minutes or less. The average travel time for fire related incidents was 3:36 minutes (median = 2:54 minutes) and performance at the 90th percentile for travel time was 6 minutes. A total of 158 of 293 (53.9%) experienced travel times of three minutes or less, and 72.4% of calls (212/293) experienced travel times of four minutes or less. The average response time for fire related calls was 6:36 minutes (median = 5:48 minutes) and performance at the 90th percentile for response time was 9:36 minutes.

**Figure 28: Distribution of Turnout Time of First Arriving Unit – Emergency EMS Related Calls**



**Figure 29: Distribution of Travel time for First Arriving Unit – Emergency EMS Related Calls**



**Figure 30: Distribution of Turnout Time of First Arriving Unit – Emergency Fire Related Calls**

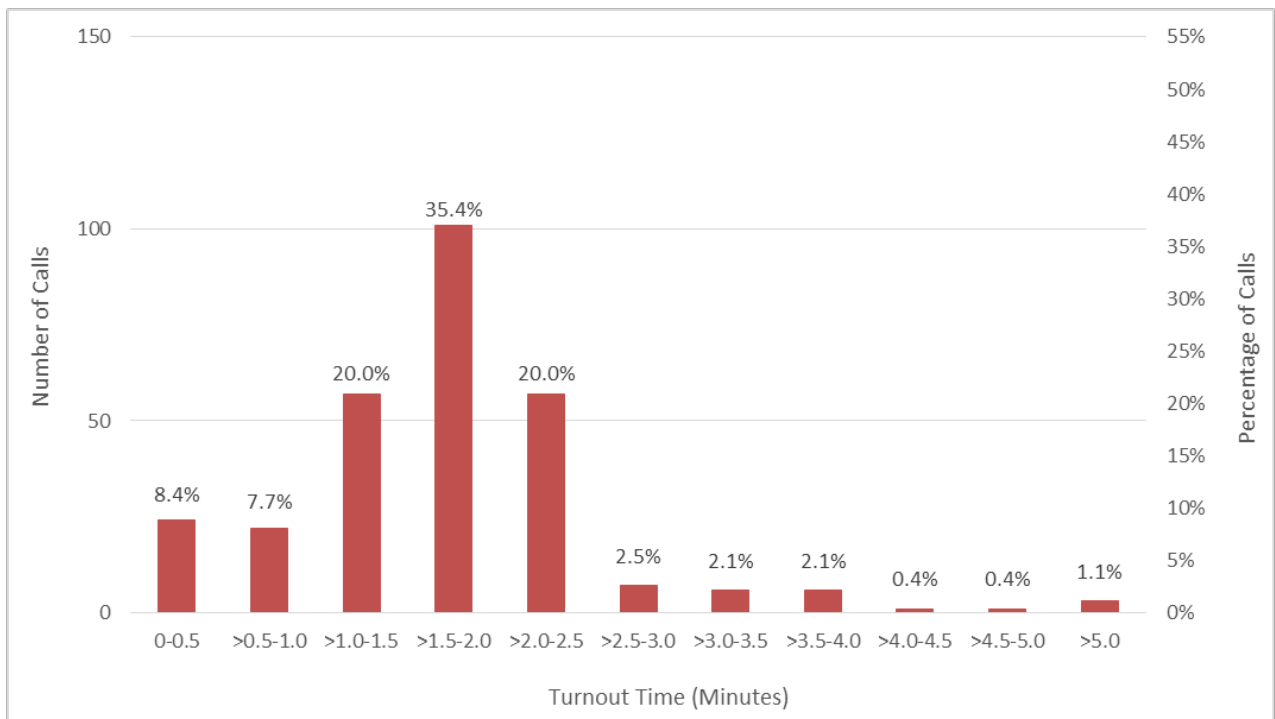
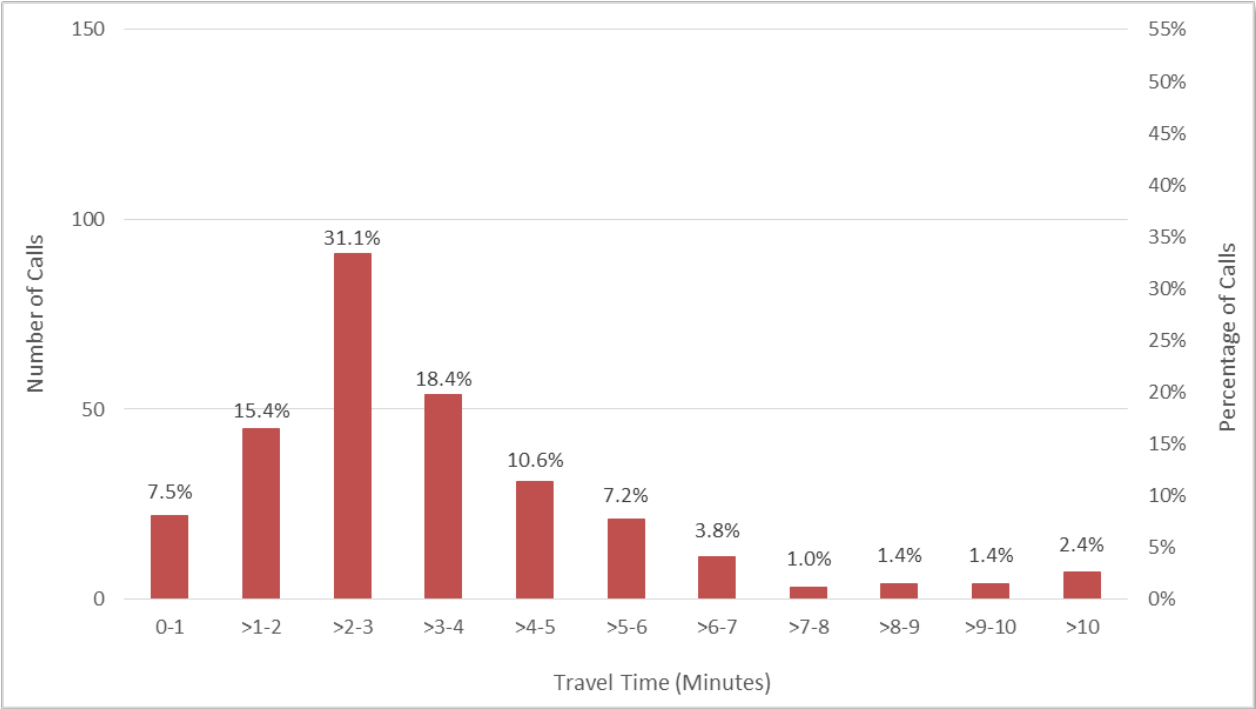




Figure 31: Distribution of Travel time for First Arriving Unit – Emergency Fire Related Calls



**Table 38: Call Totals by Type and Reporting Period**

| Demand Zone | Call Category                            | Reporting Period <sup>1</sup> |               |               |               |               |
|-------------|------------------------------------------|-------------------------------|---------------|---------------|---------------|---------------|
|             |                                          | 2014                          | 2015          | 2016          | 2017          | 2018          |
| Roseville   | EMS                                      | 8,618                         | 9,614         | 9,561         | 9,769         | 10,190        |
|             | False Alarm & False Call                 | 474                           | 576           | 675           | 685           | 734           |
|             | Fire (Not Building or Wildland)          | 133                           | 121           | 121           | 123           | 89            |
|             | Building Fire                            | 109                           | 112           | 109           | 101           | 120           |
|             | Wildland Fire                            | 66                            | 54            | 62            | 64            | 91            |
|             | Fire (All)                               | 308                           | 287           | 292           | 288           | 300           |
|             | Good Intent Call                         | 1,345                         | 1,582         | 1,833         | 2,336         | 2,447         |
|             | Hazardous Conditions (No Fire)           | 201                           | 215           | 220           | 237           | 258           |
|             | Rescue                                   | 772                           | 806           | 922           | 876           | 918           |
|             | Service Call                             | 1,386                         | 1,567         | 1,563         | 1,731         | 1,703         |
|             | Severe Weather & Natural Disaster        | 6                             | 2             | 1             | 2             | 3             |
|             | Special Incident Type                    | 3                             | 1             | 4             | 14            | 29            |
|             | Unknown                                  | 0                             | 5             | 0             | 1             | 0             |
|             | <b>Total<sup>2</sup></b>                 | <b>13,113</b>                 | <b>14,655</b> | <b>15,071</b> | <b>15,939</b> | <b>16,582</b> |
|             | <b>Average Calls per Day<sup>2</sup></b> | <b>35.9</b>                   | <b>40.2</b>   | <b>41.2</b>   | <b>43.7</b>   | <b>45.4</b>   |
|             | <b>YoY Growth</b>                        | <b>N/A</b>                    | <b>11.8%</b>  | <b>2.8%</b>   | <b>5.8%</b>   | <b>4.0%</b>   |

<sup>1</sup>Reporting periods reflect full calendar years, from January 1 to December 31 of each respective year.

<sup>2</sup>Reporting period 2016 contained 366 days due to inclusion of leap year date February 29, 2016; all other reporting periods contained 365 days.

The incident count shows how many specific calls were generated per year by call type. This does not reflect the multiple company responses, meaning a structure fire will typically have four engines, two trucks, and a Battalion Chief respond, yet it still counts as one incident. The annual unit count will reflect how many times each unit (apparatus) responded to calls.

**Table 39: 90<sup>th</sup> Percentile First Arrival Performance in Minutes by Demand Zone**

| Demand Zone              | Dispatch Time | Turnout Time | Travel Time | Response Time |
|--------------------------|---------------|--------------|-------------|---------------|
| Station 1                | 3.2           | 2.3          | 4.3         | 7.6           |
| Station 2                | 2.2           | 2.3          | 5.1         | 8.2           |
| Station 3                | 2.2           | 2.0          | 5.0         | 7.8           |
| Station 4                | 2.2           | 2.2          | 4.9         | 7.8           |
| Station 5                | 2.0           | 2.3          | 5.8         | 8.7           |
| Station 6                | 2.4           | 2.1          | 5.5         | 8.8           |
| Station 7                | 2.7           | 2.4          | 6.0         | 9.3           |
| Station 9                | 1.9           | 2.3          | 6.3         | 9.3           |
| <b>Total<sup>1</sup></b> | <b>2.4</b>    | <b>2.2</b>   | <b>5.5</b>  | <b>8.6</b>    |

<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values, but are not presented separately in the table.

**Table 40: Sample Sizes for First Arrival Performance by Demand Zone**

| Demand Zone              | Dispatch Time | Turnout Time  | Travel Time   | Response Time |
|--------------------------|---------------|---------------|---------------|---------------|
| Station 1                | 1,803         | 1,708         | 1,755         | 1,631         |
| Station 2                | 1,373         | 1,341         | 1,368         | 1,318         |
| Station 3                | 2,459         | 2,362         | 2,447         | 2,332         |
| Station 4                | 1,550         | 1,514         | 1,552         | 1,492         |
| Station 5                | 1,694         | 1,659         | 1,687         | 1,640         |
| Station 6                | 1,196         | 1,162         | 1,185         | 1,138         |
| Station 7                | 1,546         | 1,492         | 1,522         | 1,459         |
| Station 9                | 1,262         | 1,244         | 1,260         | 1,233         |
| <b>Total<sup>1</sup></b> | <b>13,050</b> | <b>12,643</b> | <b>12,939</b> | <b>12,399</b> |

<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values, but are not presented separately in the table.

## **Travel Time**

There are two notable references for travel time available to the fire service: National Fire Protection Association (NFPA) 1710<sup>F</sup> and the Commission on Fire Accreditation International (CFAI). NFPA 1710 suggests a 4-minute travel time at the 90<sup>th</sup> percentile for first due arrival of BLS and fire incidents, and a significant amount of CFAI accredited agencies are using a 5-minute travel time for first due arrival in an urban/suburban population density. The arrival of an ALS unit is recommended at 8 minutes travel time by NFPA 1710.

Considering the overall 90<sup>th</sup> percentile travel time goal of 5 minutes and 30 seconds and a 6-minute travel time at the 90<sup>th</sup> percentile for fire related incidents, a 5-minute travel time was used as a surrogate measure for the more restrictive 4-minute or 5:12 thresholds identified. When referring to the marginal utility analysis provided in the tables on the following pages, the ascending rank order is the station's capability to cover risk (incidents) in relation to the total historical call volume of the sample period (2018).

### **5-Minute Travel Time**

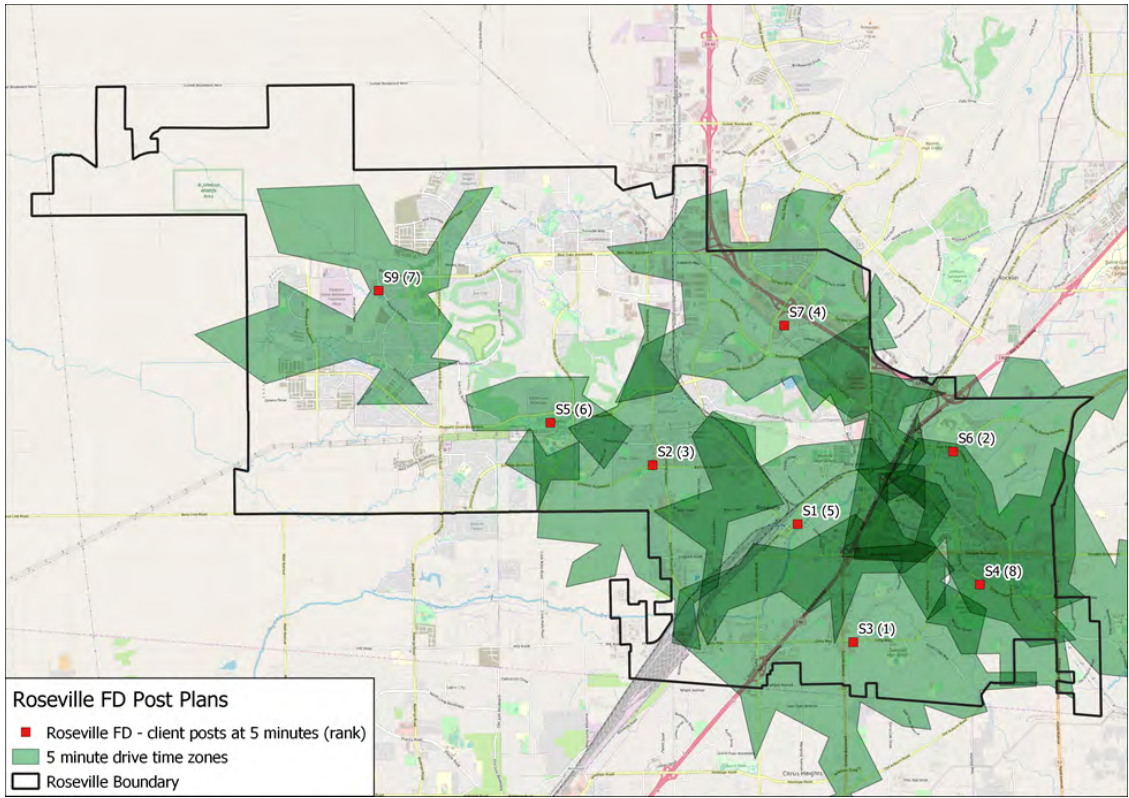
Results suggest that with all eight RFD fire stations active, 80.71% of the incidents could be responded to within 5 minutes or less travel time. The station that could contribute the most to the overall system's performance is Station 3 in the first row that could capture 29.96% of the risks within 5 minutes. Station 6 could cover an additional 17.49% of the risk, bringing the cumulative total to 47.45% between Stations 3 and 6.

In the table below, station is the current RFD station identifier; station capture is the number of calls the station would capture within a 5-minute travel time; total capture is the cumulative number of calls captured with the addition of each fire station; and percent capture is the total cumulative percentage of risk covered by each station. The goal would be to achieve at least 90% capture. Figures depict drive time mapping.

**Table 41: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station   | Station Capture | Total Capture | Percent Capture |
|------|-----------|-----------------|---------------|-----------------|
| 1    | Station 3 | 5,054           | 5,054         | 29.96%          |
| 2    | Station 6 | 2,952           | 8,006         | 47.45%          |
| 3    | Station 2 | 2,281           | 10,287        | 60.97%          |
| 4    | Station 7 | 1,354           | 11,641        | 69.00%          |
| 5    | Station 1 | 944             | 12,585        | 74.60%          |
| 6    | Station 5 | 488             | 13,073        | 77.49%          |
| 7    | Station 9 | 438             | 13,511        | 80.08%          |
| 8    | Station 4 | 106             | 13,617        | 80.71%          |

Figure 32: Current Fire Station Bleed Maps for 5-Minute Travel Time



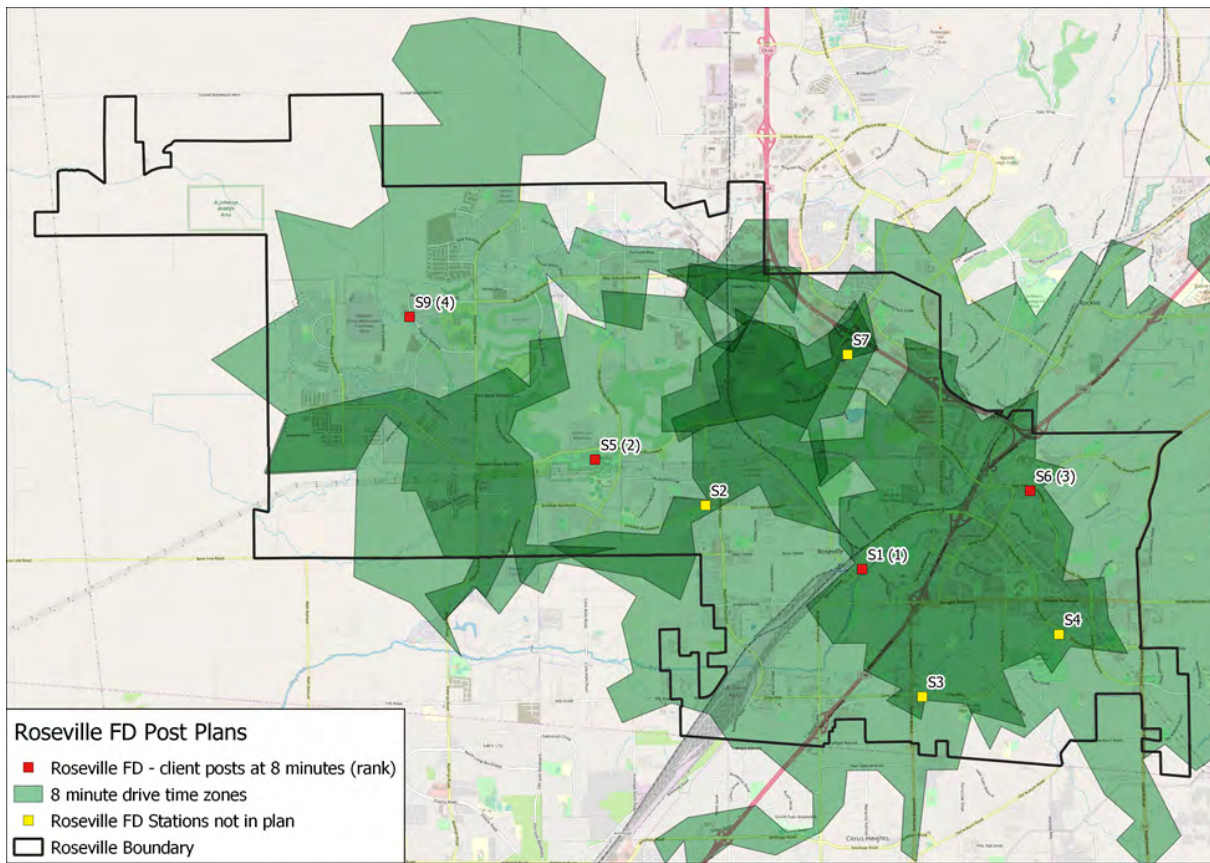
### 8-Minute Travel Time for ERF

Results suggest that with four RFD fire stations active, 95.70% of the incidents could be responded to within 8 minutes or less travel time. All eight RFD fire stations could cover 97.88% of the risk within 8 minutes or less travel time.

**Table 42: Marginal Fire Station Contribution for 8-Minute Travel Time**

| Rank | Station   | Station Capture | Total Capture | Percent Capture |
|------|-----------|-----------------|---------------|-----------------|
| 1    | Station 1 | 10,505          | 10,505        | 62.27%          |
| 2    | Station 5 | 2,711           | 13,216        | 78.34%          |
| 3    | Station 6 | 1,618           | 14,834        | 87.93%          |
| 4    | Station 9 | 1,311           | 16,145        | 95.70%          |
| 5    | Station 7 | 179             | 16,324        | 96.76%          |
| 6    | Station 3 | 158             | 16,482        | 97.69%          |
| 7    | Station 4 | 26              | 16,508        | 97.85%          |
| 8    | Station 2 | 5               | 16,513        | 97.88%          |

**Figure 33: Current Fire Station Bleed Maps for 8-Minute Travel Time**



### **Alternative Station Configurations**

RFD has proposed possible locations and construction for future fire Station 8 and Station 10, respectively. The following scenarios were created to validate and analyze the potential alternative configurations.

- Scenario 1: All existing stations with the addition of Station 8.
- Scenario 2: All existing stations with the addition of Station 8 and relocated Station 5.
- Scenario 3: All existing stations with the addition of Stations 8 and 10.

### **Scenario 1**

#### **5-Minute Travel Time**

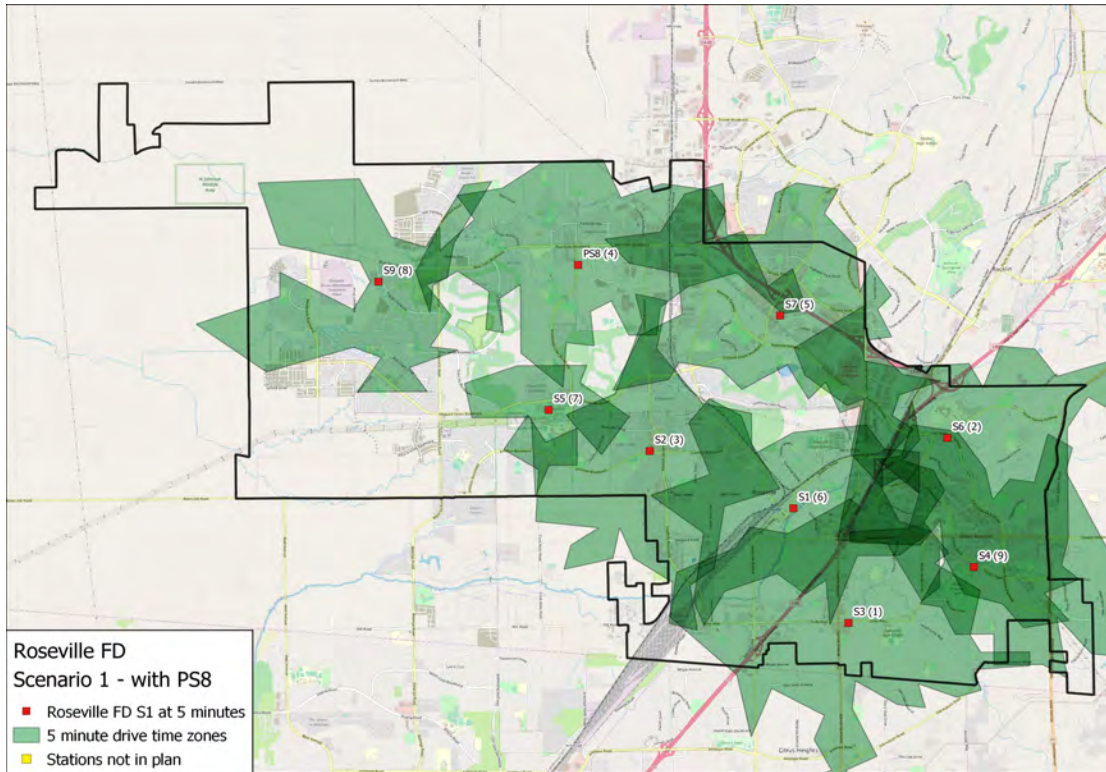
Results suggest that with all nine RFD fire stations active, 87.85% of the incidents could be responded to within 5 minutes or less travel time. This is approximately a 7% improvement over the current configuration prior to the addition of Station 8.

**Table 43: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S7      | 967             | 12,895        | 76.43%          |
| 6    | S1      | 944             | 13,839        | 82.03%          |
| 7    | S5      | 474             | 14,313        | 84.84%          |
| 8    | S9      | 403             | 14,716        | 87.23%          |
| 9    | S4      | 106             | 14,822        | 87.85%          |



**Figure 34: Current Fire Stations and Station 8 Bleed Maps for 5-Minute Travel Time**



## Scenario 2

### 5-Minute Travel Time

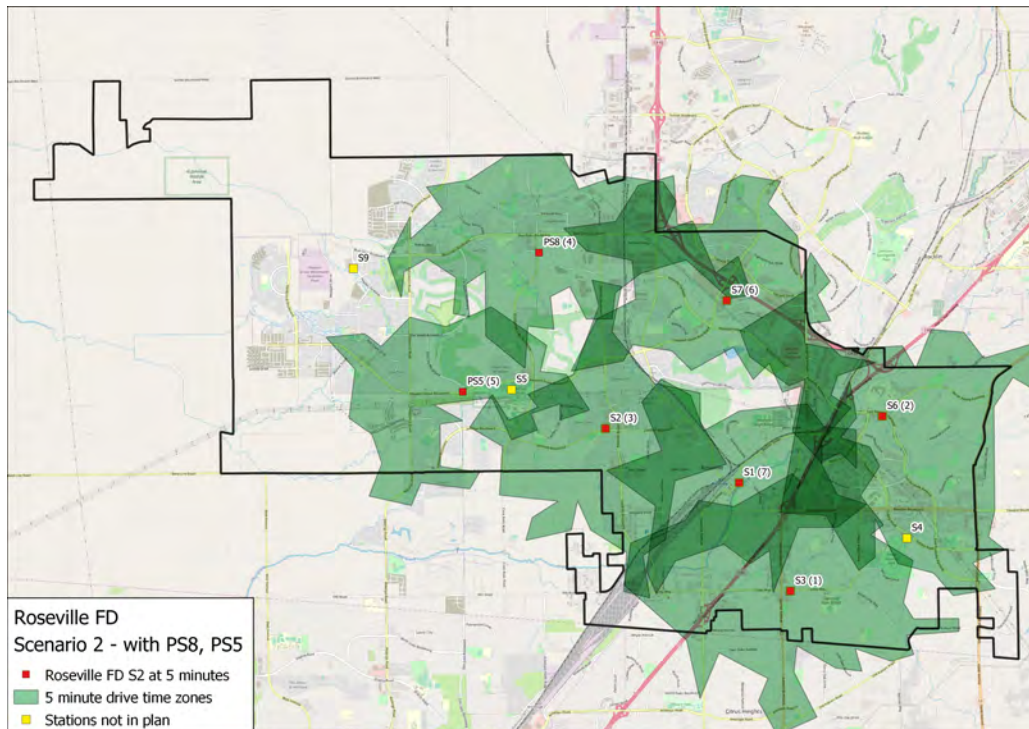
Results suggest that with all nine RFD fire stations active, 92.56% of the incidents could be responded to within 4 minutes or less travel time. This is approximately a 9% improvement over the current configuration prior to the addition of Station 8 or relocation of Station 5.

**Table 44: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S5N     | 1,397           | 13,325        | 78.98%          |
| 6    | S7      | 967             | 14,292        | 84.71%          |
| 7    | S1      | 944             | 15,236        | 90.31%          |
| 8    | S9      | 274             | 15,510        | 91.93%          |
| 9    | S4      | 106             | 15,616        | 92.56%          |



**Figure 35: Current Fire Stations, Station 8, and Relocation of Station 5 Bleed Maps for 5-Minute Travel Time**



### **Scenario 3**

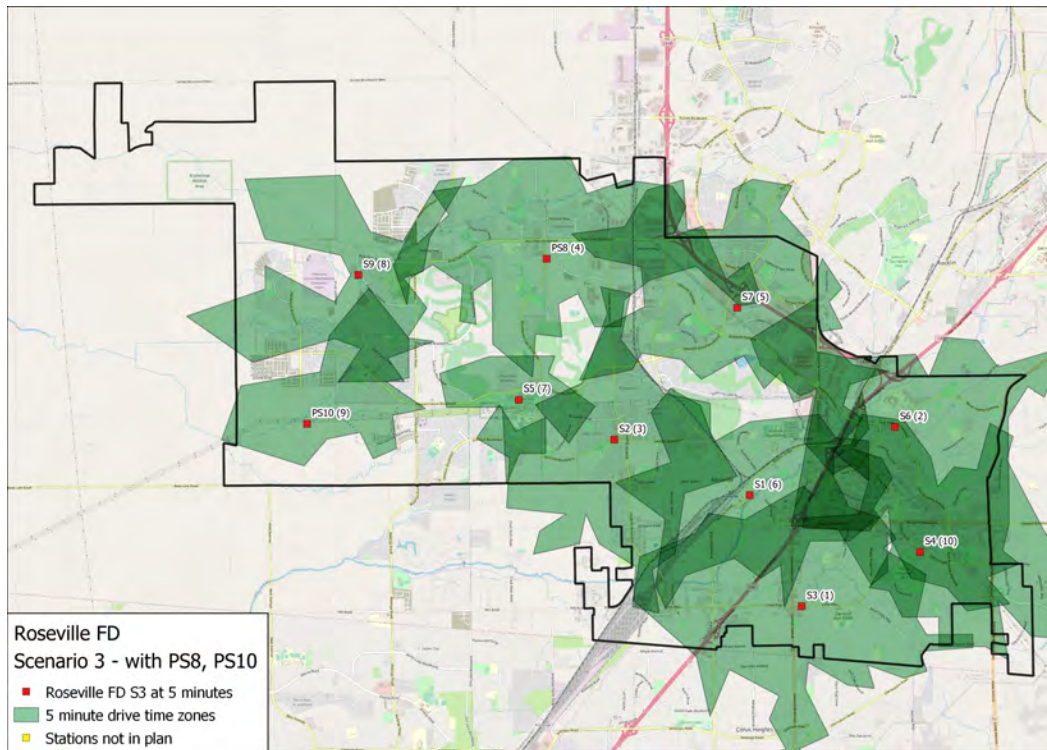
#### **5-Minute Travel Time**

Results suggest that with all 10 RFD fire stations active, 88.64% of the incidents could be responded to within 4 minutes or less travel time. This is approximately a 7% improvement over the current configuration, but 4% less than the configuration of Station 8 and relocation of Station 5.

**Table 45: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S7      | 967             | 12,895        | 76.43%          |
| 6    | S1      | 944             | 13,839        | 82.03%          |
| 7    | S5      | 474             | 14,313        | 84.84%          |
| 8    | S9      | 403             | 14,716        | 87.23%          |
| 9    | S10     | 133             | 14,849        | 88.01%          |
| 10   | S4      | 106             | 14,955        | 88.64%          |

**Figure 36: Current Fire Stations with Stations 8 and 10 Bleed Maps for 5-Minute Travel Time**



**Table 46: Summary of Alternative Station Configurations**

| Performance (Minutes) | Current Configuration | Scenario 1 | Scenario 2 | Scenario 3 |
|-----------------------|-----------------------|------------|------------|------------|
| 4                     | 64.87%                | 70.20%     | 74.04%     | 71.26%     |
| 5                     | 80.71%                | 87.85%     | 92.56%     | 88.64%     |
| 6                     | 87.57%                | 95.09%     | 97.09%     | 95.64%     |
| 7                     | 95.44%                | 98.75%     | 98.98%     | 98.77%     |
| 8                     | 97.88%                | 99.05%     | 99.24%     | 99.05%     |

The analyses of several possible alternatives reveal that Scenario 2 (addition of Station 8 and relocation Station 5) has the greatest return on investment. With very little variability, it requires only one additional station and the relocation of one station rather than two additional stations.

## Overall Response Analysis All Calls

### Overall Workload by Station

In 2018, RFD responded to 20,847 calls for service with a total of 6,624.4 on-task hours. The station-level demand is a more useful measure for deployment decisions, and the unit-level workload will help evaluate the utilization of physical apparatus and assist with apparatus procurement or maintenance decisions.

Station 1 was the busiest station based on number of calls responded to by units assigned to the station at 3,446 calls. Units assigned to Station 1 also made the greatest number of responses to calls across the Department (4,544 responses) and had the greatest number of total busy hours during 2018 (1,370 hours).

E3, E5, and E1 were the busiest RFD units based on total busy hours (928.1 hours, 718.4 hours, and 655 hours, respectively).

**Table 47: Overall Workload by Station**

| Station                | Number of Calls Responded to by Units Assigned to Station | Number of Responses Made by Units Assigned to Station <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response | Percentage of Total Busy Hours |
|------------------------|-----------------------------------------------------------|--------------------------------------------------------------------|---------------------------------------|------------------|-----------------------------------|--------------------------------|
| Station 1              | 3,446                                                     | 4,544                                                              | 4,452                                 | 1,370.0          | 18.5                              | 20.7                           |
| Station 2              | 2,054                                                     | 2,057                                                              | 2,035                                 | 674.9            | 19.9                              | 10.2                           |
| Station 3              | 2,989                                                     | 2,989                                                              | 2,963                                 | 928.1            | 18.8                              | 14.0                           |
| Station 4              | 2,100                                                     | 2,100                                                              | 2,078                                 | 635.4            | 18.3                              | 9.6                            |
| Station 5              | 2,220                                                     | 2,225                                                              | 2,198                                 | 766.0            | 20.9                              | 11.6                           |
| Station 6              | 2,096                                                     | 2,108                                                              | 2,078                                 | 593.0            | 17.1                              | 9.0                            |
| Station 7              | 2,523                                                     | 2,950                                                              | 2,906                                 | 940.0            | 19.4                              | 14.2                           |
| Station 9              | 1,825                                                     | 1,831                                                              | 1,810                                 | 685.7            | 22.7                              | 10.4                           |
| RFD Admin              | 35                                                        | 38                                                                 | 24                                    | 30.5             | 76.1                              | 0.5                            |
| RFD Other <sup>3</sup> | 5                                                         | 5                                                                  | 2                                     | 0.8              | 23.9                              | 0.0                            |
| <b>Total</b>           | <b>--</b>                                                 | <b>20,847</b>                                                      | <b>20,546</b>                         | <b>6,624.4</b>   | <b>19.3</b>                       | <b>100.0</b>                   |

<sup>1</sup>"Number of Responses" reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>"Responses with Time Data" reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix of data report).

<sup>3</sup>Reflects only the unit OES364, a state resource staffed by RFD for state or federal incidents; not otherwise typically staffed.

## Overall Workload by Unit

Table 48: Overall Workload by Unit

| Station   | Unit          | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|-----------|---------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| Station 1 | B1            | Battalion Chief | 634                              | 628                                   | 272.4            | 26.0                              |
|           | E1            | Engine          | 2,550                            | 2,497                                 | 655.0            | 15.7                              |
|           | HZ1           | Hazmat          | 12                               | 0                                     | --               | --                                |
|           | T1            | Truck           | 1,348                            | 1,327                                 | 442.6            | 20.0                              |
|           | Station Total |                 | 4,544                            | 4,452                                 | 1,370.0          | 18.5                              |
| Station 2 | E2            | Engine          | 2,021                            | 1,999                                 | 636.1            | 19.1                              |
|           | G2            | Grass           | 36                               | 36                                    | 38.8             | 64.7                              |
|           | Station Total |                 | 2,057                            | 2,035                                 | 674.9            | 19.9                              |
| Station 3 | E3            | Engine          | 2,989                            | 2,963                                 | 928.1            | 18.8                              |
|           | Station Total |                 | 2,989                            | 2,963                                 | 928.1            | 18.8                              |
| Station 4 | E4            | Engine          | 2,069                            | 2,049                                 | 613.8            | 18.0                              |
|           | G4            | Grass           | 31                               | 29                                    | 21.5             | 44.6                              |
|           | Station Total |                 | 2,100                            | 2,078                                 | 635.4            | 18.3                              |
| Station 5 | BR5           | Brush Truck     | 34                               | 33                                    | 43.9             | 79.8                              |
|           | E5            | Engine          | 2,172                            | 2,146                                 | 718.4            | 20.1                              |
|           | E5B           | Engine          | 3                                | 3                                     | 0.0              | 0.4                               |
|           | E8            | Engine          | 16                               | 16                                    | 3.7              | 13.9                              |
|           | Station Total |                 | 2,225                            | 2,198                                 | 766.0            | 20.9                              |
| Station 6 | BR6           | Brush Truck     | 45                               | 43                                    | 42.2             | 58.9                              |
|           | E6            | Engine          | 2,062                            | 2,035                                 | 550.8            | 16.2                              |
|           | E6B           | Engine          | 1                                | 0                                     | --               | --                                |
|           | Station Total |                 | 2,108                            | 2,078                                 | 593.0            | 17.1                              |
| Station 7 | E7            | Engine          | 1,916                            | 1,897                                 | 618.4            | 19.6                              |
|           | R7            | Rescue          | 16                               | 15                                    | 13.9             | 55.7                              |
|           | T7            | Truck           | 1,017                            | 994                                   | 307.7            | 18.6                              |
|           | T7B           | Truck           | 1                                | 0                                     | --               | --                                |
|           | Station Total |                 | 2,950                            | 2,906                                 | 940.0            | 19.4                              |
| Station 9 | BR9           | Brush Truck     | 39                               | 35                                    | 42.3             | 72.6                              |
|           | E9            | Engine          | 1,792                            | 1,775                                 | 643.4            | 21.7                              |
|           | Station Total |                 | 1,831                            | 1,810                                 | 685.7            | 22.7                              |
| RFD Admin | 1401          | Chief Officer   | 2                                | 0                                     | --               | --                                |
|           | 1404          | Chief Officer   | 1                                | 0                                     | --               | --                                |
|           | 1405          | Chief Officer   | 1                                | 1                                     | 0.5              | 28.3                              |
|           | 1410          | Chief Officer   | 5                                | 2                                     | 6.0              | 179.6                             |
|           | 1411          | Chief Officer   | 1                                | 0                                     | --               | --                                |
|           | 1413          | Chief Officer   | 1                                | 0                                     | --               | --                                |

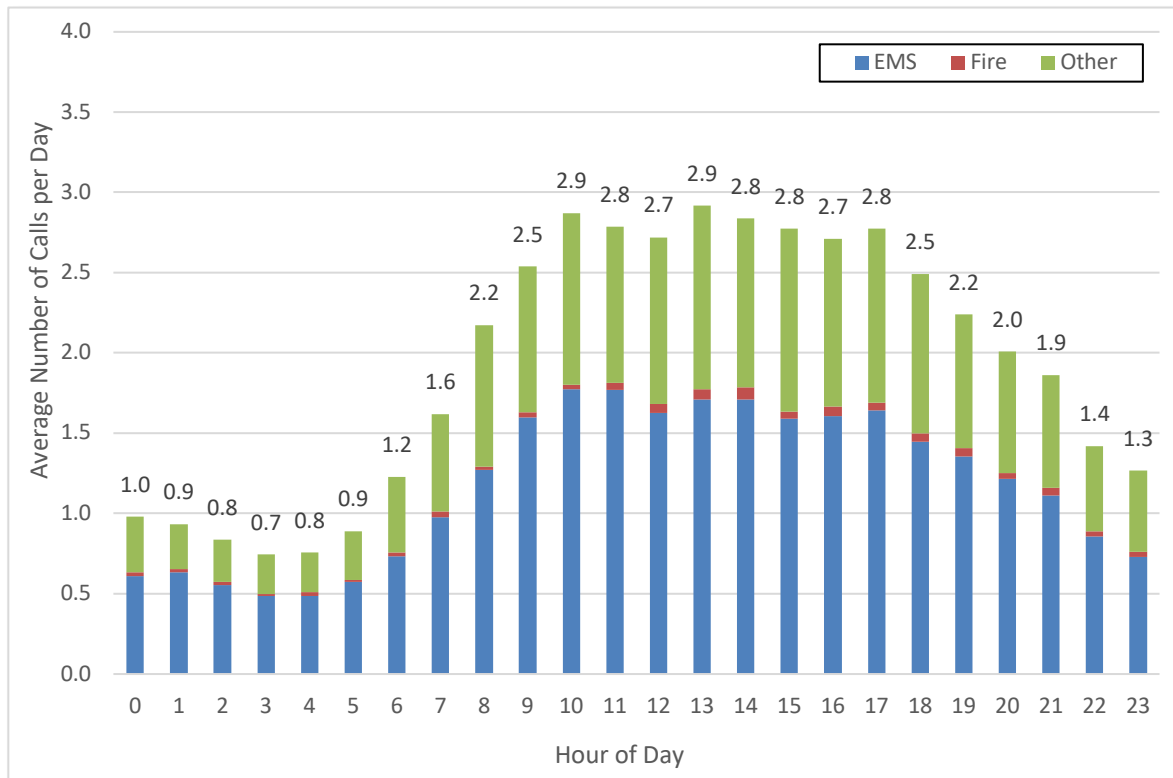
| Station          | Unit          | Unit Type       | Number of Responses¹ | Responses with Time Data² | Total Busy Hours | Average Busy Minutes per Response |
|------------------|---------------|-----------------|----------------------|---------------------------|------------------|-----------------------------------|
| RFD Admin        | 1414          | Chief Officer   | 5                    | 0                         | --               | --                                |
|                  | FPB           | Fire Prevention | 1                    | 0                         | --               | --                                |
|                  | P2            | Fire Prevention | 2                    | 2                         | 0.7              | 20.5                              |
|                  | P3            | Fire Prevention | 4                    | 4                         | 10.7             | 160.6                             |
|                  | P4            | Fire Prevention | 6                    | 6                         | 4.1              | 40.8                              |
|                  | P5            | Fire Prevention | 3                    | 3                         | 2.0              | 40.2                              |
|                  | P6            | Fire Prevention | 6                    | 6                         | 6.5              | 65.1                              |
|                  | Station Total |                 | 38                   | 24                        | 30.5             | 76.1                              |
| RFD Other        | OES364        | OES Engine      | 5                    | 2                         | 0.8              | 23.9                              |
|                  | Station Total |                 | 5                    | 2                         | 0.8              | 23.9                              |
| Department Total |               |                 | 20,847               | 20,546                    | 6,624.4          | 19.3                              |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

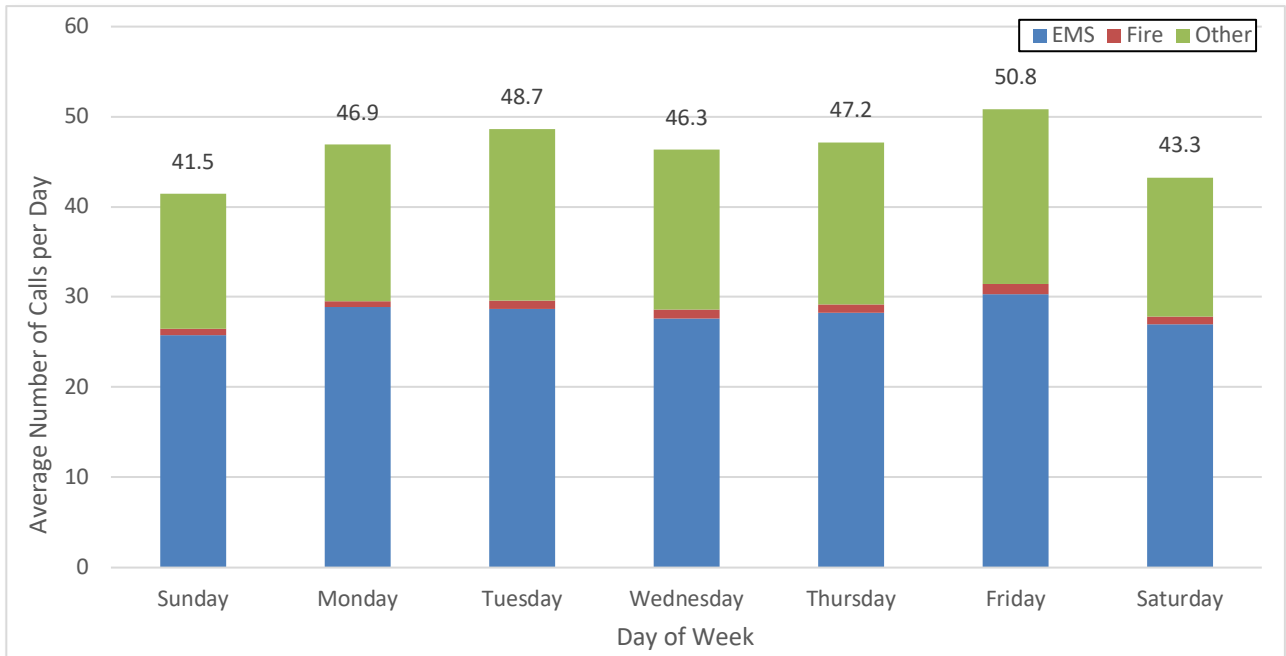
<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix of data report).

To provide a more global understanding of the community's demand for services, this temporal analysis included the average number of calls per hour. In other words, when referring to Figure 28 below, the busiest hour is at 1300 with 1,065 calls occurring during that hour in 2018. The average number of calls per hour is a daily average for those 1,065 calls if they were distributed equally across the year (i.e.,  $1,065/365 = 2.9$ ). Therefore, the busiest hour per day would be at 1300 with an average hourly call volume of 2.9 calls per day. The second busiest hour occurred at 1000 with 1,047 calls during that hour in 2018, with an average hourly call volume of 2.9 calls per day.

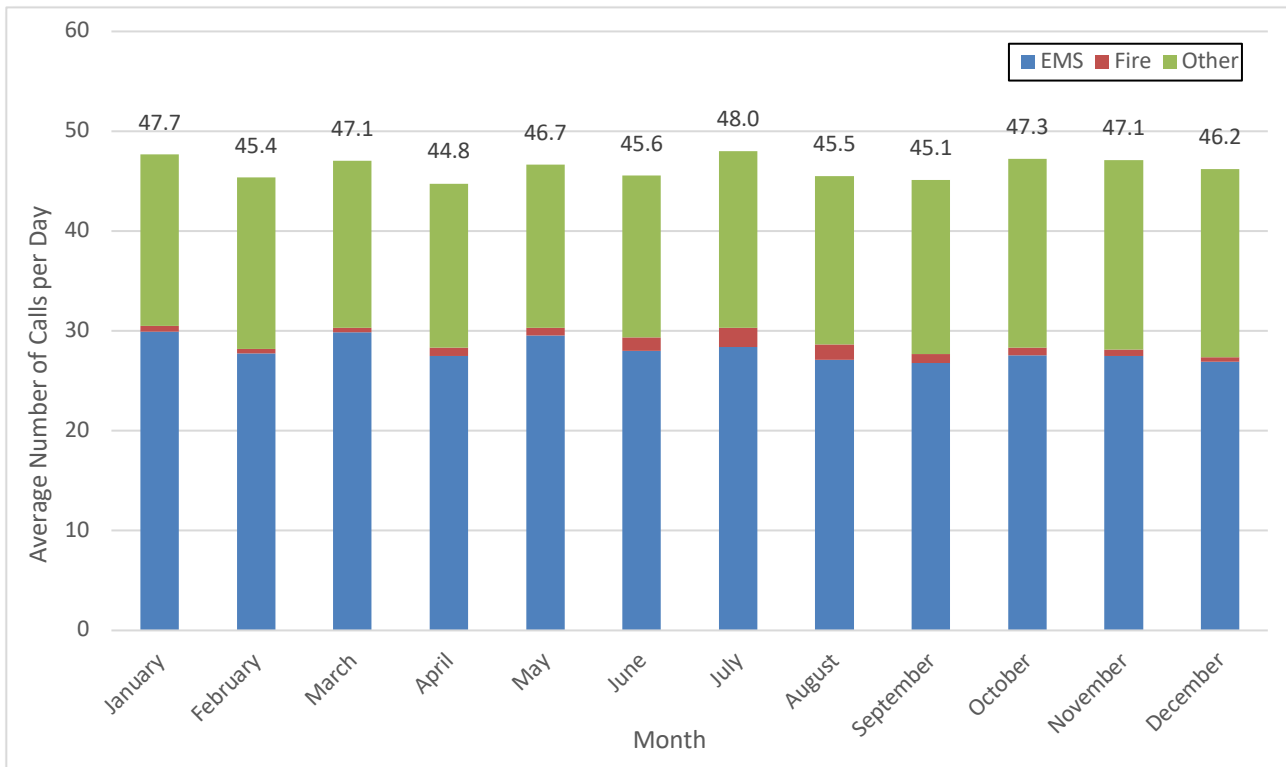
**Figure 37: Overall: Average Calls per Day by Hour of Day**



**Figure 38: Overall: Average Calls per Day by Day of Week**



**Figure 39: Overall: Average Calls per Day by Month**



## Fire Response Analysis

Table 49: Total Fire Related Calls by Nature of Call

| Nature of Call <sup>1</sup>                       | Number of Calls | Percentage of Total Fire Service Demands |
|---------------------------------------------------|-----------------|------------------------------------------|
| Brush, or brush and grass mixture fire            | 65              | 20.0                                     |
| Building fire                                     | 46              | 14.2                                     |
| Passenger vehicle fire                            | 40              | 12.3                                     |
| Trash or rubbish fire, contained                  | 36              | 11.1                                     |
| Cooking fire, confined to container               | 29              | 8.9                                      |
| Grass fire                                        | 24              | 7.4                                      |
| Outside rubbish, trash or waste fire              | 17              | 5.2                                      |
| Outside rubbish fire, other                       | 13              | 4.0                                      |
| Natural vegetation fire, other                    | 12              | 3.7                                      |
| Fire, other                                       | 9               | 2.8                                      |
| Special outside fire, other                       | 7               | 2.2                                      |
| Dumpster or other outside trash receptacle fire   | 6               | 1.8                                      |
| Fires in structures other than in a building      | 4               | 1.2                                      |
| Fire in portable building, fixed location         | 3               | 0.9                                      |
| Outside equipment fire                            | 3               | 0.9                                      |
| Cultivated vegetation, crop fire, other           | 2               | 0.6                                      |
| Fuel burner/boiler malfunction, fire confined     | 2               | 0.6                                      |
| Outside storage fire                              | 2               | 0.6                                      |
| Road freight or transport vehicle fire            | 2               | 0.6                                      |
| Chimney or flue fire, confined to chimney or flue | 1               | 0.3                                      |
| Mobile property (vehicle) fire, other             | 1               | 0.3                                      |
| Off-road vehicle or heavy equipment fire          | 1               | 0.3                                      |
| <b>Total</b>                                      | <b>325</b>      | <b>100.0</b>                             |

<sup>1</sup>Entries are presented verbatim from the data file.



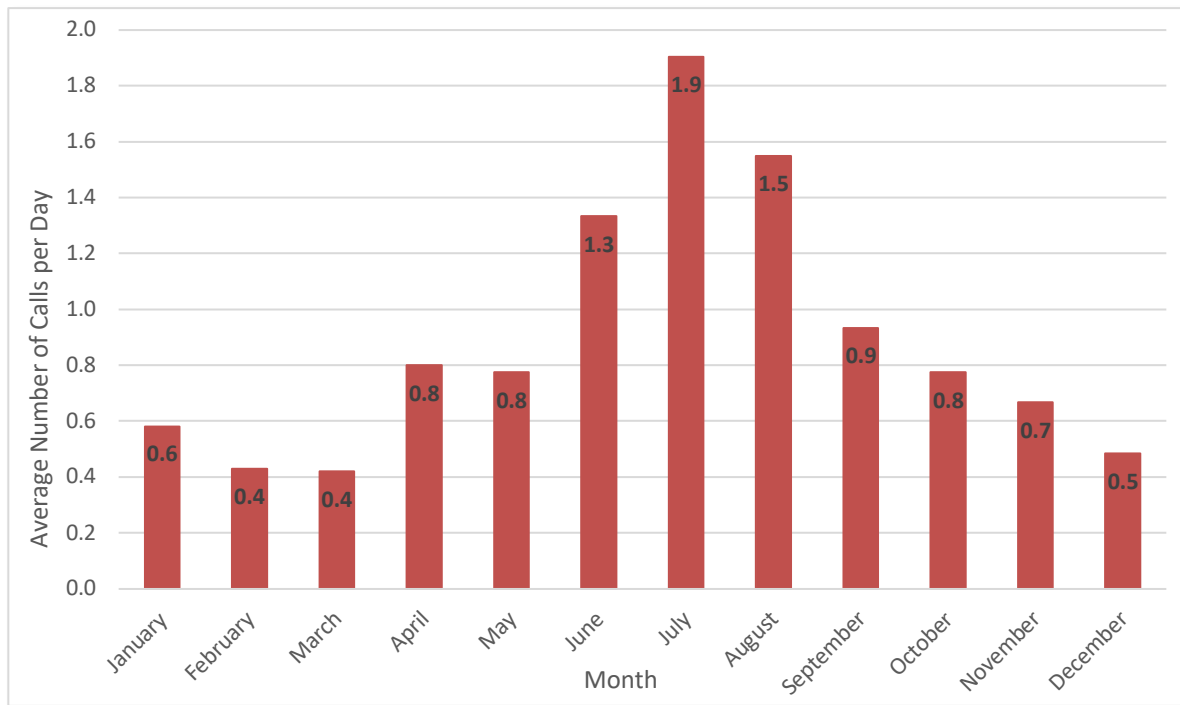
Fire related requests accounted for 1.9% of the total requests for service during 2018 and averaged 0.9 requests per day.

Temporal analyses were conducted to evaluate patterns in community demands for fire related services. These analyses examined the frequency of requests for service in 2018 by month, day of week, and hour of day. Results found that there was variability by month. The three months with the most fire related calls in descending order were: July (1.9 per day), August (1.5 per day), and June (1.3 per day). The three months with the fewest fire related calls in ascending order were: March (0.4 per day), February (0.4 per day), and December (0.5 per day).

**Table 50: Total Fire Related Calls and Average Calls per Day by Month**

| Month        | Number of Calls | Average Calls per Day | Call Percentage |
|--------------|-----------------|-----------------------|-----------------|
| January      | 18              | 0.6                   | 5.5             |
| February     | 12              | 0.4                   | 3.7             |
| March        | 13              | 0.4                   | 4.0             |
| April        | 24              | 0.8                   | 7.4             |
| May          | 24              | 0.8                   | 7.4             |
| June         | 40              | 1.3                   | 12.3            |
| July         | 59              | 1.9                   | 18.2            |
| August       | 48              | 1.5                   | 14.8            |
| September    | 28              | 0.9                   | 8.6             |
| October      | 24              | 0.8                   | 7.4             |
| November     | 20              | 0.7                   | 6.2             |
| December     | 15              | 0.5                   | 4.6             |
| <b>Total</b> | <b>325</b>      | <b>0.9</b>            | <b>100.0</b>    |

**Figure 40: Average Fire Related Calls per Day by Month**

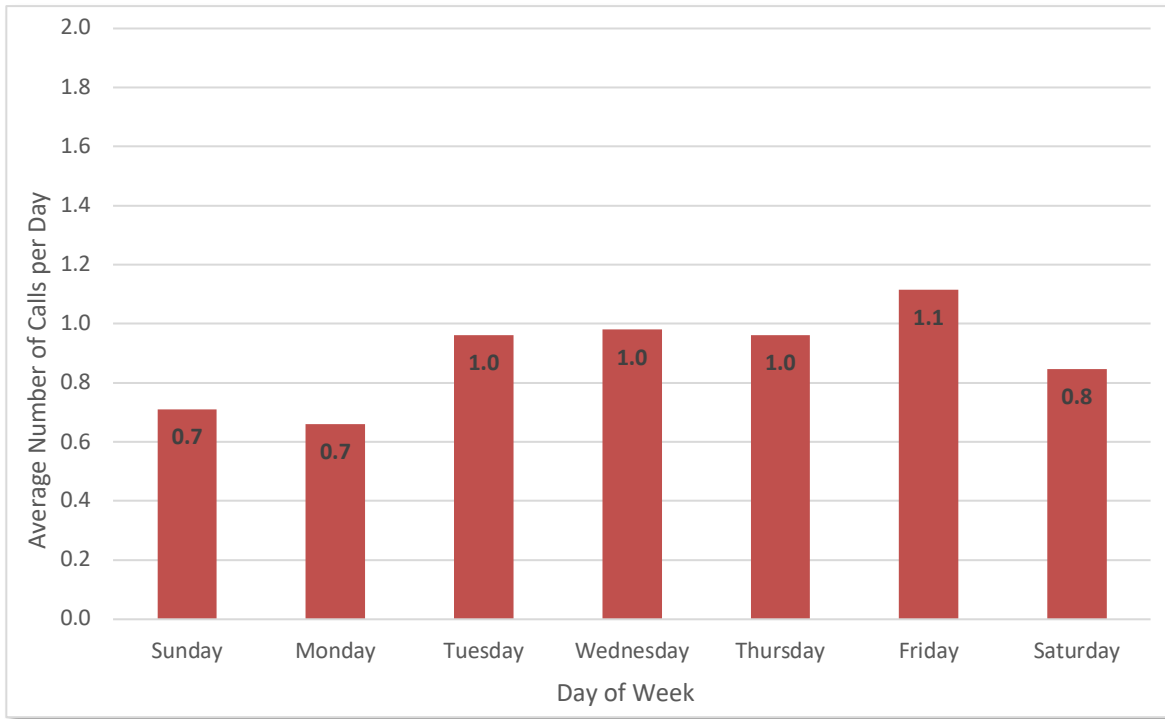


Similar analyses were conducted for fire related calls by day of week. The data revealed that there is only slight variability in the demand for services by day of week. The three days with the most fire related calls in descending order were: Friday (1.1 per day), Wednesday (1.0 per day), and Tuesday (1.0 per day). The three days with the fewest fire related calls in ascending order were: Monday (0.7 per day), Sunday (0.7 per day), and Saturday (0.8 per day).

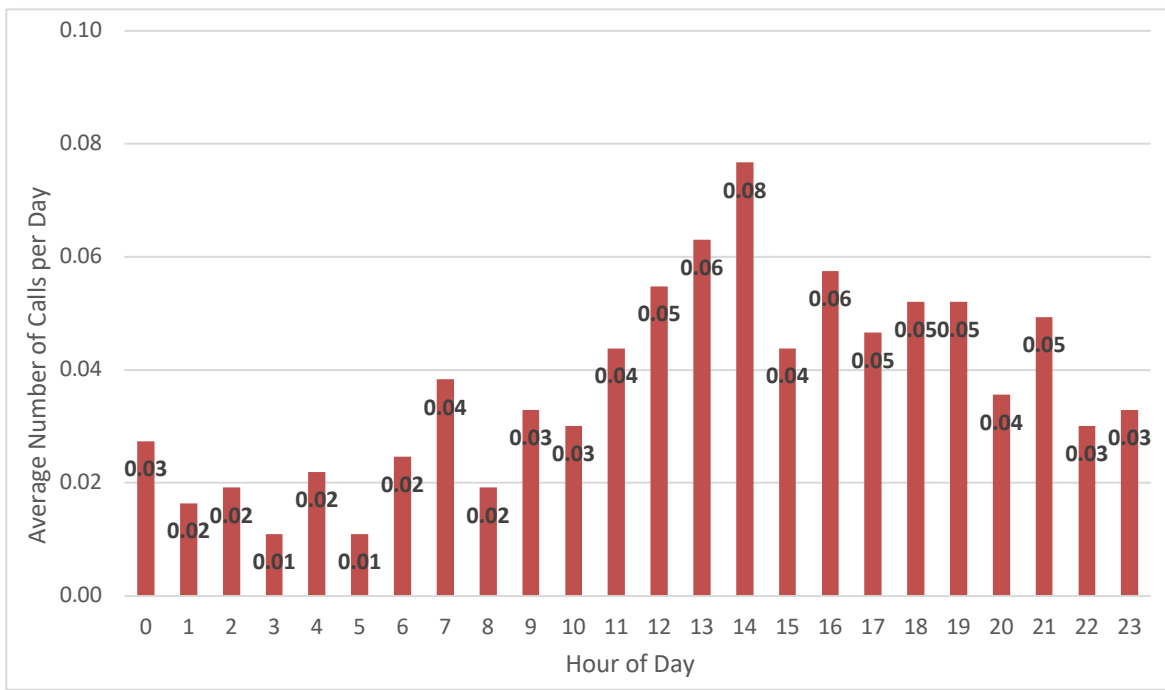
**Table 51: Total Fire Related Calls and Average Calls per Day by Day of Week**

| Day of Week  | Number of Calls | Average Calls per Day | Call Percentage |
|--------------|-----------------|-----------------------|-----------------|
| Sunday       | 37              | 0.7                   | 11.4            |
| Monday       | 35              | 0.7                   | 10.8            |
| Tuesday      | 50              | 1.0                   | 15.4            |
| Wednesday    | 51              | 1.0                   | 15.7            |
| Thursday     | 50              | 1.0                   | 15.4            |
| Friday       | 58              | 1.1                   | 17.8            |
| Saturday     | 44              | 0.8                   | 13.5            |
| <b>Total</b> | <b>325</b>      | <b>0.9</b>            | <b>100.0</b>    |

**Figure 41: Average Fire Related Calls per Day by Day of Week**



**Figure 42: Average Fire Related Calls per Day by Hour of Day**



**Table 52: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-Line Arriving Units for Moderate-Risk Fire Incidents**

| 90 <sup>th</sup> Percentile Time (Minutes) |                       |           |      |      |      |      |      |
|--------------------------------------------|-----------------------|-----------|------|------|------|------|------|
| Performance Metric                         | Arriving Unit         | 2014-2018 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time                              | 1 <sup>st</sup>       | 2.7       | 3.1  | 2.5  | 2.1  | 2.9  | 2.5  |
|                                            | 3 <sup>rd</sup> (ERF) | 5.5       | 6.9  | 6.0  | 6.7  | 2.7  | 4.1  |
| Turnout Time                               | 1 <sup>st</sup>       | 2.6       | 2.4  | 2.5  | 2.7  | 2.6  | 2.4  |
|                                            | 3 <sup>rd</sup> (ERF) | 3.5       | 3.3  | 3.6  | 3.3  | 3.7  | 4.6  |
| Travel Time                                | 1 <sup>st</sup>       | 6.7       | 7.2  | 5.8  | 7.8  | 6.5  | 6.0  |
|                                            | 3 <sup>rd</sup> (ERF) | 9.9       | 13.1 | 10.5 | 12.1 | 8.4  | 9.3  |
| Response Time                              | 1 <sup>st</sup>       | 9.9       | 10.5 | 9.1  | 10.7 | 10.0 | 9.7  |
|                                            | 3 <sup>rd</sup> (ERF) | 14.1      | 20.8 | 14.5 | 15.5 | 13.1 | 12.6 |
| Sample Size                                | 1 <sup>st</sup>       | 1,323     | 276  | 262  | 261  | 250  | 274  |
|                                            | 3 <sup>rd</sup> (ERF) | 309       | 51   | 66   | 69   | 52   | 71   |

**Table 53: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-Line Arriving Units for High-Risk Fire Incidents**

| 90 <sup>th</sup> Percentile Time (Minutes) |                       |           |      |      |      |      |      |
|--------------------------------------------|-----------------------|-----------|------|------|------|------|------|
| Performance Metric                         | Arriving Unit         | 2014-2018 | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time                              | 1 <sup>st</sup>       | 2.7       | 3.1  | 2.5  | 2.1  | 2.9  | 2.5  |
|                                            | 6 <sup>th</sup> (ERF) | 9.1       | 7.8  | 9.6  | 11.3 | 11.0 | 9.7  |
| Turnout Time                               | 1 <sup>st</sup>       | 2.6       | 2.4  | 2.5  | 2.7  | 2.6  | 2.4  |
|                                            | 6 <sup>th</sup> (ERF) | 5.5       | 4.9  | 7.5  | 8.9  | 4.0  | 8.7  |
| Travel Time                                | 1 <sup>st</sup>       | 6.7       | 7.2  | 5.8  | 7.8  | 6.5  | 6.0  |
|                                            | 6 <sup>th</sup> (ERF) | 15.7      | 17.4 | 23.2 | 15.9 | 15.3 | 17.3 |
| Response Time                              | 1 <sup>st</sup>       | 9.9       | 10.5 | 9.1  | 10.7 | 10.0 | 9.7  |
|                                            | 6 <sup>th</sup> (ERF) | 22.5      | 20.3 | 31.4 | 18.6 | 20.4 | 24.8 |
| Sample Size <sup>1</sup>                   | 1 <sup>st</sup>       | 1,323     | 276  | 262  | 261  | 250  | 274  |
|                                            | 6 <sup>th</sup> (ERF) | 117       | 18   | 28   | 17   | 20   | 34   |

RFD made a total of 1,111 responses to fire related calls in 2018. Total task time was 709.5 hours and the average busy minutes per response was 38.8 minutes. The three most utilized units based on busy hours were B1 (123.7 hours), E1 (71.9 hours), and T1 (69.1 hours).

**Table 54: Workload by Unit for Fire Related Calls**

| Station   | Unit          | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|-----------|---------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| Station 1 | B1            | Battalion Chief | 174                              | 174                                   | 123.7            | 42.6                              |
|           | E1            | Engine          | 124                              | 124                                   | 71.9             | 34.8                              |
|           | HZ1           | Hazmat          | 0                                | --                                    | --               | --                                |
|           | T1            | Truck           | 80                               | 80                                    | 69.1             | 51.9                              |
|           | Station Total |                 | 378                              | 378                                   | 264.7            | 42.0                              |
| Station 2 | E2            | Engine          | 92                               | 91                                    | 45.5             | 30.0                              |
|           | G2            | Grass           | 25                               | 25                                    | 27.0             | 64.9                              |
|           | Station Total |                 | 117                              | 116                                   | 72.5             | 37.5                              |
| Station 3 | E3            | Engine          | 89                               | 87                                    | 47.6             | 32.8                              |
|           | Station Total |                 | 89                               | 87                                    | 47.6             | 32.8                              |
| Station 4 | E4            | Engine          | 59                               | 58                                    | 29.1             | 30.1                              |
|           | G4            | Grass           | 25                               | 24                                    | 19.7             | 49.3                              |
|           | Station Total |                 | 84                               | 82                                    | 48.9             | 35.8                              |
| Station 5 | BR5           | Brush Truck     | 20                               | 20                                    | 27.6             | 82.8                              |
|           | E5            | Engine          | 63                               | 61                                    | 28.8             | 28.4                              |
|           | E5B           | Engine          | 0                                | --                                    | --               | --                                |
|           | E8            | Engine          | 0                                | --                                    | --               | --                                |
|           | Station Total |                 | 83                               | 81                                    | 56.4             | 41.8                              |
| Station 6 | BR6           | Brush Truck     | 29                               | 29                                    | 27.7             | 57.3                              |
|           | E6            | Engine          | 87                               | 87                                    | 37.6             | 26.0                              |
|           | E6B           | Engine          | 0                                | --                                    | --               | --                                |
|           | Station Total |                 | 116                              | 116                                   | 65.3             | 33.8                              |
| Station 7 | E7            | Engine          | 96                               | 96                                    | 46.7             | 29.2                              |
|           | R7            | Rescue          | 1                                | 1                                     | 1.3              | 80.0                              |
|           | T7            | Truck           | 83                               | 82                                    | 46.9             | 34.3                              |
|           | T7B           | Truck           | 0                                | --                                    | --               | --                                |
|           | Station Total |                 | 180                              | 179                                   | 95.0             | 31.8                              |
| Station 9 | BR9           | Brush Truck     | 17                               | 16                                    | 18.1             | 67.8                              |
|           | E9            | Engine          | 38                               | 38                                    | 25.1             | 39.6                              |
|           | Station Total |                 | 55                               | 54                                    | 43.2             | 48.0                              |
| RFD Admin | 1401          | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1404          | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1405          | Chief Officer   | 1                                | 1                                     | 0.5              | 28.3                              |
|           | 1410          | Chief Officer   | 4                                | 1                                     | 5.8              | 345.4                             |
|           | 1411          | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1413          | Chief Officer   | 0                                | --                                    | --               | --                                |

| Station          | Unit          | Unit Type       | Number of Responses¹ | Responses with Time Data² | Total Busy Hours | Average Busy Minutes per Response |
|------------------|---------------|-----------------|----------------------|---------------------------|------------------|-----------------------------------|
| RFD Admin        | 1414          | Chief Officer   | 1                    | 0                         | --               | --                                |
|                  | FPB           | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | P2            | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | P3            | Fire Prevention | 2                    | 2                         | 9.2              | 276.5                             |
|                  | P4            | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | P5            | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | P6            | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | Station Total |                 | 8                    | 4                         | 15.4             | 231.6                             |
| RFD Other        | OES364        | OES Engine      | 1                    | 1                         | 0.5              | 28.4                              |
|                  | Station Total |                 | 1                    | 1                         | 0.5              | 28.4                              |
| Department Total |               |                 | 1,111                | 1,098                     | 709.5            | 38.8                              |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix of data report).

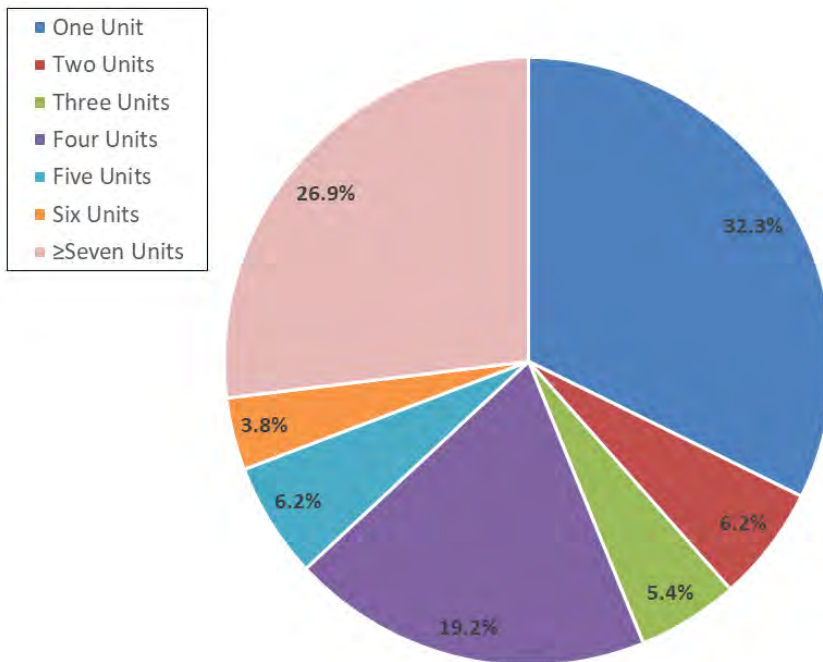
An analysis of RFD’S 2018 response by unit to fire related calls was also conducted. Overall, 28.9% of fire related calls were responded to by one unit, and 16.0% were responded to by two units. However, for building fire calls, 61.5% of calls (80/130) were responded to by three or more units. The maximum number of units responding to a building fire call was 10. RFD was busy on building fire calls for 357.7 hours during 2018, making 511 responses to 130 building fire calls and averaging 3.9 responses per call. Average busy minutes per response was 42.4 minutes.

Wildland fire calls had three or more RFD units responding 68.9% of the time (71/103).

**Table 55: Number of Responding Units by Fire Related Call Type**

| Call Category                   | Number of Responding Units |             |             |             |            |            |             | Total        |
|---------------------------------|----------------------------|-------------|-------------|-------------|------------|------------|-------------|--------------|
|                                 | 1                          | 2           | 3           | 4           | 5          | 6          | 7 or more   |              |
| Fire (Not Building or Wildland) | 29                         | 35          | 4           | 11          | 6          | 0          | 7           | 92           |
| Building Fire                   | 42                         | 8           | 7           | 25          | 8          | 5          | 35          | 130          |
| Wildland Fire                   | 23                         | 9           | 22          | 23          | 8          | 8          | 10          | 103          |
| <b>Total</b>                    | <b>94</b>                  | <b>52</b>   | <b>33</b>   | <b>59</b>   | <b>22</b>  | <b>13</b>  | <b>52</b>   | <b>325</b>   |
| <b>Percentage</b>               | <b>28.9</b>                | <b>16.0</b> | <b>10.2</b> | <b>18.2</b> | <b>6.8</b> | <b>4.0</b> | <b>16.0</b> | <b>100.0</b> |

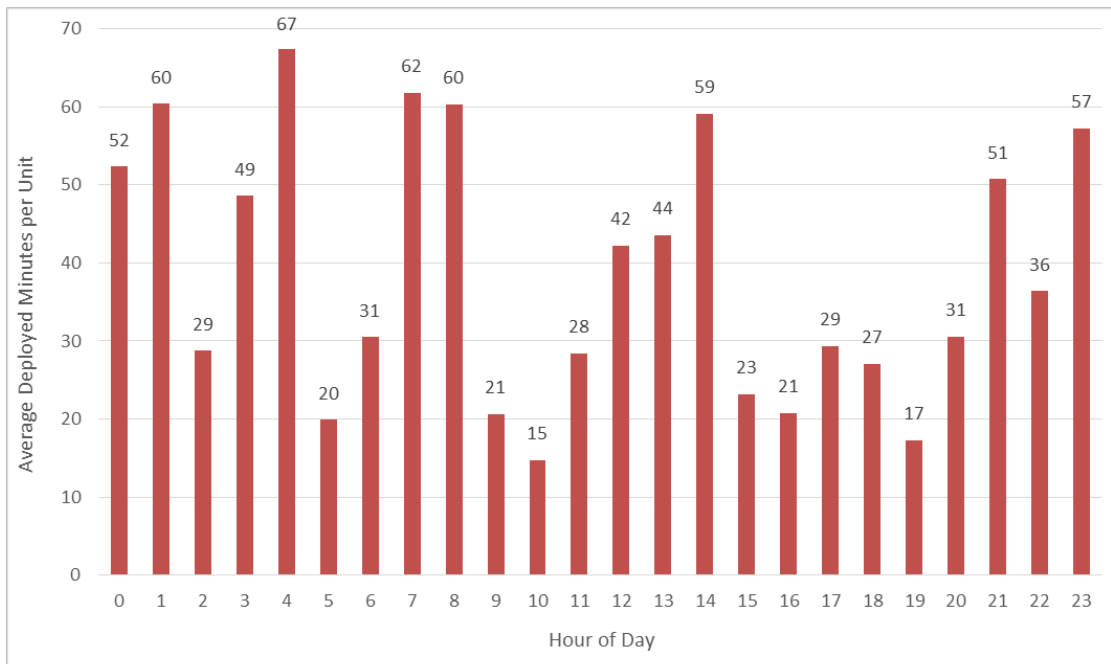
**Figure 43" Percentage of Building Fire Calls by Number of Responding Units**



**Table 56: Number of Responding Units for Building Fire Calls**

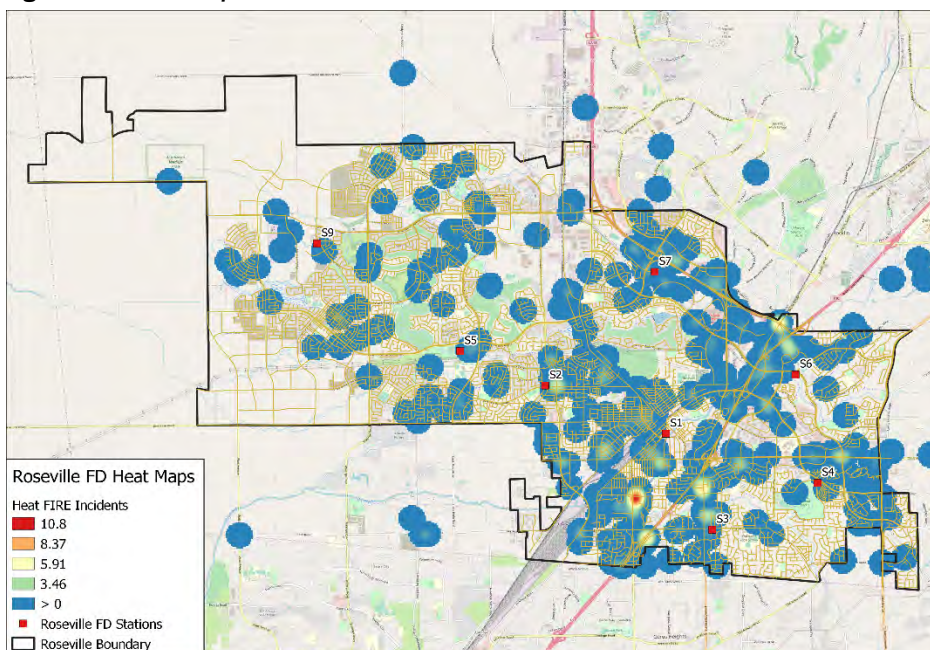
| Number of Responding Units | Number of Calls |
|----------------------------|-----------------|
| 1                          | 42              |
| 2                          | 8               |
| 3                          | 7               |
| 4                          | 25              |
| 5                          | 8               |
| 6                          | 5               |
| 7                          | 23              |
| 8                          | 8               |
| 9                          | 3               |
| 10                         | 1               |
| <b>Total</b>               | <b>130</b>      |

**Figure 44: Average Deployed Minutes per Unit by Hour of Day for Fire Related Responses**



Heat maps were created to identify the concentration of the historic demand for services for fire. The blue areas have the lowest concentration of demand and the dark red areas have the highest concentration of demand.

**Figure 45: Heat Map for Fire Related Incidents**





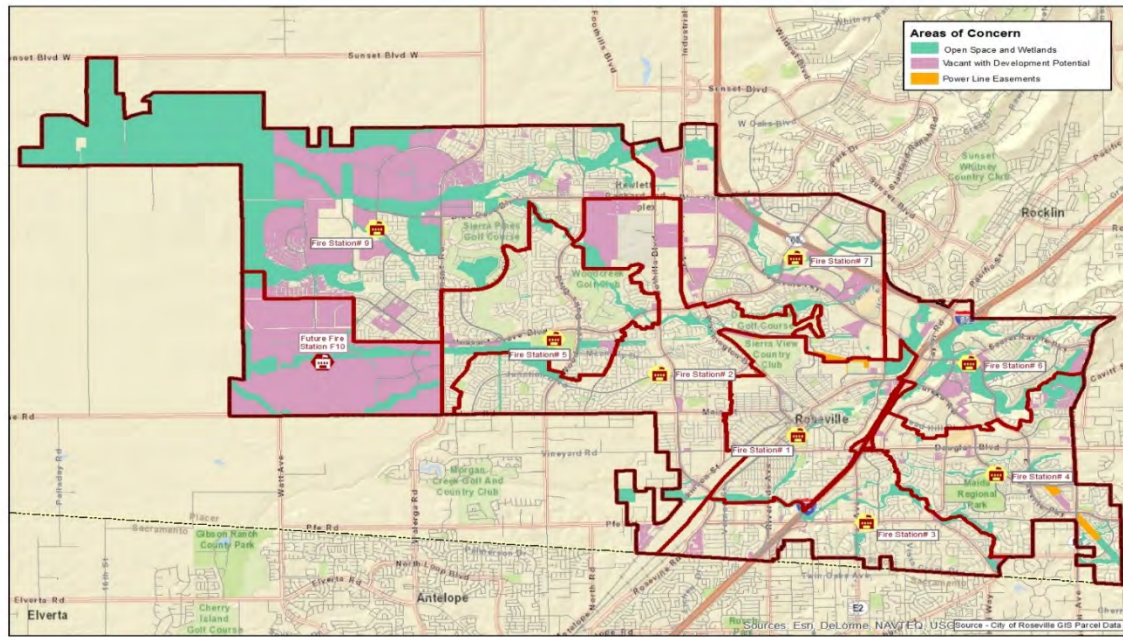
**Table 57: Wildland Incident Responses by Unit and Reporting Year**

| Reporting Year | Unit     |           |           |           |           |           |          | Total      |
|----------------|----------|-----------|-----------|-----------|-----------|-----------|----------|------------|
|                | BR2      | BR5       | BR6       | BR9       | G2        | G4        | G8       |            |
| 2014           | 0        | 26        | 21        | 15        | 19        | 10        | 0        | 91         |
| 2015           | 0        | 12        | 11        | 7         | 11        | 7         | 0        | 48         |
| 2016           | 0        | 26        | 13        | 15        | 19        | 11        | 0        | 84         |
| 2017           | 0        | 11        | 12        | 8         | 12        | 4         | 0        | 47         |
| 2018           | 0        | 18        | 27        | 16        | 24        | 22        | 0        | 107        |
| <b>Total</b>   | <b>0</b> | <b>93</b> | <b>84</b> | <b>61</b> | <b>85</b> | <b>54</b> | <b>0</b> | <b>377</b> |

**Table 58: Wildland Incident Arrivals by Unit and Reporting Year**

| Reporting Year | Unit     |           |           |           |           |           |          | Total      |
|----------------|----------|-----------|-----------|-----------|-----------|-----------|----------|------------|
|                | BR2      | BR5       | BR6       | BR9       | G2        | G4        | G8       |            |
| 2014           | 0        | 17        | 16        | 10        | 15        | 9         | 0        | 67         |
| 2015           | 0        | 10        | 6         | 5         | 8         | 6         | 0        | 35         |
| 2016           | 0        | 22        | 10        | 14        | 17        | 10        | 0        | 73         |
| 2017           | 0        | 11        | 7         | 8         | 10        | 4         | 0        | 40         |
| 2018           | 0        | 17        | 20        | 9         | 14        | 9         | 0        | 69         |
| <b>Total</b>   | <b>0</b> | <b>77</b> | <b>59</b> | <b>46</b> | <b>64</b> | <b>38</b> | <b>0</b> | <b>284</b> |

**Figure 46: Wildland Fires Areas of Concern**



## EMS Response Analysis

### EMS Benchmark

To treat **low- and moderate-risk** medical patients, the goal for total response time for arrival of the first due unit, staffed with three personnel (including a minimum of one Paramedic) shall be **7 minutes**, 90% of the time from receipt of the 9-1-1 call.

### EMS Calls Percentage of Total Call Volume

EMS related requests accounted for 60.5% of the total requests for service during 2018 and averaged 28.1 requests per day. EMS related incidents are an aggregated category of the various final incident types available in the data file. The table provides details for these EMS related incidents by nature of the call; nature of the call was obtained using a data dictionary provided by RFD that permitted the mapping of text definitions to the numeric NFIRS codes (i.e., variable “INCIDENTTYPE”) presented in the RMS data file.

**Table 59: Total EMS Related Calls by Nature of Call**

| Nature of Call <sup>1</sup>                      | Number of Calls | Percentage of Total EMS Demands |
|--------------------------------------------------|-----------------|---------------------------------|
| EMS call, excluding vehicle accident with injury | 10,065          | 98.2                            |
| Medical assist, assist EMS crew                  | 180             | 1.8                             |
| Emergency medical service, other                 | 2               | 0.0                             |
| <b>Total</b>                                     | <b>10,247</b>   | <b>100.0</b>                    |

<sup>1</sup>Entries are presented verbatim from the data file.

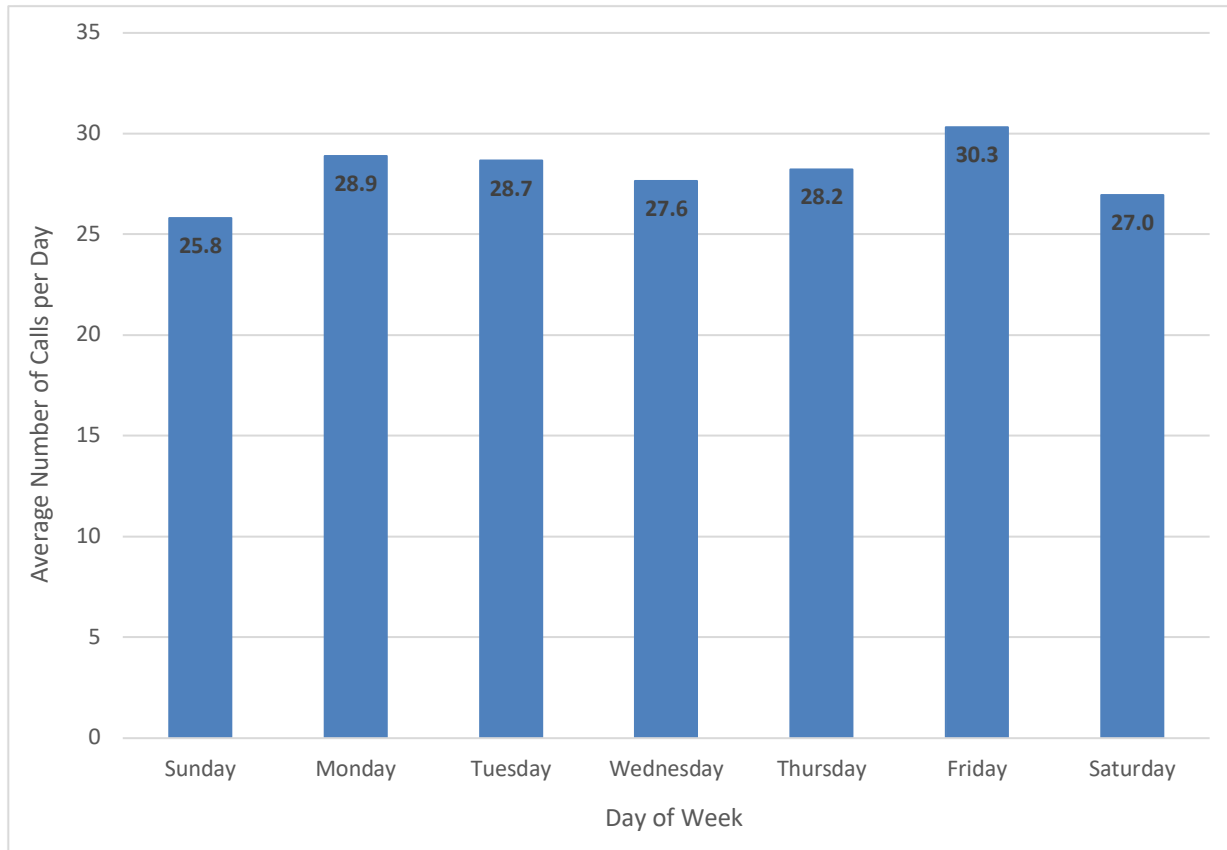
Temporal analyses were conducted to evaluate patterns in community demands for EMS related services. These analyses examined the frequency of requests for service in 2018 by month, day of week, and hour of day. Results found that there was some variability by month. The three months with the most EMS related calls in descending order were: January (29.9 per day), March (29.9 per day), and May (29.5 per day). The three months with the fewest EMS related calls in ascending order were: September (26.8 per day), December (26.9 per day), and August (27.1 per day).

Similar analyses were conducted for EMS related calls by day of week. The data revealed that there was some variability in demand for services by day of week. Friday had the highest frequency of requests for EMS related services, averaging 30.3 calls per day and accounting for 15.4% of all EMS related calls. Sunday had the lowest frequency of requests for EMS related services, averaging 25.8 calls per day and accounting for 13.1% of all EMS related calls.

**Table 60: Total EMS Related Calls and Average Calls per Day by Day of Week**

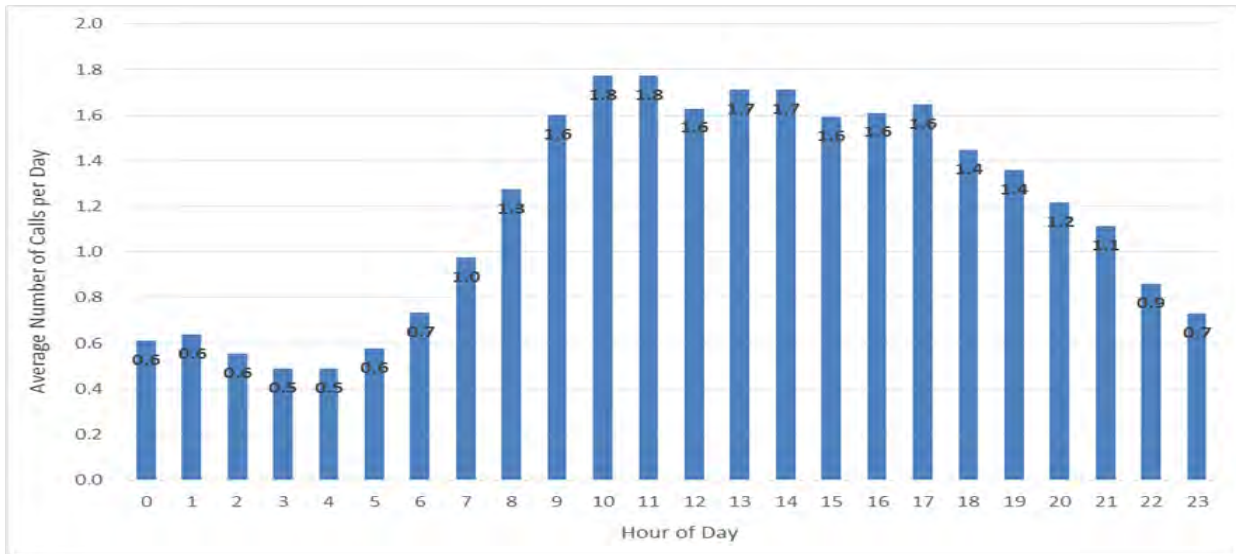
| Day of Week  | Number of Calls | Average Calls per Day | Call Percentage |
|--------------|-----------------|-----------------------|-----------------|
| Sunday       | 1,342           | 25.8                  | 13.1            |
| Monday       | 1,531           | 28.9                  | 14.9            |
| Tuesday      | 1,490           | 28.7                  | 14.5            |
| Wednesday    | 1,437           | 27.6                  | 14.0            |
| Thursday     | 1,468           | 28.2                  | 14.3            |
| Friday       | 1,577           | 30.3                  | 15.4            |
| Saturday     | 1,402           | 27.0                  | 13.7            |
| <b>Total</b> | <b>10,247</b>   | <b>28.1</b>           | <b>100.0</b>    |

**Figure 47: Average EMS Related Calls per Day by Day of Week**

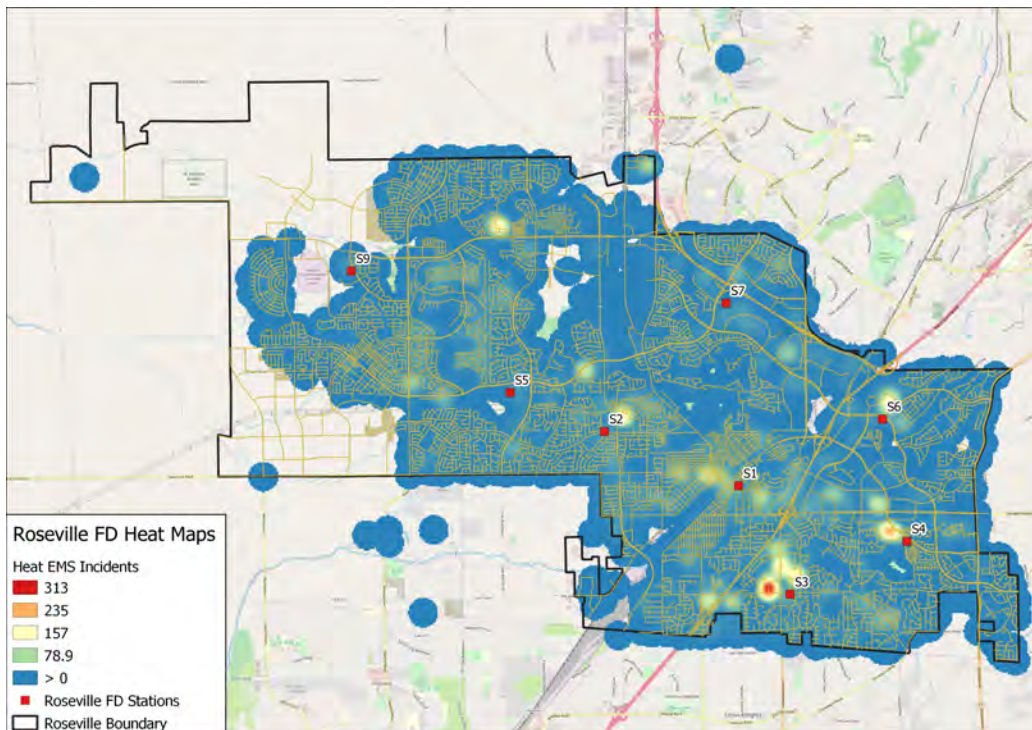


RFD made a total of 11,247 responses to EMS related calls in 2018. Total busy time was 3,671.3 hours, and the average busy minutes per response was 20.1 minutes. The three most utilized units based on total busy hours were E3 (664 hours), E5 (486 hours), and E9 (441 hours).

**Figure 48: Average EMS Related Calls per Day by Hour of Day**



**Figure 49: Heat Map for EMS Related Incidents**



**Table 61: Workload by Unit for EMS Related Calls**

| Station   | Unit                 | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|-----------|----------------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| Station 1 | B1                   | Battalion Chief | 21                               | 19                                    | 7.8              | 24.6                              |
|           | E1                   | Engine          | 1,496                            | 1,460                                 | 381.4            | 15.7                              |
|           | HZ1                  | Hazmat          | 0                                | --                                    | --               | --                                |
|           | T1                   | Truck           | 572                              | 561                                   | 147.3            | 15.8                              |
|           | <b>Station Total</b> |                 | <b>2,089</b>                     | <b>2,040</b>                          | <b>536.5</b>     | <b>15.8</b>                       |
| Station 2 | E2                   | Engine          | 1,243                            | 1,234                                 | 427.4            | 20.8                              |
|           | G2                   | Grass           | 2                                | 2                                     | 1.4              | 42.1                              |
|           | <b>Station Total</b> |                 | <b>1,245</b>                     | <b>1,236</b>                          | <b>428.8</b>     | <b>20.8</b>                       |
| Station 3 | E3                   | Engine          | 1,925                            | 1,918                                 | 664.0            | 20.8                              |
|           | <b>Station Total</b> |                 | <b>1,925</b>                     | <b>1,918</b>                          | <b>664.0</b>     | <b>20.8</b>                       |
| Station 4 | E4                   | Engine          | 1,207                            | 1,199                                 | 392.2            | 19.6                              |
|           | G4                   | Grass           | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>1,207</b>                     | <b>1,199</b>                          | <b>392.2</b>     | <b>19.6</b>                       |
| Station 5 | BR5                  | Brush Truck     | 0                                | --                                    | --               | --                                |
|           | E5                   | Engine          | 1,317                            | 1,304                                 | 486.0            | 22.4                              |
|           | E5B                  | Engine          | 0                                | --                                    | --               | --                                |
|           | E8                   | Engine          | 10                               | 10                                    | 2.8              | 17.1                              |
|           | <b>Station Total</b> |                 | <b>1,327</b>                     | <b>1,314</b>                          | <b>488.9</b>     | <b>22.3</b>                       |
| Station 6 | BR6                  | Brush Truck     | 1                                | 1                                     | 0.4              | 25.3                              |
|           | E6                   | Engine          | 914                              | 900                                   | 281.6            | 18.8                              |
|           | E6B                  | Engine          | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>915</b>                       | <b>901</b>                            | <b>282.1</b>     | <b>18.8</b>                       |
| Station 7 | E7                   | Engine          | 980                              | 970                                   | 354.9            | 22.0                              |
|           | R7                   | Rescue          | 0                                | --                                    | --               | --                                |
|           | T7                   | Truck           | 305                              | 296                                   | 82.7             | 16.8                              |
|           | T7B                  | Truck           | 0                                | --                                    | --               | --                                |
|           | <b>Station Total</b> |                 | <b>1,285</b>                     | <b>1,266</b>                          | <b>437.6</b>     | <b>20.7</b>                       |
| Station 9 | BR9                  | Brush Truck     | 0                                | --                                    | --               | --                                |
|           | E9                   | Engine          | 1,107                            | 1,101                                 | 441.1            | 24.0                              |
|           | <b>Station Total</b> |                 | <b>1,107</b>                     | <b>1,101</b>                          | <b>441.1</b>     | <b>24.0</b>                       |
| RFD Admin | 1401                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1404                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1405                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1410                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1411                 | Chief Officer   | 0                                | --                                    | --               | --                                |
|           | 1413                 | Chief Officer   | 0                                | --                                    | --               | --                                |

| Station          | Unit          | Unit Type       | Number of Responses¹ | Responses with Time Data² | Total Busy Hours | Average Busy Minutes per Response |
|------------------|---------------|-----------------|----------------------|---------------------------|------------------|-----------------------------------|
| RFD Admin        | 1414          | Chief Officer   | 0                    | --                        | --               | --                                |
|                  | FPB           | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | P2            | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | P3            | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | P4            | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | P5            | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | P6            | Fire Prevention | 0                    | --                        | --               | --                                |
|                  | Station Total |                 | 0                    | --                        | --               | --                                |
| RFD Other        | OES364        | OES Engine      | 1                    | 1                         | 0.3              | 19.5                              |
|                  | Station Total |                 | 1                    | 1                         | 0.3              | 19.5                              |
| Department Total |               |                 | 11,101               | 10,976                    | 3,671.3          | 20.1                              |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

RFD dispatched multiple units to 8.1% of EMS related calls (833/10,244). On average, 1.1 units were dispatched per EMS related call (11,101/10,244).

**Table 62: Number of Responding Units by EMS Related Call Type**

| Call Category | Number of Responding Units |            |            |            | Total        |
|---------------|----------------------------|------------|------------|------------|--------------|
|               | 1                          | 2          | 3          | 4          |              |
| EMS           | 9,411                      | 810        | 22         | 1          | 10,244       |
| Total         | 9,411                      | 810        | 22         | 1          | 10,244       |
| Percentage    | <b>91.9</b>                | <b>7.9</b> | <b>0.2</b> | <b>0.0</b> | <b>100.0</b> |



## Hazardous Materials Call Analysis

### Hazardous Materials Benchmark

For 90% of all **low-risk** Hazardous Materials responses, the total response time for arrival of the first due unit, staffed with three personnel (one Captain, one Engineer, and one FF/P) shall be **8 minutes**.

### Hazardous Materials Baseline Performance Measure

**Table 63: Baseline Average Performance of Primary Front-Line Arriving Units for Hazardous Conditions (No Fire) Incidents – Low Risk**

| Performance Metric       | Arriving Unit   | Average Time (Minutes) |      |      |      |      |      |
|--------------------------|-----------------|------------------------|------|------|------|------|------|
|                          |                 | 2014-2018              | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup> | 1.9                    | 1.5  | 1.7  | 2.1  | 1.8  | 2.2  |
| Turnout Time             | 1 <sup>st</sup> | 1.6                    | 1.4  | 1.5  | 1.6  | 1.6  | 1.7  |
| Travel Time              | 1 <sup>st</sup> | 3.8                    | 3.9  | 4.0  | 3.9  | 3.8  | 3.6  |
| Response Time            | 1 <sup>st</sup> | 7.0                    | 6.6  | 7.1  | 7.5  | 7.0  | 7.0  |
| Sample Size <sup>1</sup> | 1 <sup>st</sup> | 691                    | 119  | 122  | 126  | 162  | 162  |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 64: Baseline Average Performance of Primary Front-Line Arriving Units for Hazardous Conditions (No Fire) Incidents – Moderate and High Risk**

| Performance Metric       | Arriving Unit         | Average Time (Minutes) |      |      |      |      |      |
|--------------------------|-----------------------|------------------------|------|------|------|------|------|
|                          |                       | 2014-2018              | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup>       | 1.9                    | 1.5  | 1.7  | 2.1  | 1.8  | 2.2  |
|                          | 3 <sup>rd</sup> (ERF) | 2.3                    | 2.2  | 2.0  | 2.3  | 2.6  | 2.3  |
| Turnout Time             | 1 <sup>st</sup>       | 1.6                    | 1.4  | 1.5  | 1.6  | 1.6  | 1.7  |
|                          | 3 <sup>rd</sup> (ERF) | 2.2                    | 2.7  | 2.3  | 2.8  | 2.1  | 1.7  |
| Travel Time              | 1 <sup>st</sup>       | 3.8                    | 3.9  | 4.0  | 3.9  | 3.8  | 3.6  |
|                          | 3 <sup>rd</sup> (ERF) | 6.2                    | 5.6  | 6.8  | 5.5  | 5.7  | 7.0  |
| Response Time            | 1 <sup>st</sup>       | 7.0                    | 6.6  | 7.1  | 7.5  | 7.0  | 7.0  |
|                          | 3 <sup>rd</sup> (ERF) | 10.0                   | 9.1  | 11.1 | 10.2 | 9.9  | 9.6  |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 691                    | 119  | 122  | 126  | 162  | 162  |
|                          | 3 <sup>rd</sup> (ERF) | 152                    | 24   | 29   | 19   | 45   | 35   |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

The response goal for hazardous material incidents is recorded as the first arriving engine or truck on these specific call types. The vast majority of hazardous material calls are handled with a single company. If a medium- or high-level incident occurs, additional personnel and apparatus are requested. Hazardous Material 1 is cross staffed with Engine 1 and Truck 1, so the arrival of Hazardous Material 1 may be delayed, if one or both of the crews are out of the station at the time of dispatch.



## Technical Rescue Call Analysis

### Technical Rescue Benchmark

For 90% of all **low-risk** Rescue responses, the total response time for arrival of the first due unit, staffed with three personnel (one Captain, one Engineer, and one FF/P) shall be **8 minutes**.

### Technical Rescue Baseline Performance

**Table 65: Baseline Average Performance of Primary Front-Line Arriving Units for Rescue Incidents – Low Risk**  
Average Time (Minutes)

| Performance Metric       | Arriving Unit   | 2014-2018 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------------------|-----------------|-----------|------|------|------|------|------|
| Dispatch Time            | 1 <sup>st</sup> | 1.8       | 1.2  | 1.8  | 2.0  | 2.3  | 1.9  |
| Turnout Time             | 1 <sup>st</sup> | 1.4       | 1.3  | 1.3  | 1.5  | 1.5  | 1.5  |
| Travel Time              | 1 <sup>st</sup> | 3.4       | 3.4  | 3.4  | 3.4  | 3.5  | 3.4  |
| Response Time            | 1 <sup>st</sup> | 6.5       | 5.7  | 6.3  | 6.7  | 7.2  | 6.7  |
| Sample Size <sup>1</sup> | 1 <sup>st</sup> | 4,057     | 734  | 765  | 865  | 830  | 863  |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 66: Baseline Average Performance of Primary Front-Line Arriving Units for Rescue Incidents – Moderate and High Risk**  
Average Time (Minutes)

| Performance Metric       | Arriving Unit         | 2014-2018 | 2014 | 2015 | 2016 | 2017 | 2018 |
|--------------------------|-----------------------|-----------|------|------|------|------|------|
| Dispatch Time            | 1 <sup>st</sup>       | 1.8       | 1.2  | 1.8  | 2.0  | 2.3  | 1.9  |
|                          | 3 <sup>rd</sup> (ERF) | 2.0       | 1.1  | 2.8  | 1.5  | 2.1  | 2.2  |
| Turnout Time             | 1 <sup>st</sup>       | 1.4       | 1.3  | 1.3  | 1.5  | 1.5  | 1.5  |
|                          | 3 <sup>rd</sup> (ERF) | 1.8       | 1.9  | 1.6  | 1.9  | 2.0  | 1.9  |
| Travel Time              | 1 <sup>st</sup>       | 3.4       | 3.4  | 3.4  | 3.4  | 3.5  | 3.4  |
|                          | 3 <sup>rd</sup> (ERF) | 6.9       | 5.2  | 6.1  | 7.9  | 6.1  | 9.2  |
| Response Time            | 1 <sup>st</sup>       | 6.5       | 5.7  | 6.3  | 6.7  | 7.2  | 6.7  |
|                          | 3 <sup>rd</sup> (ERF) | 10.9      | 7.7  | 12.1 | 11.5 | 9.9  | 13.1 |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 4,057     | 734  | 765  | 865  | 830  | 863  |
|                          | 3 <sup>rd</sup> (ERF) | 136       | 23   | 34   | 21   | 32   | 26   |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

## SECTION 7: CONCENTRATION OF RESOURCES – ERF

### Effective Response Force

The capability of an ERF to assemble in a timely manner with the appropriate personnel, apparatus, and equipment is vital to the success of a significant building fire event. Therefore, it is important to measure the capabilities of assembling an ERF. In most fire departments, the distribution model performs satisfactorily, but it is not uncommon to be challenged to assemble an ERF in the recommended timeframes. Several factors affect the capabilities to assemble an ERF including number of fire stations, number of units, and number of personnel on each unit. Each of these policy decisions should be made in relation to a community's specific risks and the willingness to assume risk.

Concentration refers to the spacing of multiple resources in close proximity in order to assemble an initial ERF, sometimes referred to as first alarm assignment within prescribed timeframes. An initial ERF is one that has been deemed capable of stopping the escalation of a fire emergency, stabilizing a medical scene, affecting a rescue, and successfully mitigating an incident. Analysis of unit concentration must take into account the substantial reliance of all of the region's fire and medical service organizations on mutual and automatic aid. RFD has determined that 11 firefighters are sufficient to make our ERF for moderate-risk fires unless it is a confirmed working structure fire. On any working building fire, the Department response is four fire engines, two ladder trucks, and one Battalion Chief for a total of 21 personnel.

### ***Response Goal Statement #2: Effective Response Force of 11 Personnel for Moderate-Risk Fires***

For 90% of all moderate-risk structure fires, the total response time for arrival of the ERF staffed with 14 firefighters and officers, shall be 11 minutes and 30 seconds. The ERF shall be able to: establish command, appoint a site safety officer, provide an uninterrupted water supply, advance an attack line and backup line for fire control, comply with the Occupational Safety and Health Administration (OSHA) requirements for two-in and two-out, complete forcible entry, search and rescue at-risk victims, ventilate the structure, control utilities, and perform salvage and overhaul.

The ERF for high- and special-risk structure fires shall be capable of placing elevated streams into service from aerial ladders. These operations shall be done in accordance with Department policy while providing for the safety of responders and the general public. There is not a calculated response time for high- and special-risk structure fires due to infrequent calls of this severity.

## Effective Response Force Mapping

The following analyses evaluated an ERF of 16 personnel. Under the current configuration of eight stations, the Department can cover nearly 22% of the jurisdiction and assemble 16 personnel within 8 minutes.

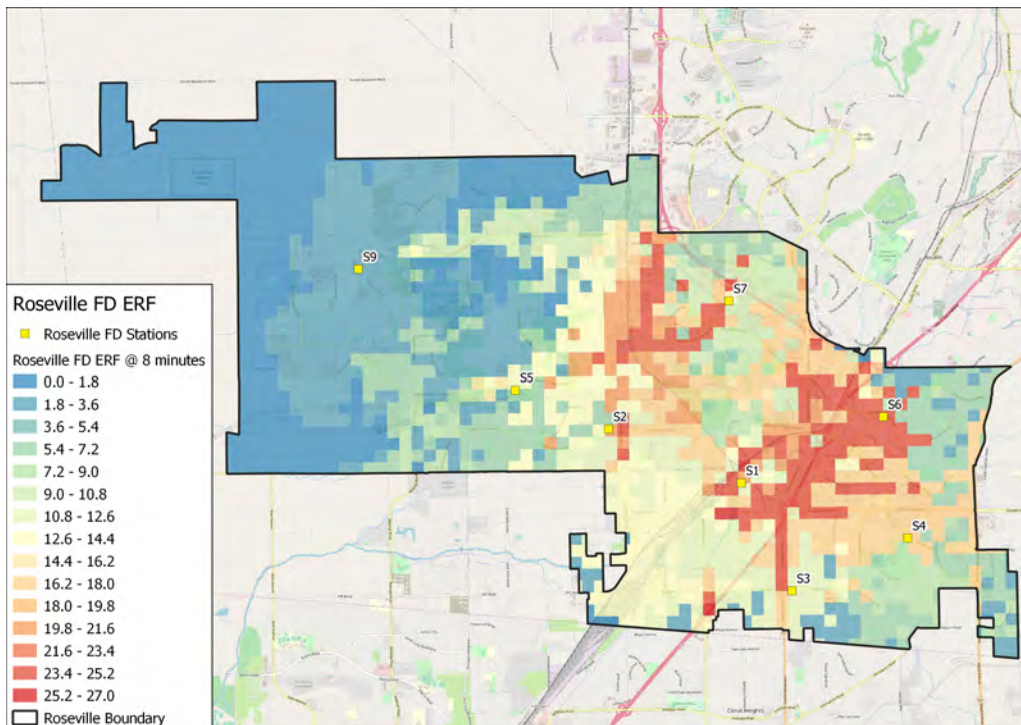
Approximately, 50% of the community can be covered within 10 minutes with 16 personnel, and 75% of the community can be covered within 13 minutes with 16 personnel.

**Table 67: Comparisons of ERF Configurations**

| Travel Time Objective | Current |
|-----------------------|---------|
| 8-Minute              | 21.88%  |
| 10-Minute             | 49.03%  |
| 13-Minute             | 74.81%  |
| 17-Minute             | 86.72%  |

Overall, the ERF coverage is more robust in the center of the jurisdiction where the greatest historical demand exists. The areas in the east and west of the City are challenged since they do not benefit from concentric response zones.

**Figure 50: 8-Minute ERF – All Current Stations**



## Baseline Performance Measures ERF

**Table 68: Baseline Average Performance of Primary Front-Line Arriving Units for Fire Incidents – Low Risk**

| Performance Metric       | Arriving Unit   | Average Time (Minutes) |      |      |      |      |      |
|--------------------------|-----------------|------------------------|------|------|------|------|------|
|                          |                 | 2014-2018              | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup> | 1.5                    | 1.6  | 1.4  | 1.5  | 1.5  | 1.4  |
| Turnout Time             | 1 <sup>st</sup> | 1.7                    | 1.5  | 1.6  | 1.7  | 1.8  | 1.7  |
| Travel Time              | 1 <sup>st</sup> | 4.0                    | 4.3  | 3.7  | 4.3  | 4.0  | 3.6  |
| Response Time            | 1 <sup>st</sup> | 6.9                    | 7.1  | 6.4  | 7.2  | 7.2  | 6.6  |
| Sample Size <sup>1</sup> | 1 <sup>st</sup> | 1,323                  | 276  | 262  | 261  | 250  | 274  |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 69: Baseline Average Performance of Primary Front-Line Arriving Units for Fire Incidents – Moderate Risk**

| Performance Metric       | Arriving Unit         | Average Time (Minutes) |      |      |      |      |      |
|--------------------------|-----------------------|------------------------|------|------|------|------|------|
|                          |                       | 2014-2018              | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup>       | 1.5                    | 1.6  | 1.4  | 1.5  | 1.5  | 1.4  |
|                          | 3 <sup>rd</sup> (ERF) | 2.2                    | 3.1  | 2.3  | 2.3  | 1.4  | 1.8  |
| Turnout Time             | 1 <sup>st</sup>       | 1.7                    | 1.5  | 1.6  | 1.7  | 1.8  | 1.7  |
|                          | 3 <sup>rd</sup> (ERF) | 2.3                    | 2.1  | 2.3  | 2.1  | 2.5  | 2.3  |
| Travel Time              | 1 <sup>st</sup>       | 4.0                    | 4.3  | 3.7  | 4.3  | 4.0  | 3.6  |
|                          | 3 <sup>rd</sup> (ERF) | 5.7                    | 6.0  | 5.6  | 6.5  | 5.2  | 5.0  |
| Response Time            | 1 <sup>st</sup>       | 6.9                    | 7.1  | 6.4  | 7.2  | 7.2  | 6.6  |
|                          | 3 <sup>rd</sup> (ERF) | 9.5                    | 10.5 | 9.4  | 10.0 | 8.8  | 8.8  |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 1,323                  | 276  | 262  | 261  | 250  | 274  |
|                          | 3 <sup>rd</sup> (ERF) | 309                    | 51   | 66   | 69   | 52   | 71   |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 70: Baseline Average Performance of Primary Front-Line Arriving Units for Fire Incidents – High Risk**

| Performance Metric       | Arriving Unit         | Average Time (Minutes) |      |      |      |      |      |
|--------------------------|-----------------------|------------------------|------|------|------|------|------|
|                          |                       | 2014-2018              | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup>       | 1.5                    | 1.6  | 1.4  | 1.5  | 1.5  | 1.4  |
|                          | 6 <sup>th</sup> (ERF) | 3.3                    | 2.1  | 3.1  | 3.6  | 3.7  | 3.8  |
| Turnout Time             | 1 <sup>st</sup>       | 1.7                    | 1.5  | 1.6  | 1.7  | 1.8  | 1.7  |
|                          | 6 <sup>th</sup> (ERF) | 2.7                    | 2.4  | 3.1  | 3.1  | 2.2  | 2.8  |
| Travel Time              | 1 <sup>st</sup>       | 4.0                    | 4.3  | 3.7  | 4.3  | 4.0  | 3.6  |
|                          | 6 <sup>th</sup> (ERF) | 8.1                    | 7.6  | 8.6  | 6.8  | 8.0  | 8.6  |
| Response Time            | 1 <sup>st</sup>       | 6.9                    | 7.1  | 6.4  | 7.2  | 7.2  | 6.6  |
|                          | 6 <sup>th</sup> (ERF) | 13.8                   | 11.6 | 15.0 | 12.6 | 13.7 | 14.7 |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 1,323                  | 276  | 262  | 261  | 250  | 274  |
|                          | 6 <sup>th</sup> (ERF) | 117                    | 18   | 28   | 17   | 20   | 34   |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 71: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-Line Arriving Units for Building Fire Incidents – Low Risk**

| Performance Metric       | Arriving Unit   | 90 <sup>th</sup> Percentile Time (Minutes) |      |      |      |      |      |
|--------------------------|-----------------|--------------------------------------------|------|------|------|------|------|
|                          |                 | 2014-2018                                  | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup> | 2.2                                        | 2.2  | 2.4  | 1.9  | 2.7  | 2.3  |
| Turnout Time             | 1 <sup>st</sup> | 2.5                                        | 2.4  | 2.6  | 2.7  | 2.6  | 2.4  |
| Travel Time              | 1 <sup>st</sup> | 6.2                                        | 7.4  | 5.7  | 7.4  | 7.1  | 5.6  |
| Response Time            | 1 <sup>st</sup> | 9.4                                        | 9.3  | 9.0  | 10.9 | 11.3 | 8.7  |
| Sample Size <sup>1</sup> | 1 <sup>st</sup> | 497                                        | 96   | 105  | 97   | 90   | 109  |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 72: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-Line Arriving Units for Building Fire Incidents – Moderate Risk**

| Performance Metric       | Arriving Unit         | 90 <sup>th</sup> Percentile Time (Minutes) |      |      |      |      |      |
|--------------------------|-----------------------|--------------------------------------------|------|------|------|------|------|
|                          |                       | 2014-2018                                  | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup>       | 2.2                                        | 2.2  | 2.4  | 1.9  | 2.7  | 2.3  |
|                          | 3 <sup>rd</sup> (ERF) | 3.3                                        | 3.9  | 5.5  | 4.3  | 2.1  | 3.1  |
| Turnout Time             | 1 <sup>st</sup>       | 2.5                                        | 2.4  | 2.6  | 2.7  | 2.6  | 2.4  |
|                          | 3 <sup>rd</sup> (ERF) | 3.7                                        | 2.6  | 3.8  | 5.1  | 5.0  | 4.9  |
| Travel Time              | 1 <sup>st</sup>       | 6.2                                        | 7.4  | 5.7  | 7.4  | 7.1  | 5.6  |
|                          | 3 <sup>rd</sup> (ERF) | 7.8                                        | 8.5  | 8.3  | 8.6  | 7.3  | 9.2  |
| Response Time            | 1 <sup>st</sup>       | 9.4                                        | 9.3  | 9.0  | 10.9 | 11.3 | 8.7  |
|                          | 3 <sup>rd</sup> (ERF) | 11.5                                       | 10.2 | 13.8 | 11.1 | 11.2 | 12.3 |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 497                                        | 96   | 105  | 97   | 90   | 109  |
|                          | 3 <sup>rd</sup> (ERF) | 179                                        | 28   | 47   | 34   | 33   | 37   |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

**Table 73: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-Line Arriving Units for Building Fire Incidents – High Risk**

| Performance Metric       | Arriving Unit         | 90 <sup>th</sup> Percentile Time (Minutes) |      |      |      |      |      |
|--------------------------|-----------------------|--------------------------------------------|------|------|------|------|------|
|                          |                       | 2014-2018                                  | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup>       | 2.2                                        | 2.2  | 2.4  | 1.9  | 2.7  | 2.3  |
|                          | 6 <sup>th</sup> (ERF) | 8.9                                        | 7.9  | 8.4  | 10.3 | 11.7 | 7.8  |
| Turnout Time             | 1 <sup>st</sup>       | 2.5                                        | 2.4  | 2.6  | 2.7  | 2.6  | 2.4  |
|                          | 6 <sup>th</sup> (ERF) | 6.2                                        | 4.9  | 8.3  | 6.4  | 4.6  | 10.2 |
| Travel Time              | 1 <sup>st</sup>       | 6.2                                        | 7.4  | 5.7  | 7.4  | 7.1  | 5.6  |
|                          | 6 <sup>th</sup> (ERF) | 10.0                                       | 13.3 | 12.7 | 9.8  | 12.7 | 9.1  |
| Response Time            | 1 <sup>st</sup>       | 9.4                                        | 9.3  | 9.0  | 10.9 | 11.3 | 8.7  |
|                          | 6 <sup>th</sup> (ERF) | 17.6                                       | 16.6 | 21.4 | 17.1 | 22.3 | 19.3 |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 497                                        | 96   | 105  | 97   | 90   | 109  |
|                          | 6 <sup>th</sup> (ERF) | 92                                         | 15   | 26   | 11   | 16   | 24   |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

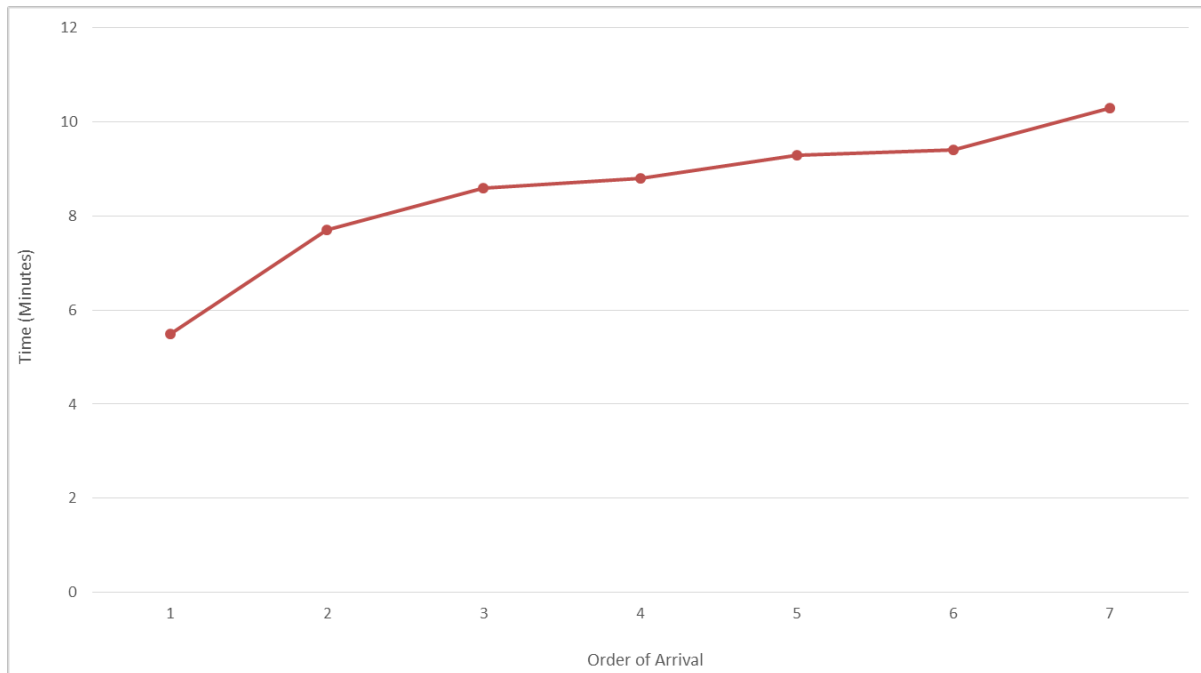
**Table 74: Building Fire: 90<sup>th</sup> Percentile Travel Time in Minutes for ERF by Demand Zone**

| Demand Zone  | Order of Arrival |            |            |            |            |            |             |
|--------------|------------------|------------|------------|------------|------------|------------|-------------|
|              | 1                | 2          | 3          | 4          | 5          | 6          | 7           |
| Station 1    | 3.2              | 4.3        | 9.3        | 9.6        | --         | --         | --          |
| Station 2    | 5.8              | 4.3        | 5.7        | 4.8        | --         | --         | --          |
| Station 3    | 4.1              | --         | --         | --         | --         | --         | --          |
| Station 4    | 4.0              | --         | --         | --         | --         | --         | --          |
| Station 5    | 6.0              | 7.9        | --         | --         | --         | --         | --          |
| Station 6    | --               | --         | --         | --         | --         | --         | --          |
| Station 7    | 4.9              | --         | --         | --         | --         | --         | --          |
| Station 9    | 5.3              | --         | --         | --         | --         | --         | --          |
| <b>Total</b> | <b>5.5</b>       | <b>7.7</b> | <b>8.6</b> | <b>8.8</b> | <b>9.3</b> | <b>9.4</b> | <b>10.3</b> |

**Table 75: Building Fire: Sample Size for ERF Analysis by Demand Zone**

| Demand Zone  | Order of Arrival |           |           |           |           |           |           |
|--------------|------------------|-----------|-----------|-----------|-----------|-----------|-----------|
|              | 1                | 2         | 3         | 4         | 5         | 6         | 7         |
| Station 1    | 16               | 12        | 11        | 10        | 6         | 4         | 2         |
| Station 2    | 15               | 10        | 10        | 10        | 7         | 6         | 6         |
| Station 3    | 18               | 8         | 5         | 4         | 4         | 4         | 2         |
| Station 4    | 14               | 8         | 8         | 6         | 3         | 6         | 1         |
| Station 5    | 13               | 10        | 4         | 3         | 3         | 6         | 2         |
| Station 6    | 5                | 1         | 1         | 1         | 0         | 0         | 0         |
| Station 7    | 11               | 5         | 4         | 3         | 1         | 2         | 2         |
| Station 9    | 12               | 6         | 4         | 3         | 3         | 2         | 2         |
| <b>Total</b> | <b>112</b>       | <b>66</b> | <b>49</b> | <b>40</b> | <b>27</b> | <b>24</b> | <b>17</b> |

**Figure 51: 90<sup>th</sup> Percentile ERF Travel Time Performance for Building Fires Overall**



**Table 76: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-Line Arriving Units for Wildland Fire Incidents – Low Risk**

| Performance Metric       | Arriving Unit   | 90 <sup>th</sup> Percentile Time (Minutes) |      |      |      |      |      |
|--------------------------|-----------------|--------------------------------------------|------|------|------|------|------|
|                          |                 | 2014-2018                                  | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup> | 3.3                                        | 4.6  | 2.8  | 3.3  | 3.6  | 2.6  |
| Turnout Time             | 1 <sup>st</sup> | 3.2                                        | 3.0  | 2.3  | 3.3  | 3.5  | 3.5  |
| Travel Time              | 1 <sup>st</sup> | 10.1                                       | 11.5 | 9.7  | 11.8 | 7.8  | 8.5  |
| Response Time            | 1 <sup>st</sup> | 12.9                                       | 17.4 | 10.4 | 12.9 | 10.7 | 13.1 |
| Sample Size <sup>1</sup> | 1 <sup>st</sup> | 315                                        | 62   | 52   | 63   | 57   | 81   |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.



**Table 77: Baseline 90<sup>th</sup> Percentile Performance of Primary Front-Line Arriving Units for Wildland Fire Incidents – Moderate and High Risk**

| Performance Metric       | Arriving Unit         | 90 <sup>th</sup> Percentile Time (Minutes) |      |      |      |      |      |
|--------------------------|-----------------------|--------------------------------------------|------|------|------|------|------|
|                          |                       | 2014-2018                                  | 2014 | 2015 | 2016 | 2017 | 2018 |
| Dispatch Time            | 1 <sup>st</sup>       | 3.3                                        | 4.6  | 2.8  | 3.3  | 3.6  | 2.6  |
|                          | 3 <sup>rd</sup> (ERF) | 7.0                                        | 11.6 | 12.8 | 7.2  | 5.5  | 7.3  |
| Turnout Time             | 1 <sup>st</sup>       | 3.2                                        | 3.0  | 2.3  | 3.3  | 3.5  | 3.5  |
|                          | 3 <sup>rd</sup> (ERF) | 3.5                                        | 7.0  | N/A  | 3.4  | N/A  | 6.4  |
| Travel Time              | 1 <sup>st</sup>       | 10.1                                       | 11.5 | 9.7  | 11.8 | 7.8  | 8.5  |
|                          | 3 <sup>rd</sup> (ERF) | 13.1                                       | 15.1 | 12.5 | 20.8 | 23.0 | 12.0 |
| Response Time            | 1 <sup>st</sup>       | 12.9                                       | 17.4 | 10.4 | 12.9 | 10.7 | 13.1 |
|                          | 3 <sup>rd</sup> (ERF) | 21.3                                       | 27.9 | N/A  | 23.4 | N/A  | 14.7 |
| Sample Size <sup>1</sup> | 1 <sup>st</sup>       | 315                                        | 62   | 52   | 63   | 57   | 81   |
|                          | 3 <sup>rd</sup> (ERF) | 91                                         | 14   | 12   | 26   | 10   | 29   |

<sup>1</sup>Sample sizes reflect the number of responses made by arriving primary front-line units to emergency calls; due to missing or excluded time data, sample sizes corresponding to individual table metrics may be smaller.

N/A = Small or zero sample size precluded the calculation of metric.

## Mutual and Automatic Aid Analysis

RFD maintains a broad network of mutual and automatic aid agreements with surrounding jurisdictions. Mutual aid defines services provided to another area at the specific request of the jurisdiction having authority, and is granted whenever doing so will not leave areas of primary responsibility with an inadequate level of protection. Mutual aid can be provided within our County for a large-scale incident, and no reimbursement occurs for the first 12 hours of commitment to the incident. Other times, when large fires overwhelm the response capabilities of local resources, resources are requested through the State of California Master Mutual Aid system. Examples would be deployment of a Roseville Type III Brush Engine to Southern California for a large fire incident.

Automatic aid refers to agreements that provide a pre-determined level of cross-jurisdictional response support, usually in boundary areas, without the need for a specific request. Currently, Roseville has automatic aid agreements with CalFire, Sacramento Metropolitan Fire District, South Placer Fire District, and Rocklin Fire--all agencies that share borders with the Department.

**Table 78: Mutual Aid and Automatic Aid Received and Given – Calls, Responses, and Busy Time**

| Mutual Aid Code        | Number of Calls | Agency or Station | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|------------------------|-----------------|-------------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| Mutual Aid Received    | 10              | AMR               | 6                                | 6                                     | 2.5              | 25.2                              |
|                        |                 | Other Outside     | 10                               | 10                                    | 7.0              | 42.0                              |
|                        |                 | <b>Total</b>      | <b>16</b>                        | <b>16</b>                             | <b>9.5</b>       | <b>35.7</b>                       |
| Automatic Aid Received | 15              | AMR               | 11                               | 10                                    | 5.3              | 32.1                              |
|                        |                 | Other Outside     | 18                               | 18                                    | 7.3              | 24.4                              |
|                        |                 | <b>Total</b>      | <b>29</b>                        | <b>28</b>                             | <b>12.7</b>      | <b>27.2</b>                       |
| Mutual Aid Given       | 127             | Station 1         | 37                               | 37                                    | 32.8             | 53.2                              |
|                        |                 | Station 2         | 20                               | 20                                    | 14.8             | 44.4                              |
|                        |                 | Station 3         | 1                                | 1                                     | 0.1              | 7.6                               |
|                        |                 | Station 4         | 10                               | 10                                    | 7.6              | 45.9                              |
|                        |                 | Station 5         | 29                               | 29                                    | 19.0             | 39.2                              |
|                        |                 | Station 6         | 13                               | 12                                    | 13.2             | 66.0                              |
|                        |                 | Station 7         | 48                               | 48                                    | 33.6             | 42.0                              |
|                        |                 | Station 9         | 20                               | 19                                    | 25.8             | 81.4                              |
|                        |                 | RFD Admin         | 3                                | 0                                     | --               | --                                |
|                        |                 | RFD Other         | 2                                | 0                                     | --               | --                                |
|                        |                 | <b>Total</b>      | <b>183</b>                       | <b>176</b>                            | <b>146.9</b>     | <b>50.1</b>                       |
| Automatic Aid Given    | 65              | Station 1         | 29                               | 29                                    | 29.5             | 61.0                              |
|                        |                 | Station 2         | 7                                | 7                                     | 3.2              | 27.8                              |
|                        |                 | Station 3         | 13                               | 13                                    | 5.2              | 24.0                              |
|                        |                 | Station 4         | 11                               | 10                                    | 7.1              | 42.8                              |
|                        |                 | Station 5         | 6                                | 6                                     | 5.6              | 55.8                              |
|                        |                 | Station 6         | 11                               | 11                                    | 1.9              | 10.6                              |
|                        |                 | Station 7         | 17                               | 17                                    | 9.0              | 31.6                              |
|                        |                 | Station 9         | 9                                | 8                                     | 9.6              | 71.6                              |
|                        |                 | RFD Admin         | 1                                | 0                                     | --               | --                                |
|                        |                 | RFD Other         | 0                                | --                                    | --               | --                                |
|                        |                 | <b>Total</b>      | <b>104</b>                       | <b>101</b>                            | <b>71.1</b>      | <b>42.2</b>                       |
| Other Aid Given        | 1               | Station 9         | 1                                | 1                                     | 0.4              | 21.9                              |
|                        |                 | <b>Total</b>      | <b>1</b>                         | <b>1</b>                              | <b>0.4</b>       | <b>21.9</b>                       |
| None                   | 16,505          | All               | 32,959                           | 31,777                                | 8,227.4          | 15.5                              |
| Y <sup>3</sup>         | 196             | All               | 805                              | 781                                   | 250.3            | 19.2                              |
| <b>Total</b>           | <b>16,919</b>   | <b>All</b>        | <b>34,273</b>                    | <b>33,041</b>                         | <b>8,865.5</b>   | <b>16.1</b>                       |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

<sup>3</sup>Code appeared as “Y,” not otherwise specified.

**Table 79: Overall Workload by Unit – Outside Agencies**

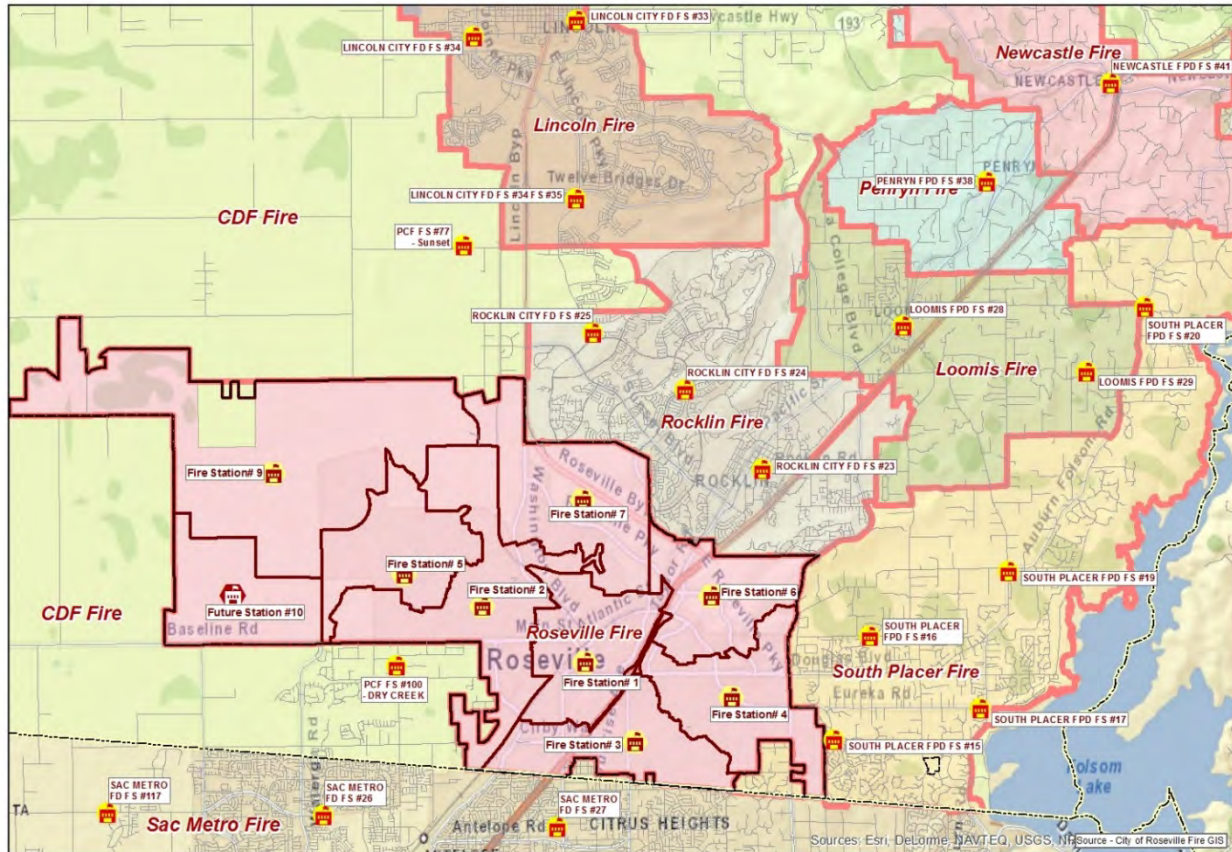
| Agency               | Unit          | Unit Type       | Number of Responses <sup>1</sup> | Responses with Time Data <sup>2</sup> | Total Busy Hours | Average Busy Minutes per Response |
|----------------------|---------------|-----------------|----------------------------------|---------------------------------------|------------------|-----------------------------------|
| AMR                  | All           | ALS Unit        | 13,170                           | 12,252                                | 2,194.4          | 10.7                              |
|                      | Station Total |                 | 13,170                           | 12,252                                | 2,194.4          | 10.7                              |
| Placer County        | E77           | Engine          | 4                                | 3                                     | 0.4              | 7.8                               |
|                      | E100          | Engine          | 20                               | 16                                    | 9.1              | 34.0                              |
|                      | Station Total |                 | 24                               | 19                                    | 9.5              | 29.9                              |
| Rocklin              | B24           | Battalion Chief | 68                               | 65                                    | 9.2              | 8.5                               |
|                      | E23           | Engine          | 85                               | 84                                    | 18.3             | 13.1                              |
|                      | E24           | Engine          | 6                                | 6                                     | 0.4              | 4.0                               |
|                      | E25           | Engine          | 2                                | 2                                     | 0.2              | 6.0                               |
|                      | T24           | Truck           | 26                               | 25                                    | 3.1              | 7.6                               |
|                      | Station Total |                 | 187                              | 182                                   | 31.3             | 10.3                              |
| South Placer         | B19           | Battalion Chief | 19                               | 18                                    | 2.7              | 8.8                               |
|                      | E15           | Engine          | 26                               | 24                                    | 3.3              | 8.3                               |
|                      | Station Total |                 | 45                               | 42                                    | 6.0              | 8.6                               |
| Outside Agency Total |               |                 | 13,426                           | 12,495                                | 2,241.2          | 10.8                              |

<sup>1</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>2</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix of data report).

## Regional Resources

Figure 52: Regional Departments and Available Resources



## Regional Incident Management Team

RFD is an integral part of Placer County's Incident Support Team. Approximately eight RFD personnel participate in the 50-member team composed of peers from regional fire, law, and PSAP agencies. The team is activated through emergency notification to support incident management that extends beyond a single operational period, or when requested by the Incident Commander. The team trains regularly and is able to respond to multiple hazards including wildland fires, floods, earthquakes, tornadoes, large fires, hazardous materials incidents, and other natural or human-caused incidents.

## ***Response Reliability Analysis***

### ***Maintain Response Reliability greater than 80% for each Fire Response District Benchmark***

Response reliability is the probability that the resources assigned to an area will be available to respond from within the area when an emergency occurs. The benchmark for RFD is to maintain 80% or greater response reliability for each response district. Response reliability would be 100% if every company were available in their designated area when a fire or emergency call is received. However, in reality, there are times when the first due unit is committed, out of area, or otherwise unavailable. This requires that a later due unit, in the predetermined response order, be assigned. If the later due unit is too far away, the call cannot be handled within the desired response time. When a district's response reliability falls below 80%, it is time to begin looking at ways to keep that assigned apparatus in that district available more often. If those efforts fail, then other measures should be taken, such as implementation of a peak activity unit, cover unit from another district, additional staffing, and/or an additional company.

As the number of emergency calls per day, training demands, and other activities increase, so does the probability that the first due unit will be out of area or unavailable when a call is received, resulting in decreased reliability.

### ***Percentage of First Due Compliance***

The reliability of the distribution model is a factor of how often the response model is available and able to respond to a call within the assigned demand zone. This analysis utilized all dispatched calls within RFD's demand zones and performance included responses from any unit in RFD's department. Units assigned to Station 1 responded to calls within their respective demand zone >90% of the time. Units from all other stations responded to calls within their respective demand zones <90% of the time.

## Response Reliability by Demand Zone

**Table 80: Number of Responses by Demand Zone and Program**

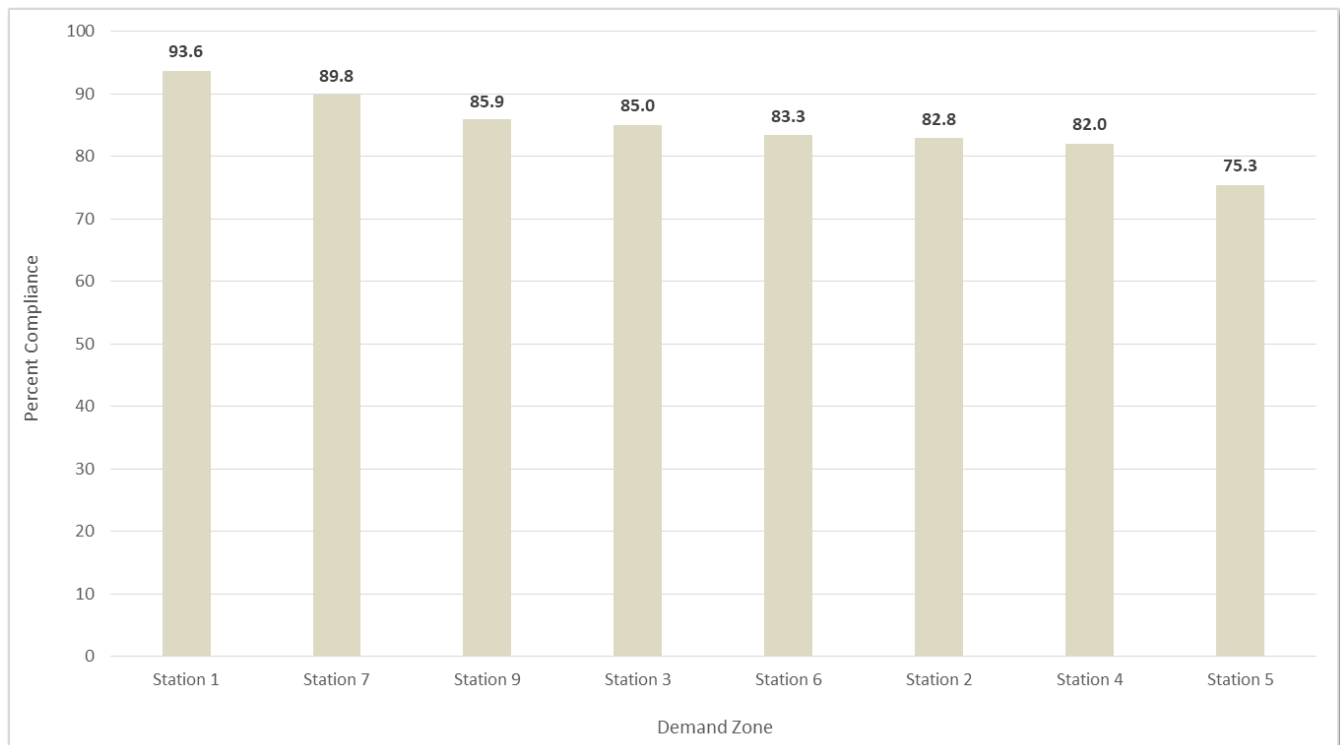
| Demand Zone  | Program       |              |              | Total         |
|--------------|---------------|--------------|--------------|---------------|
|              | EMS           | Fire         | Other        |               |
| Station 1    | 1,668         | 227          | 1,270        | 3,165         |
| Station 2    | 1,235         | 124          | 736          | 2,095         |
| Station 3    | 2,196         | 141          | 1,184        | 3,521         |
| Station 4    | 1,270         | 106          | 966          | 2,342         |
| Station 5    | 1,524         | 118          | 980          | 2,622         |
| Station 6    | 828           | 114          | 1,153        | 2,095         |
| Station 7    | 1,193         | 136          | 1,266        | 2,595         |
| Station 9    | 1,124         | 97           | 701          | 1,922         |
| Unknown      | 63            | 48           | 379          | 490           |
| <b>Total</b> | <b>11,101</b> | <b>1,111</b> | <b>8,635</b> | <b>20,847</b> |

**Table 81: First Due Compliance by Demand Zone – Number of Calls**

| Demand Zone  | Responding Unit's Assigned Station |              |              |              |              |              |              |              |           |           | Total <sup>1</sup> |
|--------------|------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-----------|-----------|--------------------|
|              | Station 1                          | Station 2    | Station 3    | Station 4    | Station 5    | Station 6    | Station 7    | Station 9    | RFD Admin | RFD Other |                    |
| Station 1    | <b>2,149</b>                       | 74           | 91           | 28           | 16           | 121          | 72           | 7            | 5         | 0         | 2,295              |
| Station 2    | 214                                | <b>1,432</b> | 11           | 5            | 120          | 10           | 143          | 10           | 4         | 0         | 1,729              |
| Station 3    | 440                                | 37           | <b>2,537</b> | 202          | 8            | 99           | 39           | 0            | 5         | 0         | 2,985              |
| Station 4    | 122                                | 5            | 223          | <b>1,608</b> | 5            | 250          | 29           | 2            | 4         | 0         | 1,962              |
| Station 5    | 77                                 | 337          | 2            | 1            | <b>1,710</b> | 4            | 117          | 314          | 3         | 1         | 2,270              |
| Station 6    | 168                                | 7            | 56           | 200          | 5            | <b>1,375</b> | 164          | 3            | 6         | 0         | 1,651              |
| Station 7    | 133                                | 83           | 4            | 10           | 31           | 203          | <b>1,778</b> | 21           | 5         | 0         | 1,981              |
| Station 9    | 58                                 | 39           | 2            | 1            | 270          | 3            | 82           | <b>1,427</b> | 0         | 0         | 1,662              |
| Unknown      | 85                                 | 40           | 63           | 45           | 55           | 31           | 99           | 41           | 3         | 4         | 373                |
| <b>Total</b> | <b>3,446</b>                       | <b>2,054</b> | <b>2,989</b> | <b>2,100</b> | <b>2,220</b> | <b>2,096</b> | <b>2,523</b> | <b>1,825</b> | <b>35</b> | <b>5</b>  | <b>16,908</b>      |

<sup>1</sup>“Total” values may not equal the sum of the cell values across columns per row because units from multiple stations may have responded to a call within the given demand zone.

**Figure 53: Percentage of First Due Compliance by Demand Zone**



### **Overlapped or Simultaneous Call Analysis**

Overlapped or simultaneous calls are defined as another call being received in a demand zone or for a first due station while one or more calls are already ongoing for the same demand zone or first due station. For example, if there is an ongoing call in Station 1's zone wherein all units have not yet been cleared, and another request for service occurs in Station 1's zone, those two calls would be captured as overlapped calls. Understanding the percentage of overlapped calls will help to determine the number of units to staff for each station. In general, the larger the call volume for a demand zone or first due station, the greater the likelihood of overlapped calls occurring. The distribution of the demand throughout the day will impact the chance of having overlapped calls. Additionally, the duration of a call plays a significant role; the longer it takes to clear a request, the greater the likelihood of having an overlapping request.

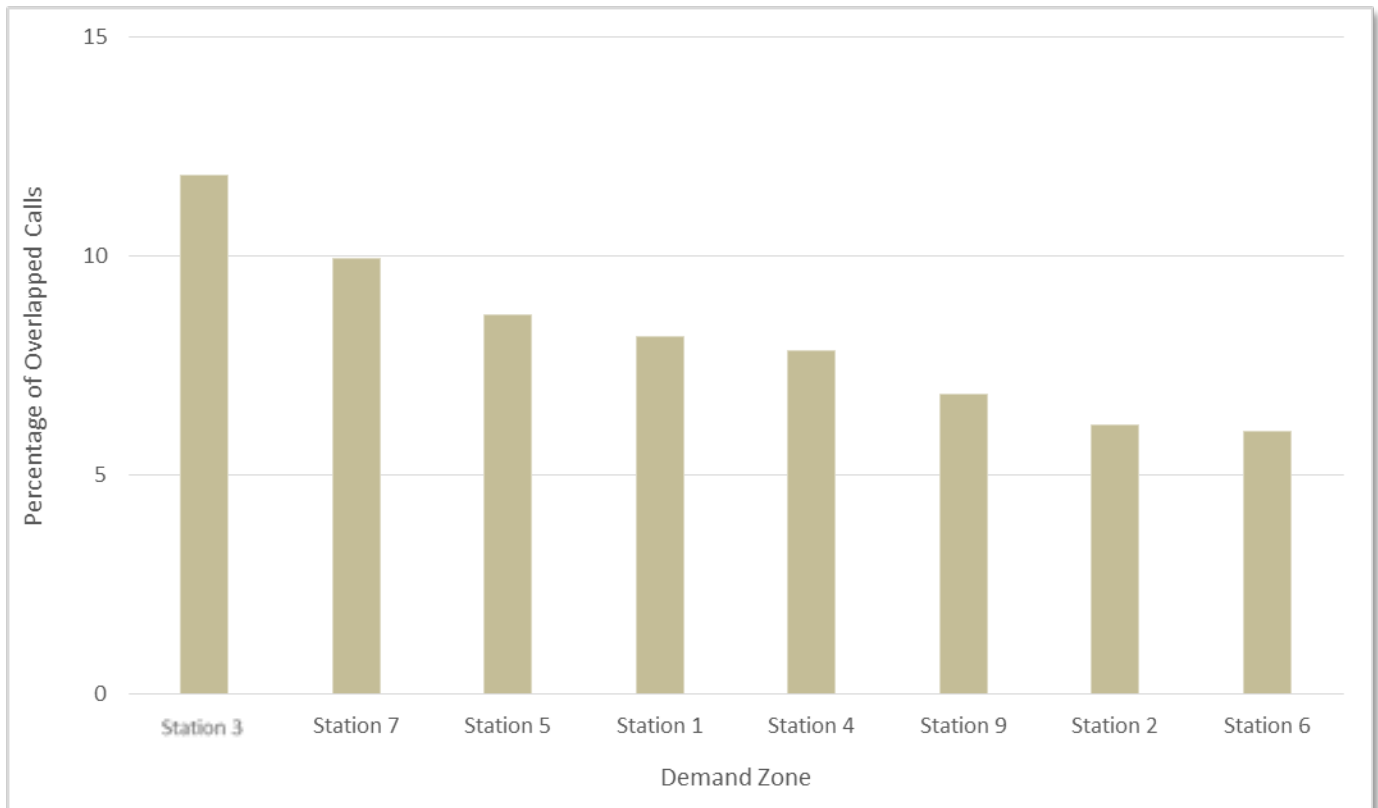
Results for these analyses are reported for all calls and then broken down by EMS and fire calls. Note that for EMS and fire calls, overlapped calls represent any call classified in its respective program area, but that overlapped with one or more calls from *any* program area. For example, Station 1 observed 187 calls during 2018 that overlapped with one or more calls within its demand zone—113 were classified as EMS calls, 16 were classified as fire calls, and 58 were classified into one of the other call categories. The 113 calls that were classified as EMS calls could have overlapped with one or more calls from EMS, fire, or other program areas. Calls with an unknown demand zone were not included in these analyses.

Station 3's demand zone had the highest percentage of overlapped calls during 2018 for overall calls at 11.8% and for EMS calls at 8.6%. Station 1's demand zone had the highest percentage of overlapped calls during 2018 classified as fire calls at 0.7%.

**Table 82: Overlapped Calls by Demand Zone**

| Demand Zone | Overlapped Calls | Total Calls | Percentage of Overlapped Calls |
|-------------|------------------|-------------|--------------------------------|
| Station 1   | 187              | 2,291       | 8.2                            |
| Station 2   | 106              | 1,726       | 6.1                            |
| Station 3   | 353              | 2,980       | 11.8                           |
| Station 4   | 154              | 1,960       | 7.9                            |
| Station 5   | 196              | 2,265       | 8.7                            |
| Station 6   | 99               | 1,645       | 6.0                            |
| Station 7   | 197              | 1,978       | 10.0                           |
| Station 9   | 114              | 1,662       | 6.9                            |

**Figure 54: Percentage of Overlapped Calls by Demand Zone**

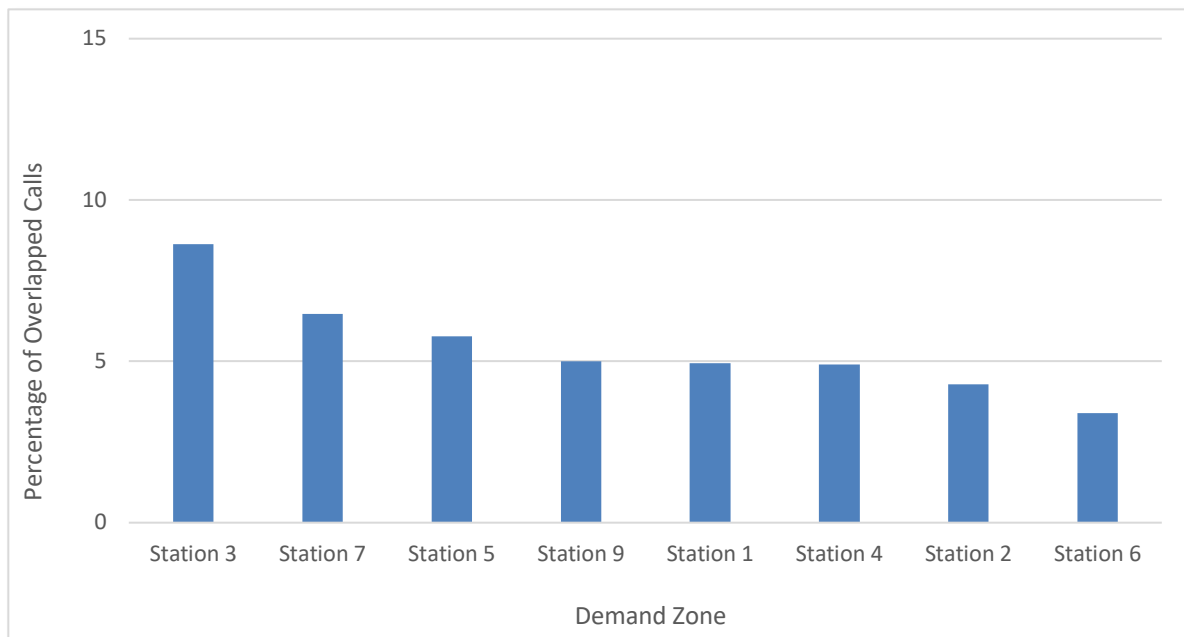




**Table 83: Overlapped EMS Calls by Demand Zone**

| Demand Zone | Overlapped Calls | Total Calls | Percentage of Overlapped Calls |
|-------------|------------------|-------------|--------------------------------|
| Station 1   | 113              | 2,291       | 4.9                            |
| Station 2   | 74               | 1,726       | 4.3                            |
| Station 3   | 257              | 2,980       | 8.6                            |
| Station 4   | 96               | 1,960       | 4.9                            |
| Station 5   | 131              | 2,265       | 5.8                            |
| Station 6   | 56               | 1,645       | 3.4                            |
| Station 7   | 128              | 1,978       | 6.5                            |
| Station 9   | 83               | 1,662       | 5.0                            |

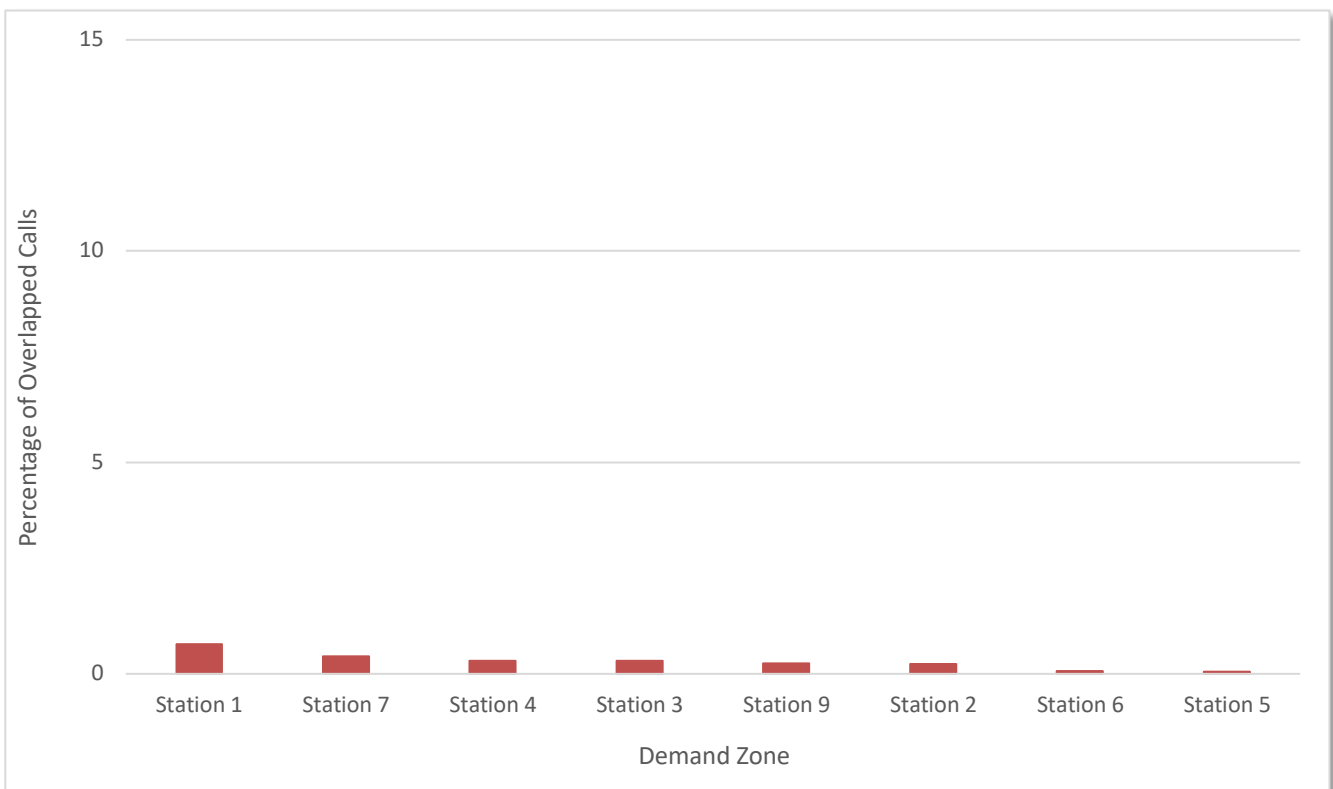
**Figure 55: Percentage of Overlapped EMS Calls by Demand Zone**



**Table 84: Overlapped Fire Calls by Demand Zone**

| Demand Zone | Overlapped Calls | Total Calls | Percentage of Overlapped Calls |
|-------------|------------------|-------------|--------------------------------|
| Station 1   | 16               | 2,291       | 0.7                            |
| Station 2   | 4                | 1,726       | 0.2                            |
| Station 3   | 9                | 2,980       | 0.3                            |
| Station 4   | 6                | 1,960       | 0.3                            |
| Station 5   | 1                | 2,265       | 0.0                            |
| Station 6   | 1                | 1,645       | 0.1                            |
| Station 7   | 8                | 1,978       | 0.4                            |
| Station 9   | 4                | 1,662       | 0.2                            |

**Figure 56: Percentage of Overlapped Fire Calls by Demand Zone**



## SECTION 8: ISO RATING & COMMUNITY EXPECTATIONS

### Current ISO Rating

In July 2015, RFD received an ISO Public Protection Classification grading of **02**. An ISO rating is expressed as a number between 1 and 10, with 1 being the highest level of protection and 10 being unprotected or nearly so. This is an important rating as insurance rates for businesses within our City are based upon this rating.

*Figure 57: 2015 ISO Summary Evaluation*

| FSRS Item                                         | Earned Credit | Credit Available |
|---------------------------------------------------|---------------|------------------|
| <b>Emergency Communications</b>                   |               |                  |
| 414. Credit for Emergency Reporting               | 3.00          | 3                |
| 422. Credit for Telecommunicators                 | 4.00          | 4                |
| 432. Credit for Dispatch Circuits                 | 1.50          | 3                |
| <b>440. Credit for Emergency Communications</b>   | <b>8.50</b>   | <b>10</b>        |
| <b>Fire Department</b>                            |               |                  |
| 513. Credit for Engine Companies                  | 5.88          | 6                |
| 523. Credit for Reserve Pumpers                   | 0.49          | 0.5              |
| 532. Credit for Pumper Capacity                   | 3.00          | 3                |
| 549. Credit for Ladder Service                    | 1.98          | 4                |
| 553. Credit for Reserve Ladder and Service Trucks | 0.50          | 0.5              |
| 561. Credit for Deployment Analysis               | 6.93          | 10               |
| 571. Credit for Company Personnel                 | 8.81          | 15               |
| 581. Credit for Training                          | 8.39          | 9                |
| 730. Credit for Operational Considerations        | 2.00          | 2                |
| <b>590. Credit for Fire Department</b>            | <b>37.98</b>  | <b>50</b>        |
| <b>Water Supply</b>                               |               |                  |
| 616. Credit for Supply System                     | 30.00         | 30               |
| 621. Credit for Hydrants                          | 2.87          | 3                |
| 631. Credit for Inspection and Flow Testing       | 3.59          | 7                |
| <b>640. Credit for Water Supply</b>               | <b>36.46</b>  | <b>40</b>        |
| <b>Divergence</b>                                 | <b>-3.04</b>  | <b>—</b>         |
| <b>1050. Community Risk Reduction</b>             | <b>4.83</b>   | <b>5.50</b>      |
| <b>Total Credit</b>                               | <b>84.73</b>  | <b>105.5</b>     |

**Final Community Classification = 02**

## SECTION 9: ROSEVILLE POLICE & FIRE PSAP

### Public Safety Answering Point and Dispatch

The City of Roseville PSAP is housed within the Roseville Police Department and employs 21 full-time dispatchers, three Communication Supervisors, and one Administrator. In 2018, the center processed 163,507 telephone calls and 139,817 Computer Aided Dispatch incidents. In 2018, the PSAP's average answer time for 911 calls was 10.59 seconds.

*Table 85: PSAP Call Data by Year*

| 2018 Statistics                 | 911    | 7-Digit Emergency | Administrative Lines |
|---------------------------------|--------|-------------------|----------------------|
| Total Number 2018               | 60,575 | 15,069            | 87,863               |
| Total Number 2017               | 82,338 | 16,535            | 89,574               |
| % of Total Calls Processed 2018 | 37.04% | 9.21%             | 53.73%               |
| % of Total Calls Processed 2017 | 33.03% | 10.43%            | 53.53%               |

All Roseville Police and Fire Dispatchers are cross-trained to perform call-taking duties and handle both law and fire radio dispatch. Dispatchers are required to pass an extensive background check prior to appointment with the City of Roseville, and, on average, spend ten months in on-the-job training working directly with a training officer before being allowed to work in a solo capacity. Additionally, dispatchers receive over 140 hours of classroom instruction and receive a minimum of two dispatch certifications.

Roseville Police and Fire Public Safety Dispatchers maintain Emergency Medical Dispatch (EMD) certification through the International Association of Emergency Dispatch (IAED). EMD certification requires that dispatchers receive 24 hours of classroom instruction, pass a written exam with a score of at least 80%, and obtain CPR certification. Dispatchers are also required to re-test and pass the written exam and receive an additional 24 hours of Continuing Dispatch Education every two years.

City of Roseville Public Safety Dispatchers processed approximately 12,767 emergency medical calls in 2014. A random percentage of these calls are reviewed through monthly quality assurance checks conducted by a quality assurance committee. The committee is composed of a Registered Nurse, an EMD certified dispatcher, and an EMD certified Communications Supervisor. During the review, committee members evaluate a random selection of the emergency medical calls received in that month and compare them against a standardized EMD rubric and provide feedback regarding call handling. On average, Roseville Police and Fire Dispatchers receive EMD scores of 90.85%. The PSAP is currently striving to certify all

supervisors and the members of the EMD review committee through the IAED's EMD-Q quality assurance program.

Roseville's public safety dispatchers are also certified as Public Safety Dispatchers through the California Commission on Peace Officer Standard and Training (POST). POST requires that all dispatchers complete a 120-hour basic dispatcher course, receive adequate on-the-job training, and pass a probationary period of at least 12 months.

Roseville's PSAP offers enhanced 9-1-1 services that allow dispatchers to pinpoint most callers' locations, and even maps cellular callers' locations using latitude and longitude coordinates. The telephone system links directly to the current Computer Aided Dispatch (CAD) system and provides emergency telecommunications for the deaf (TDD) access as well as language translation services to the Roseville community.

In 2018, the dispatch center installed a new regional phone system with their county partners. With this new system, they are able to answer their 9-1-1 calls from any of the partner centers shall they need to evacuate. The CAD vendor, New World Systems™, brings a variety of new capabilities to the center that will facilitate more efficient and timely dispatching of emergency resources. New World System capabilities include highly accurate mapping capabilities, unit recommendations, proximity dispatching, and interactive messaging with field units.

Dispatchers are also trained to operate and monitor both 800 MHz and VHF radio systems, and the radio system has been updated to meet all the P25 state requirements. The Roseville Police Department operates primarily on the 800 MHz system, but most regional fire and law enforcement partners operate on VHF systems. Roseville Public Safety Dispatchers are trained to react quickly to emergency radio traffic and they have a variety of tools available to provide immediate interoperability capabilities, as necessary.

Since the Roseville PSAP is both an alternate 9-1-1 answer site and a back-up dispatch center for two other PSAPs in the region, the center's radio consoles are designed to allow dispatchers from any of the participating agencies to easily dispatch law and fire resources with no noticeable delays in service or impact to field units. The PSAP recently participated in, and successfully completed, two regional 9-1-1 and radio dispatch failover events that tested the emergency backup plans and validated current emergency plans.

Roseville's PSAP is highly functional, staffed with highly-trained and certified dispatch personnel, and is prepared to transition to a more technical, next generation 9-1-1-compliant facility to better serve the community and the Roseville Police and Fire Departments.

## SECTION 10: COMPLIANCE METHODOLOGY

### Compliance Methodology

In order to ensure that service-level objectives and performance measures are evaluated and that efforts are made to reach or maintain the established levels, a compliance strategy must be implemented.

Maintenance of effort refers to the resources and energy put forth by the organization to maintain and improve the services provided by the organization and identified in this document.

To measure and achieve compliance with the objectives set forth in this SOC, RFD will utilize the following six-step compliance model.

*Figure 58: Six-Step Compliance Model*



#### **Phase 1 - Establish/Review Performance Measures**

This phase includes the research for, and completion of the initial SOC process. Upon adoption of the SOC, RFD will conduct a full review of the performance measures annually. Review will include the following items:

- Service provided identified
- Levels of service defined
- Levels of risk categorized
- Performance objectives and measures developed
  - o Distribution performance measures adopted
  - o Concentration measures adopted

## ***Phase 2 - Evaluate Performance***

Actual service performance is evaluated against adopted performance measures and benchmarks. Service will be evaluated at multiple levels.

- System level
- Regional level
- First-due area level
- Unit level
- ERF Level

## ***Phase 3 - Develop Compliance Strategies***

RFD will utilize SWOT (Strengths, Weaknesses, Opportunities, and Threats) analysis along with the data collected in the evaluation phase to identify compliance issues. RFD will use this information to develop solutions to performance issues.

## ***Phase 4 - Communicate Expectations to the Department***

Any expectation of success is dependent upon the personnel involved being aware of the expectations being placed on them. It is important for the Department to clearly communicate the expectations for service improvement to the entire staff and to the public as well. The following tasks are needed:

- Explain the method of measuring compliance to personnel who are expected to perform the services
- Provide feedback mechanisms
- Define consequences for non-compliance

Any changes to policy or procedures should be accompanied by training of personnel in the changes. Provide appropriate levels of training/direction for all affected personnel and communicate consequences of non-compliance. Empower personnel within the Department to identify the need to modify processes, application systems, and technical infrastructure as necessary to comply, should there be a conflict with the new methods.

### ***Phase 5 - Validate Compliance***

RFD will develop and deploy verification tools and techniques that can be used by each division of the Department to verify compliance with the adopted requirements. These tools may include:

- Monthly Evaluations
  - o Performance by unit
  - o Overall system performance
  - o Review of performance by division/section management
- Quarterly Evaluations
  - o Performance by unit
  - o Performance by first due
  - o Overall system performance

### ***Phase 6 - Make Adjustments and Repeat Process***

RFD will develop and implement a review program to ensure service levels are maintained, and where possible, are constantly improving. In addition to the validation completed in Phase 5, it is necessary to view the results on a more universal level. Evaluation at this level would focus more on trending and projections. Evaluations at this level may include:

- Annual Review and Evaluation
  - o Performance by unit, first-due unit, and overall performance
  - o Compliance by time of day, day of week, and month of year for each type of service
  - o Indication of workload may show future trends and past performances
  - o Review of performance by Command Staff
  - o Adjustment of service-level objectives as necessary



## APPENDIX A: TERMINOLOGY GLOSSARY AND ACRONYMS

These industry standard terms come from CFAI and they may or may not have been used in this document.

**Acceptable Level of Risk:** The amount or level of risk set through adoption of public policy through law, regulation, or level of service. To deem acceptable, risk is gauged against a benchmark or standard that has been deemed adequate for the jurisdiction.

**Accepted Risk:** The portion of a problem that is beyond the agency's ability to cope with the consequences and are accepted within the community as a potential loss.

**Accreditation:** A process by which an association or agency evaluates and recognizes a program of study or an institution as meeting certain predetermined standards or qualifications.

**Adequate:** Providing what is needed to meet a given objective without being in excess.

**Advanced Life Support (ALS):** A sophisticated level of pre-hospital care that builds upon basic life support procedures, and includes the use of invasive techniques such as advanced airway management, cardiac monitoring and defibrillation, intravenous therapy and the administration of specified medications, to save a patient's life.

**AHJ:** Authority Having Jurisdiction

**Alarm Processing Time:** The elapsed time from the receipt of an alarm by the 9-1-1 communications center and the notification of specific fire companies that are to respond.

**Apparatus:** Fire suppression or medical vehicle such as engine, ladder, truck, or medic unit.

**Assumption:** A situation or condition, which must be considered as existing if the organization, is forced to operate in a specific manner and over which the organization does not exercise any control.

**Baseline:** The current measurement of performance in an organizational context; a usually initial set of critical observations of data used for comparison or a control. The activities that are currently in place to achieve the organization's goals and objectives.

**Basic Life Support (BLS):** A primary level of pre-hospital care, which includes the recognition of life-threatening conditions and the application of simple emergency lifesaving procedures, including the use of adjunctive equipment, aimed at supporting life.

**Benchmark:** A benchmark is defined as a standard from which something can be judged. Searching for the best practice will help define superior performance of a product, service, or process.

**Community Risk Assessment:** The evaluation of fire and other risks taking into account all pertinent facts that increase or decrease hazard in order to define standards of coverage. (See Occupancy Risk Assessment)

**Concentration:** Spacing of multiple resources arranged so that an initial effective response force can arrive on scene within the time frames outlined in the on-scene performance expectations.

**Confined Space/Trench Rescue:** All rescues that meet OSHA's definition of confined space, in which special breathing apparatus, shoring, explosion-proof lighting, and atmospheric monitoring are necessary.

**Cost Benefit:** Term used to express the value of a component of a system. It is expressed usually as a ratio of cost, expenditure, or to a benefit, a saving of some type. Cost benefit can be measured in either soft or hard currency descriptions.

**CCR:** Cardio-Cerebral Resuscitation

**Critical Incidents:** A method of evaluation based on specific examples of above or below average performance.

**Deployment:** The strategic assignment and placement of fire agency resources such as fire companies, fire stations, and specific staffing levels for those companies.

**Dispatch Time:** The portion of a Fire Department's response time that begins when the dispatcher receives an alarm and ends when the dispatcher assigns the proper companies to respond to the emergency.

**Dollar Value of Total Fire Loss:** The assessed value of improvements lost as a result of fire. This is not the replacement value.

**Effective Response Force (ERF):** The minimum amount of staffing and equipment that must reach a specific emergency zone location within a maximum prescribed travel or driving time and is capable of initial fire suppression, emergency medical services, and/or mitigation.

**Emergency Operations Center (EOC):** A central location where those in authority congregate to allow for exchange of information and conduct face-to-face coordination in the making of decisions. The center, often referred to as the EOC, provides for centralized emergency management in major natural disaster and other emergencies.

**EMS:** Emergency Medical Services.

**Engines:** Basic firefighting vehicle equipped with a pump capable of supplying a minimum of 500 gallons per minute, fire hose, and a water tank.

**Evaluation:** Analysis and comparison of actual performance versus prior plan and stated goals and objectives. The systematic and thoughtful collection of information and decision making. Evaluation consists of having criteria, collecting evidence, and making judgments.

**Fire Company:** Assigned personnel, apparatus, and equipment.

**Fire Confined to Structure:** Responses to fire calls where the fire is contained to the structure or structures that were involved when the responding unit first arrived at the scene.

**Fire Crew:** Personnel assigned to an apparatus.

**Fire Out on Arrival:** Fire calls in which the fire that initiated the call is extinguished when the responding unit arrives at the scene.

**Fire Spread Beyond Structure:** Fire calls where the fire first spreads beyond the structure or structures that were involved when the responding unit arrived at the scene.

**Fire Pre-Plan:** Plan developed to identify hazardous building information and owner information, used during emergency incidents to determine the best course of mitigating an emergency.

**Fire Flow Available:** The amount of water available for firefighting on a continuous basis. The highest demand upon the water distribution system.

**Fire Flow Delivered:** The amount of water that can be delivered at the scene of an emergency. It is a combination of three factors: pump capacity available, hose and nozzle configurations, and staffing levels.

**Fire Flow Required or Estimated:** The quantity of water that should be available for a period of two to three hours at a minimum pressure of 20 psi in a water distribution system.

**Fire Protection Environment:** The conditions, circumstances, and influences under which a fire protection system must operate. It includes the population, the geographical area, land use, occupancy factors, weather conditions, structural and nonstructural physical situations, financial, political, legislative, and regulatory criteria.

**First Due Area:** The portion of a jurisdiction that each response company has been assigned to be the first unit to arrive at the scene of an emergency. Usually the first-in company is responsible for most activities in that area.

**First Responder:** A term used for the person who is trained and/or certified to be the first to arrive at a scene of a specific type of emergency, i.e. EMS or hazardous materials.

**Heavy Extrication:** Rescues of persons trapped in road, rail, air, and water vehicles, which require specialized tools and training.

**Insurance Services Offices (ISO):** A for-profit national organization that evaluates public fire protection and provides rating and classification information to insurance companies for a fee. Some insurers use this rating to set basic premiums for fire insurance.

**IAFC:** International Association of Fire Chiefs.

**IAFF:** International Association of Fire Fighters.

**IFSTA:** International Fire Service Training Association.

**ISFSI:** International Society of Fire Service Instructors.

**Jurisdiction:** A population area wherein there is clearly defined responsibility, based on statutory authority, to provide fire and/or emergency medical services.

**Ladder Truck:** Vehicles that carry a variety of equipment such as ladders, forcible entry tools and rescue equipment.

**Level of Service:** The resources needed to meet the stated service level objective(s). Level of service is defined only in terms of what is provided and not in terms of effectiveness or of quality.

**Median Age of Population:** The median age of the population as reported in the most recent census.

**Median Age of Residential Structures:** The median age of residential structures as reported in the most recent census.

**Median Household Income:** The median household income as reported by the U.S. Bureau of Labor Statistics for the most recent period reported.

**Minimum Staffing per Unit:** The minimum number of personnel assigned to staff each type of apparatus.

**NFPA:** National Fire Protection Association.

**NFPA Standards:** Standards published by the NFPA through the consensus process setting a recognized level of standard for fire service-related dimensions, services, installations, vehicles, or equipment specification.

**Non-Transport:** Responses in which no individuals are transported to a medical facility.

**Number of Population by Age:** The number of persons in each category within the service area as reported in the most recent census.

**Occupancy:** The classification given to a building in accordance with a specific building code.

**Occupancy Risk Assessment:** An assessment of the potential severity of a specific structure in relation to the fire agency's ability to handle the types and severity of emergencies within that structure. Occupancy risk assessment often includes classifying these risks into categories (See Risk Categories).

**Performance Indicator:** The desired level of achievement toward a given objective and the ability to demonstrate doing a particular task as specified in the Accreditation process.

**PSAP:** Public Safety Answering Point.

**Resource Exhaustion:** Resource exhaustion occurs when a system is out of resources for both initial response and to maintain an area-wide effective response force.

**Response:** A response to an incident regardless of the number of units or personnel required to respond.

**Response Reliability:** The probability that the required amount of staffing and apparatus that is regularly assigned will be available when a fire or emergency call is received, i.e. the percentage of time that all response units are available for a dispatch. When a response unit is unavailable, the response time to an emergency in their first due area will be longer, because a more distant unit will have to respond to the call. Response reliability is a statement of the probability that an effective response force may not be provided when a call is received.

**Response Time:** The total amount of time that elapses from the time that call is dispatched until the responding unit is on the scene of the emergency and prepared to control the situation. Response time is composed of several elements.

**Risk:** Exposure to a hazard based on the probability of an outcome when combined with a given situation with a specific vulnerability. The level of risk can be described as the probability of a specified loss over a given period of time. All structures, for example, are subject to destruction by fire; however, individual structures vary considerably as to the possibility of loss as a result of their construction, contents, and built-in protection.

## **Risk Categories:**

**Maximum/Worst Risk** - Occupancies classified as maximum risk will be of substantial size and contain a concentration of properties that present a very high risk of life loss, loss of economic value to the community or large loss damage to property in the event of fire. These risks frequently affect the need for the Fire Department to have multiple alarm capability and have an adequate assessment of their ability to concentrate resources.

**High Hazard Risks** - Built-up areas of substantial size with a concentration of property presenting a substantial risk of life loss, a severe financial impact on the community, or unusual potential damage to property in the event of fire.

**Special Risks** - These are areas that require a first due response over and above that appropriate to the risk. These areas should be treated as special risks, and given an appropriate predetermined response.

**Moderate Risk** - Built-up areas of average size, where the risk of life loss or damage to the property in the event of a fire in a single occupancy is usually limited to that occupancy. In certain areas, such as small apartment complexes, the risk of death or injury may be relatively high. The moderate/typical risks are often the greatest factor in determining fire station locations and staffing due to the frequency of emergencies in this category. To assure an equitable response and to provide adequate initial attack/rescue capability to the majority of incidents, the typical risk is often used in determining needed resources.

**Low Risk** - Small commercial structures that are remote from other buildings, detached residential garages and outbuildings.

**Remote and Isolated Rural Risks** - Areas may be classified as remote/isolated rural risks if they are isolated from any centers of population and contain few buildings; for example, rural land with no occupied structures or recreational areas.

**Residential Single-Family Dwelling Unit:** One family unit - house.

**Square Miles Served:** Number of square miles contained within the boundaries of the service area.

**Staffing:** The level of personnel assigned to perform the anticipated emergency tasks of a specific fire company for the risk identified in a given district or community. The number of personnel required to perform multiple emergency operations functions such as fire suppression versus EMS or hazardous materials operations.

**Standardization:** Standardization is a process by which a product or service is assessed against some standard, performance, or quality.

**Standard Operating Guideline (SOG):** A term used to describe written direction provided to personnel in a manual format.

**Transport:** Responses that result in one or more persons being transported to a medical facility.

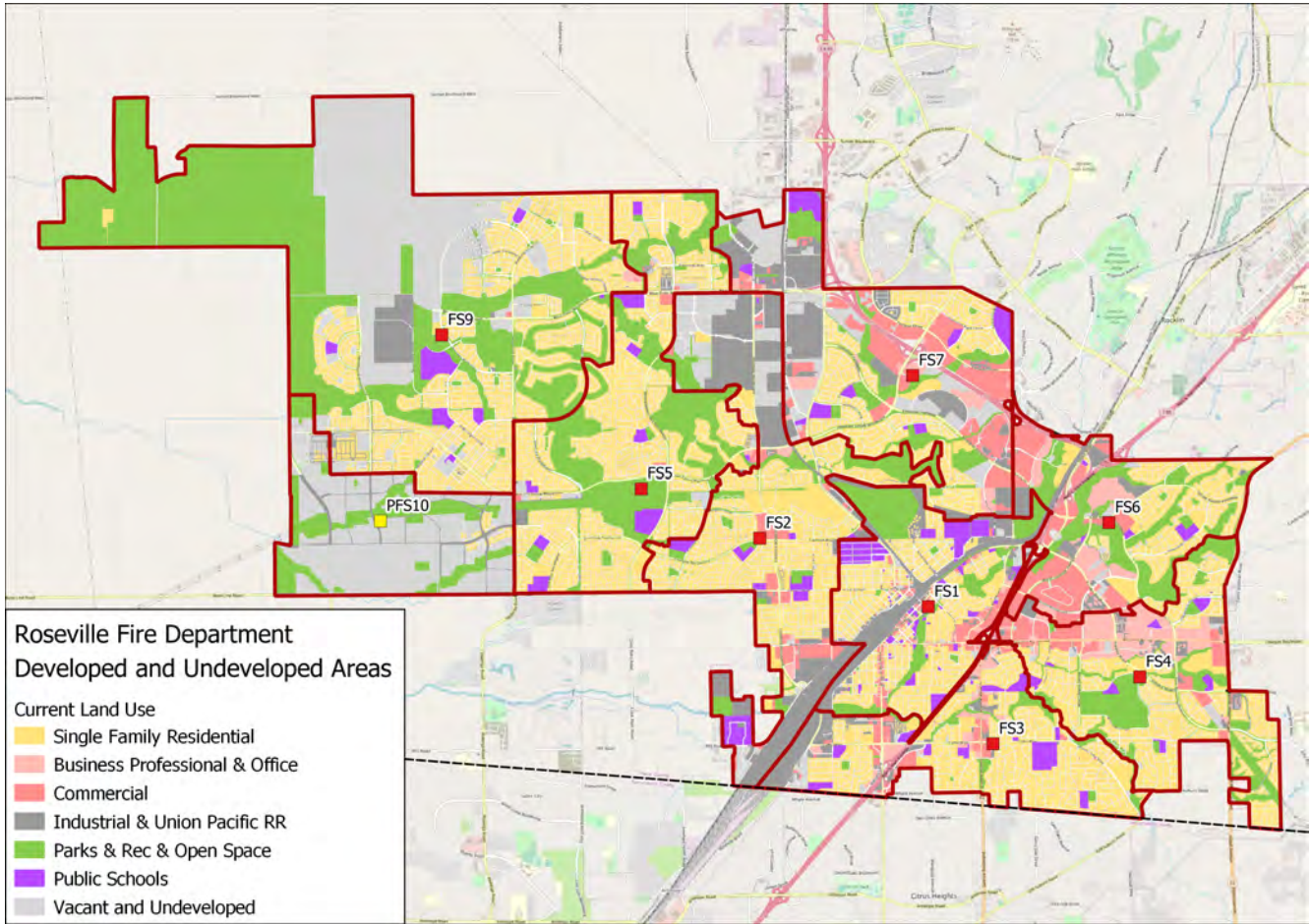
**Travel Time:** The portion of response time that is utilized by responding units to drive to the scene of the emergency. Travel time begins when assigned fire companies begin to actually drive to the emergency.

**Turnout Time:** The portion of response time when fire units are donning personal protective clothing and boarding their apparatus. The time begins once the units have been given their assignments and ends when they begin travel time.

**Water Rescue:** The rescue of persons trapped in rivers, lakes, pools, or flood-control waterway.

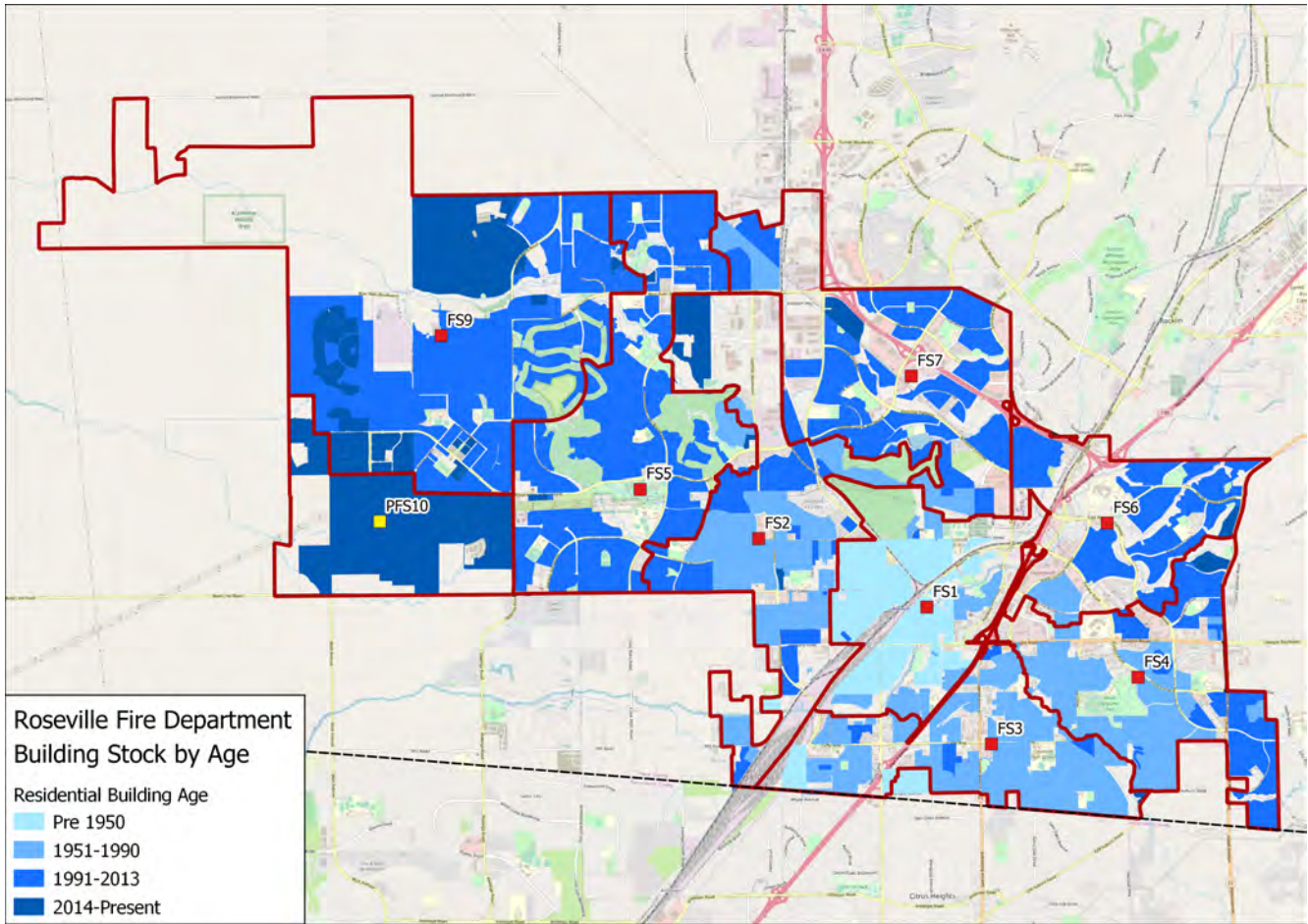
# APPENDIX B: MAPS

## Developed/Undeveloped Areas

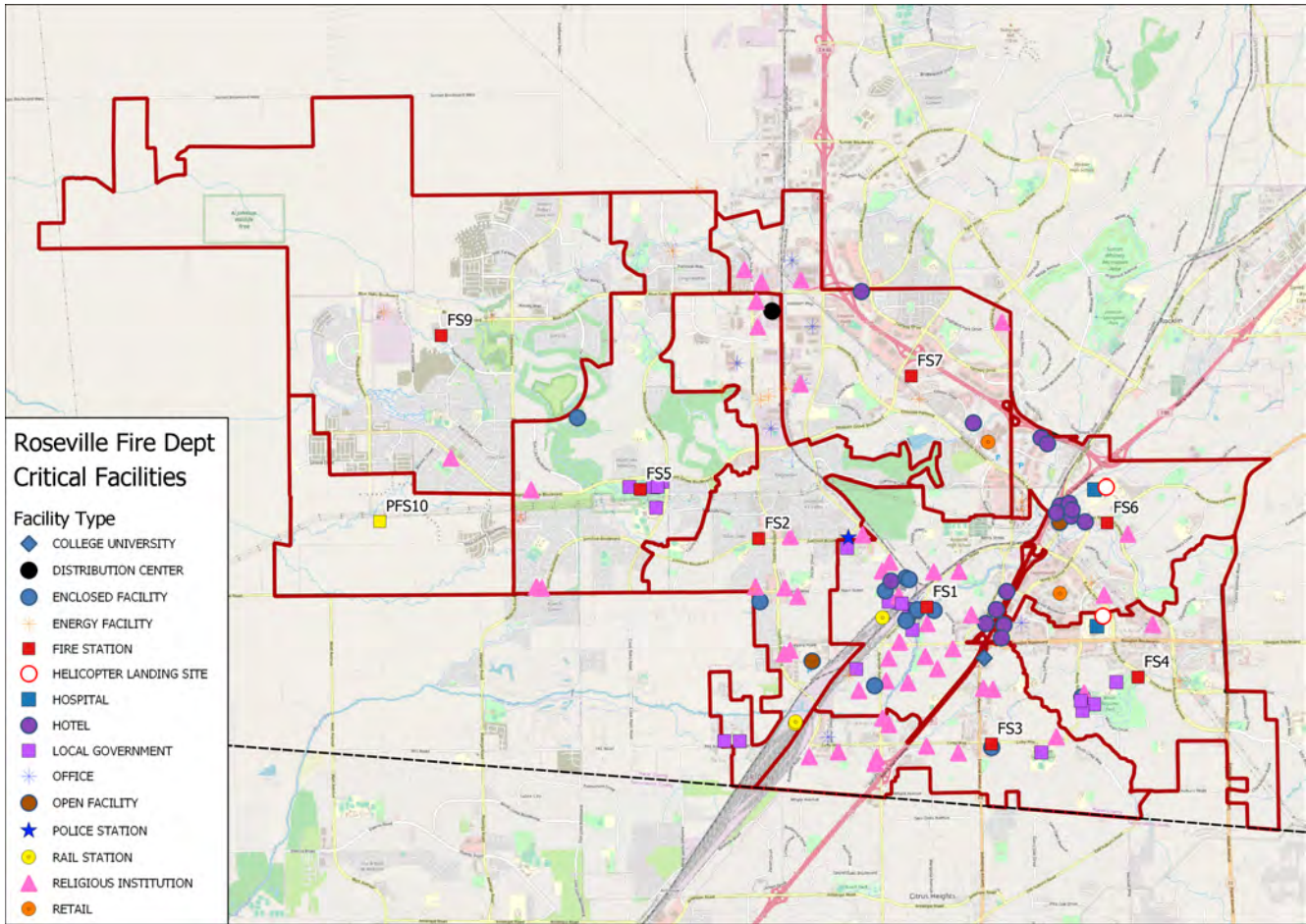




**Building Stock by Age**

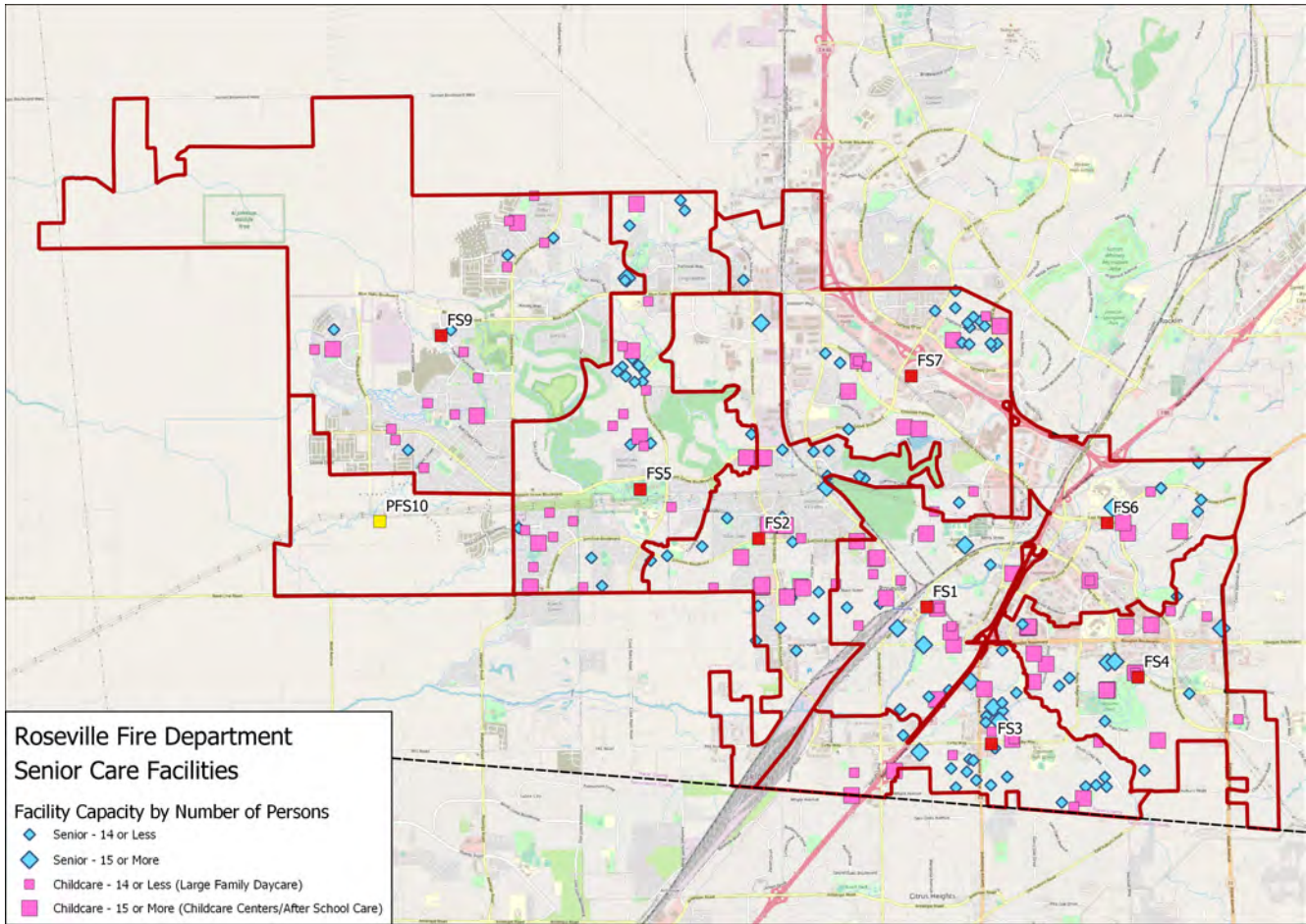


Critical Facilities

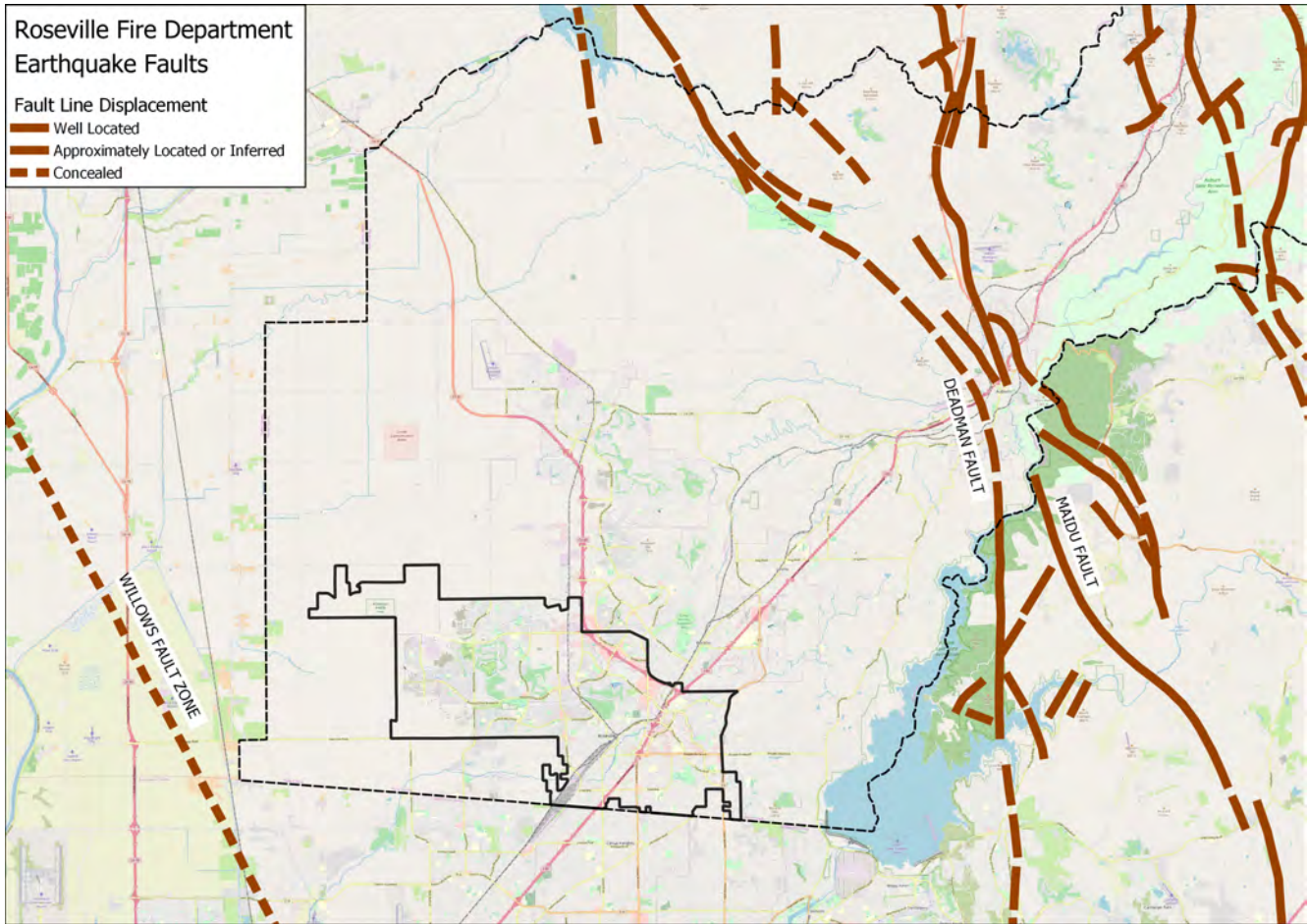




Senior Care Facilities

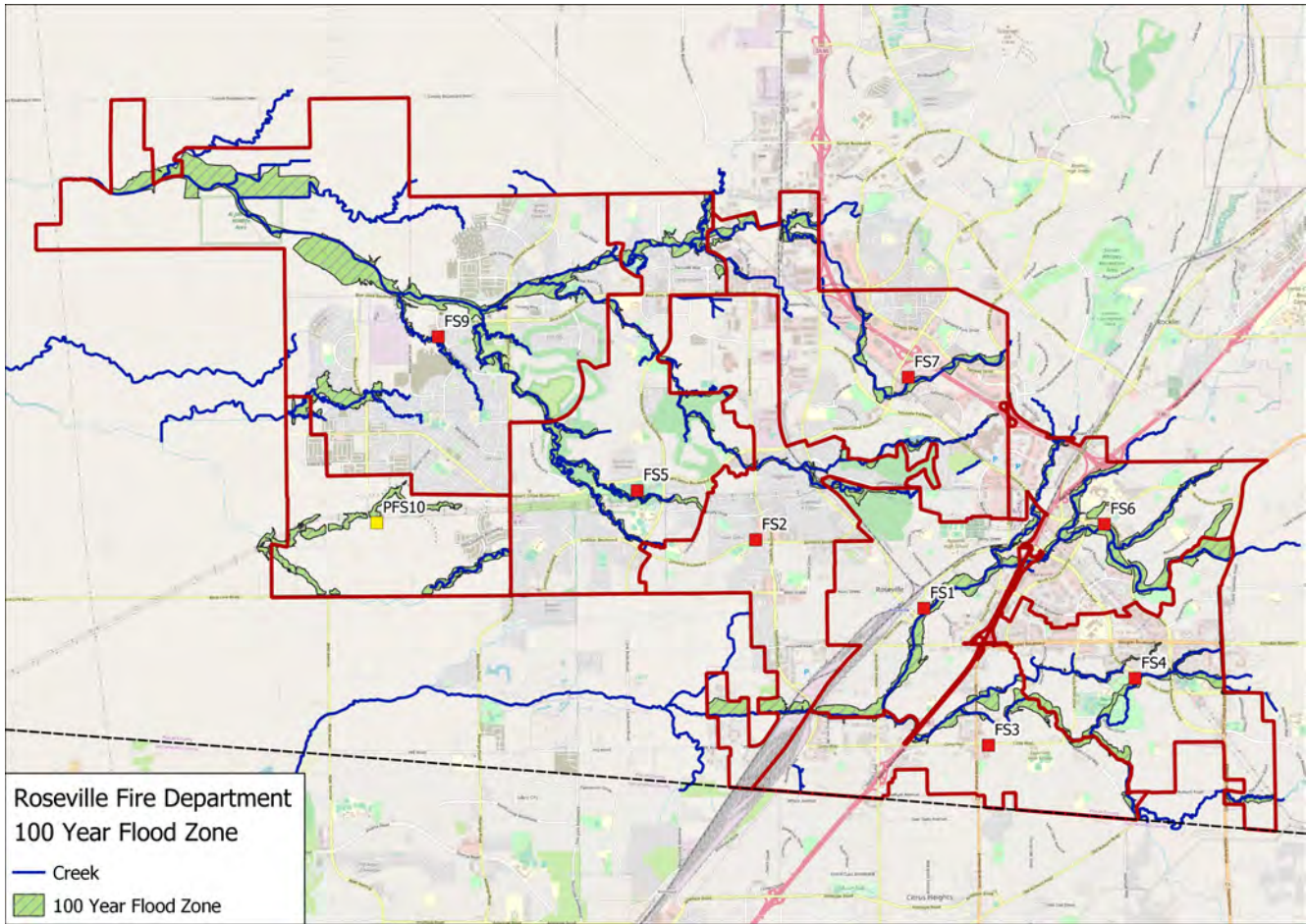


Earthquake Faults

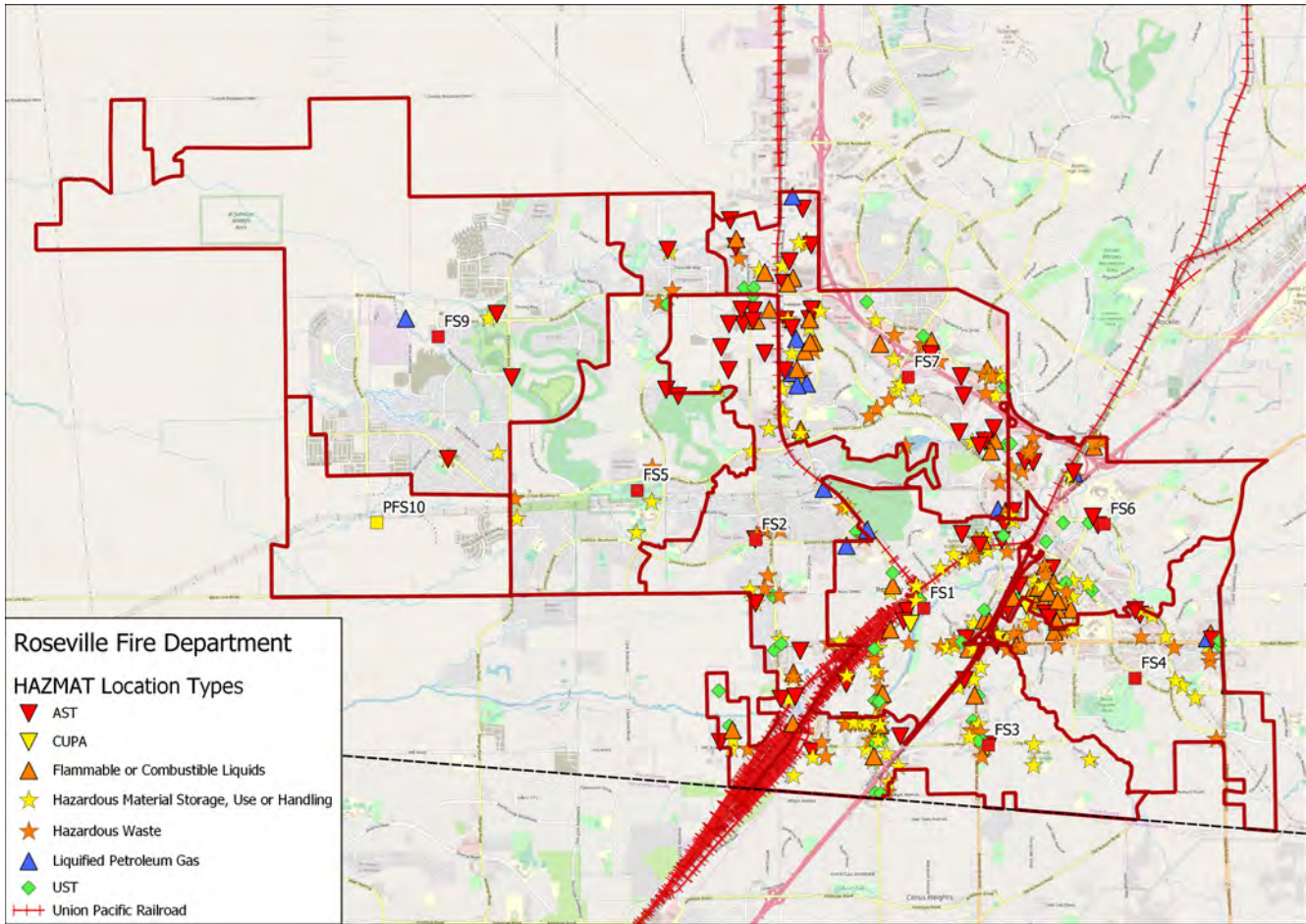




100 Year Flood Zone

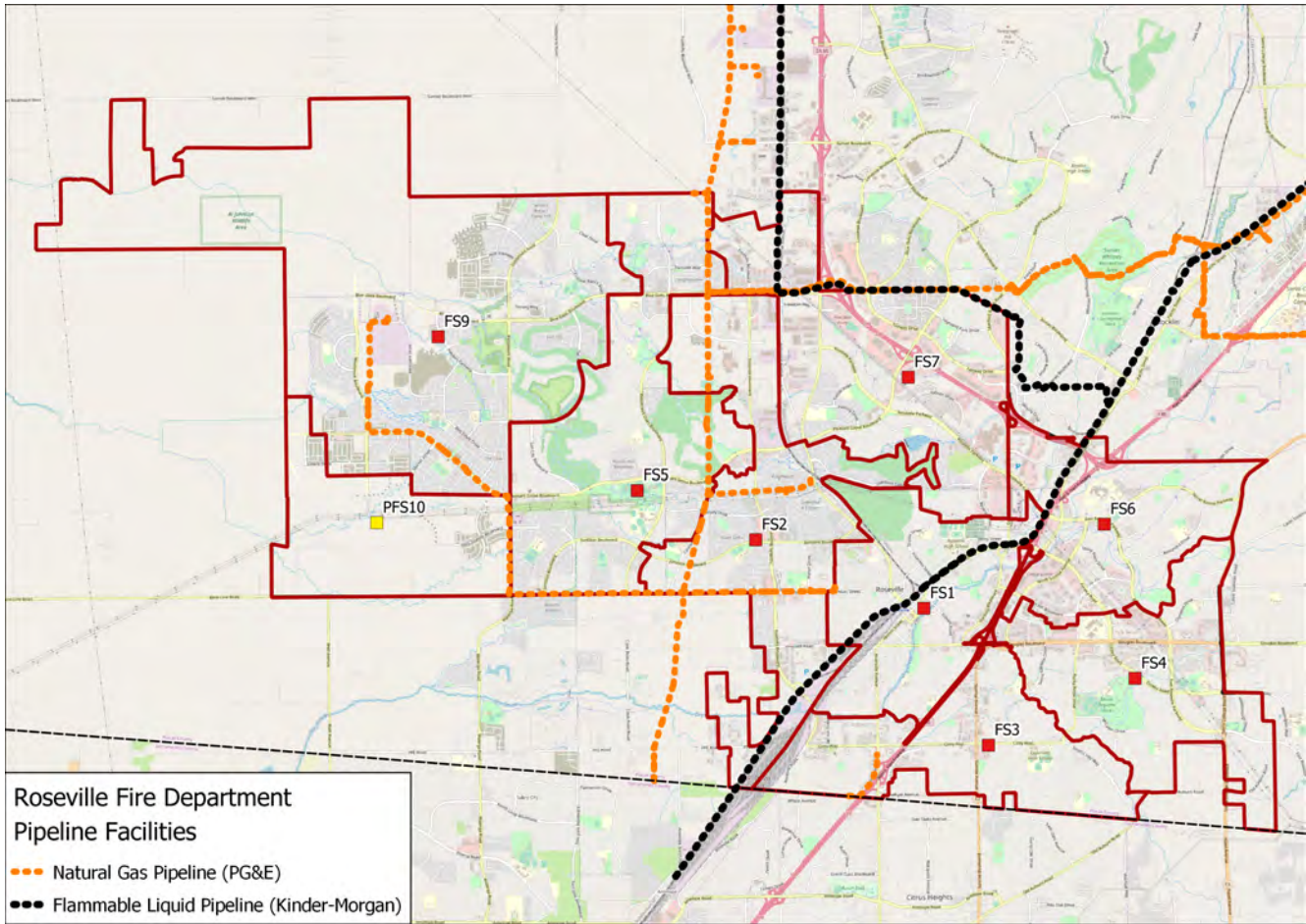


**Industrial Fixed Facilities HazMat**

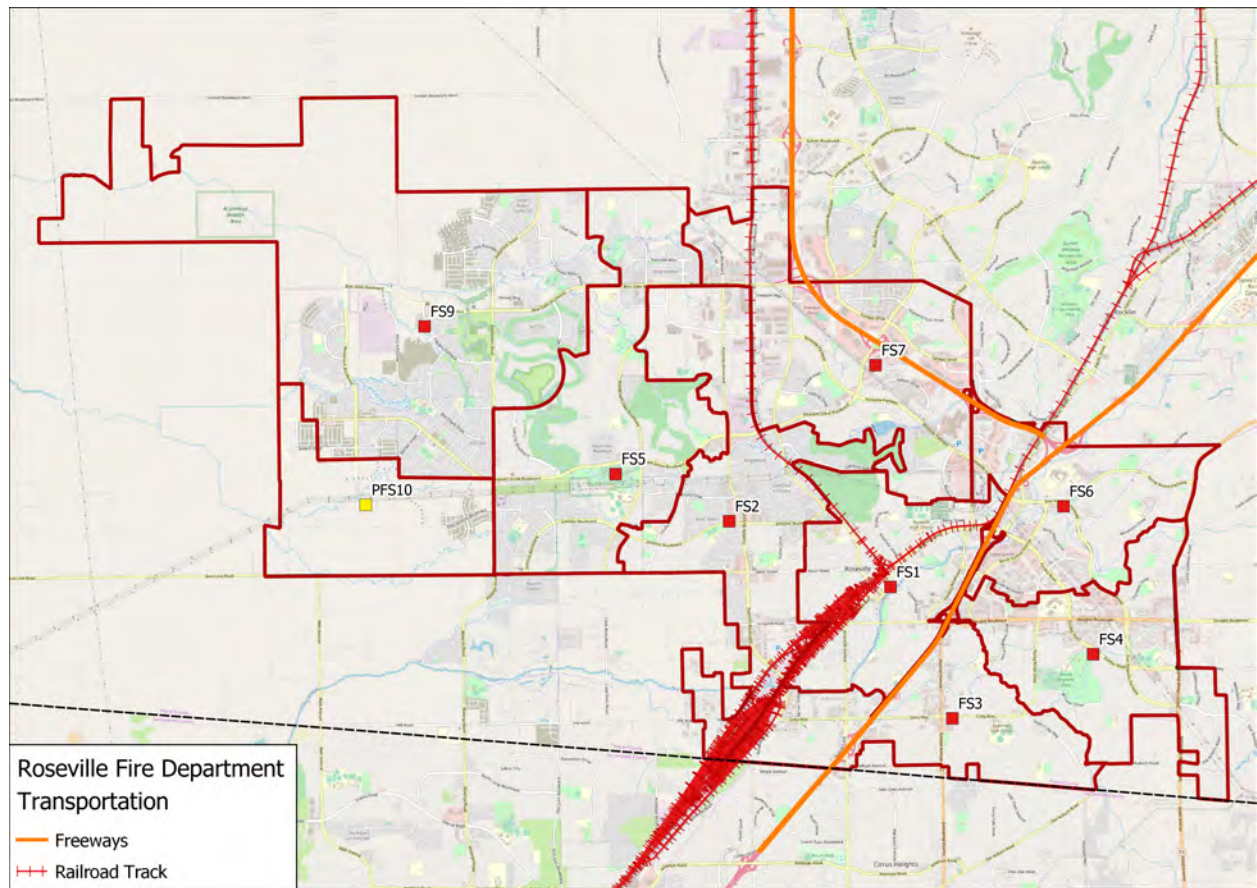




Pipeline Facilities



## Transportation







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February 2020

## FINAL Summary Report



**Roseville Fire Department  
Roseville, California**

*Prepared by:*



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# CONSULTANT REPORT

# Roseville Fire Department Executive Summary Report

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# EXECUTIVE SUMMARY

This comprehensive summary report includes an executive summary, a presentation slide deck, a quantitative data report, and a geographic information system report. In addition, a standalone Standards of Cover document has also been provided. Overall, the firm's strategy is to provide city and fire administrations with sufficient objective data from which to establish policy. Therefore, all alternatives and recommendations are grounded in the data analysis and best practices insulating the process from potential biases.

## Community Demands for Service

Commensurate with most communities that provide integrated fire and emergency medical services (EMS), requests for EMS are the majority of community driven incident activity. EMS accounts for 60.5% of the incident activity and 55.4% of all time on task. Fire related incidents account for 1.9% of the incidents but 10.7% of the overall time on task.

Of the *Fire* related activity, reports of wildland fires (3.9%), fire other (1.4%), and building fires (5.4%) account for 1.5% of the total community requests for service.

Combined, all RFD units made 20,847 responses, and were busy on calls (i.e., from dispatch to clear time) for a total of 6,624.4 hours in 2018 while handling a total of 16,908 unique incidents. Overall, average busy minutes per response was 19.3 minutes during 2018 but varied based on call type. The number of individual unit responses will also contribute to understanding total department workload, as 2,408 of 16,908 calls (14.2%) resulted in multiple RFD units responding. This accounts for approximately 46.4 calls per day with a year over year growth between 3% and 11.3% over the data range.

**Table 1: Number of Calls, Number of Responses, and Total Busy Time by Call Category**

| Call Category                                | Number of Calls <sup>1</sup> | Number of Responses <sup>2</sup> | Average Responses per Call | Responses with Time Data <sup>3</sup> | Total Busy Hours | Average Busy Minutes per Response | Percentage of Total Busy Hours |
|----------------------------------------------|------------------------------|----------------------------------|----------------------------|---------------------------------------|------------------|-----------------------------------|--------------------------------|
| <b>EMS</b>                                   | <b>10,244</b>                | <b>11,101</b>                    | <b>1.1</b>                 | <b>10,976</b>                         | <b>3,671.3</b>   | <b>20.1</b>                       | <b>55.4</b>                    |
| <b>False Alarm &amp; False Call</b>          | <b>739</b>                   | <b>1,024</b>                     | <b>1.4</b>                 | <b>1,008</b>                          | <b>261.5</b>     | <b>15.6</b>                       | <b>3.9</b>                     |
| Fire (Not Building or Wildland)              | 92                           | 235                              | 2.6                        | 233                                   | 90.5             | 23.3                              | 1.4                            |
| Building Fire                                | 130                          | 511                              | 3.9                        | 506                                   | 357.7            | 42.4                              | 5.4                            |
| Wildland Fire                                | 103                          | 365                              | 3.5                        | 359                                   | 261.3            | 43.7                              | 3.9                            |
| <b>Fire (All)</b>                            | <b>325</b>                   | <b>1,111</b>                     | <b>3.4</b>                 | <b>1,098</b>                          | <b>709.5</b>     | <b>38.8</b>                       | <b>10.7</b>                    |
| <b>Good Intent Call</b>                      | <b>2,583</b>                 | <b>3,235</b>                     | <b>1.3</b>                 | <b>3,190</b>                          | <b>459.4</b>     | <b>8.6</b>                        | <b>6.9</b>                     |
| <b>Hazardous Conditions (No Fire)</b>        | <b>261</b>                   | <b>625</b>                       | <b>2.4</b>                 | <b>601</b>                            | <b>279.5</b>     | <b>27.9</b>                       | <b>4.2</b>                     |
| <b>Rescue</b>                                | <b>925</b>                   | <b>1,528</b>                     | <b>1.7</b>                 | <b>1,499</b>                          | <b>544.9</b>     | <b>21.8</b>                       | <b>8.2</b>                     |
| <b>Service Call</b>                          | <b>1,799</b>                 | <b>2,182</b>                     | <b>1.2</b>                 | <b>2,133</b>                          | <b>690.0</b>     | <b>19.4</b>                       | <b>10.4</b>                    |
| <b>Severe Weather &amp; Natural Disaster</b> | <b>3</b>                     | <b>5</b>                         | <b>1.7</b>                 | <b>5</b>                              | <b>3.3</b>       | <b>39.8</b>                       | <b>0.1</b>                     |
| <b>Special Incident Type</b>                 | <b>29</b>                    | <b>36</b>                        | <b>1.2</b>                 | <b>36</b>                             | <b>5.0</b>       | <b>8.4</b>                        | <b>0.1</b>                     |
| <b>Total</b>                                 | <b>16,908</b>                | <b>20,847</b>                    | <b>1.2</b>                 | <b>20,546</b>                         | <b>6,624.4</b>   | <b>19.3</b>                       | <b>100.0</b>                   |

<sup>1</sup>“Number of Calls” reflects an adjusted number of unique incidents to correspond with responses made by RFD units.

<sup>2</sup>“Number of Responses” reflects the total number of entries in the unit-level data file, regardless of calculated busy time.

<sup>3</sup>“Responses with Time Data” reflects the number of responses in the unit-level data file with calculated busy time not otherwise missing or excluded (see Appendix).

**Observation:**

The department is sending a single resource to nearly all EMS incidents and has an overall department average of 1.2 units per response. Understanding that the department does not transport, this is a minimal and efficient use of resources, particularly for EMS related incidents.

**Observation:**

Utilization of Medical Priority Dispatch (MPDS) would allow the department the confidence to better align resource allocation to the severity of risk. However, the cost avoidance strategy at this point could be in conflict with the department’s desire to seek alternative revenue sources for providing first response for EMS incidents.

**Observation:**

In 2018, the average busy minutes per response for RFD was 19.3 minutes from dispatch to available.

**Recommendation:**

It is recommended that the department utilize MPDS as a risk management tool to expand the use of non-emergency responses. This reduces risk to both the first responders as well as the public.

## Historical Performance

The Roseville Fire Department currently operates from eight fixed facility fire stations and has a travel time of 5.5 minutes overall. EMS related incidents have a 5.4-minute travel time or less and all fire related incidents have a 6.0-minute travel time or less for 90 percent of the incidents. In other words, 9 out of 10 times, the department will provide this level of service or better.

**Table 2: 90th Percentile First Arrival Performance in Minutes by Demand Zone**

| Demand Zone              | Dispatch Time | Turnout Time | Travel Time | Response Time |
|--------------------------|---------------|--------------|-------------|---------------|
| Station 1                | 3.2           | 2.3          | 4.3         | 7.6           |
| Station 2                | 2.2           | 2.3          | 5.1         | 8.2           |
| Station 3                | 2.2           | 2.0          | 5.0         | 7.8           |
| Station 4                | 2.2           | 2.2          | 4.9         | 7.8           |
| Station 5                | 2.0           | 2.3          | 5.8         | 8.7           |
| Station 6                | 2.4           | 2.1          | 5.5         | 8.8           |
| Station 7                | 2.7           | 2.4          | 6.0         | 9.3           |
| Station 9                | 1.9           | 2.3          | 6.3         | 9.3           |
| <b>Total<sup>1</sup></b> | <b>2.4</b>    | <b>2.2</b>   | <b>5.5</b>  | <b>8.6</b>    |

<sup>1</sup>Metrics associated with unknown first due stations (demand zones) are included in the total values but are not presented separately in the table.

### Dispatch Time

Dispatch time is measured from the “first keystroke” in the dispatch center when the 911 call is created in CAD until the time that the fire department units are dispatched to the emergency. When utilizing the effective dispatch time associated with the first arriving unit, the dispatch time was 2.4 minutes at the 90<sup>th</sup> percentile.

However, dispatch time was specifically evaluated as the first dispatched unit, irrespective of the first arriving units’ status. This evaluation reduced the 90<sup>th</sup> percentile dispatch time to 2.0 minutes and is at the upper threshold of the national experience. The national consensus standards associated with NFPA 1221 and 1710 would suggest a dispatch interval of 1.0 to approximately 1.5 minutes depending on the year of the standard and whether medical priority dispatching is utilized. This is more restrictive than most communication centers actualized performance. In our experience quality communication centers are performing at 2.0 minutes or

less at the 90<sup>th</sup> percentile. Therefore, Roseville is providing quality services, but is at the upper threshold of the national experience and may benefit from examining opportunities for incremental improvements.

**Observation:**

The dispatch time is at the upper threshold of 2.0 minutes for 90<sup>th</sup> percentile dispatch interval. Opportunities for incremental improvements may be available.

**Turnout Time**

Turnout time is defined as the time from when the units are notified of an incident by the dispatch center until the unit identifies that it is enroute to the call. It is highly recommended to maximize turnout time as it is largely a no-cost option under management control to realize improved total response time and efficiency.

National recommendations provide differentiation between EMS and fire/special operations incidents. For example, the best practice for an EMS incident is a turnout time of 60 seconds or less 90% of the time. Due to the necessity to don personal protective equipment prior to responding to fire related incidents, best practices provide either 80 seconds (NFPA) or 90 seconds (CFAI) or less at the 90<sup>th</sup> percentile for turnout times associated with fire calls. Therefore, turnout and travel times were reported by the major program areas of EMS and fire. The EMS performance is at 2.2 minutes and fire (all) is reported at 2.4 minutes, at the 90<sup>th</sup> percentiles, respectively.

**Observation:**

The turnout time is not well aligned with national best practices of 1 minute for EMS incidents and 1.5 minutes for fire related incidents.

**Recommendation:**

It is recommended that the department work to align turnout time with best practices.

**Travel Time**

Travel time is defined as the time from when the units report enroute, or driving to the incident location, until they arrive at the intended location. When examining the individual station performances, the travel time varies between a low of 4.3 minutes from Station 1 to 6.3 minutes for Station 9. The overall observed travel time in 2018 was 5.5 minutes for the City of Roseville.

Similar to the discussion on dispatch time, the NFPA 1710 recommendation is a 4.0-minute travel time at the 90<sup>th</sup> percentile. The Commission on Fire Accreditation International (CFAI) recognizes a baseline performance of 5.2 minutes at the 90<sup>th</sup> percentile. It is extremely rare for an agency to meet the more restrictive NFPA 1710 standard, but the fire department is well aligned with the suggested baseline performance from the CFAI and is aligned with the observed national experience.



**Observation:**

The travel time is excellent and within the national experience. It is common for urban/suburban areas to perform between 5 and 8 minutes at the 90<sup>th</sup> percentile.

**Observation:**

The travel time for Station 9 is the longest in the City's system. This may be directly related to the fact that Station 9 is covering the geographic area associated with the proposed Station 8 location.

## **System Resiliency**

The system design was evaluated to determine if any efficiencies or service gaps existed. Overall, the system is very robust and has good station reliability, low call concurrency, high resiliency, and quality response times. Response times were evaluated and discussed previously.

### **Reliability**

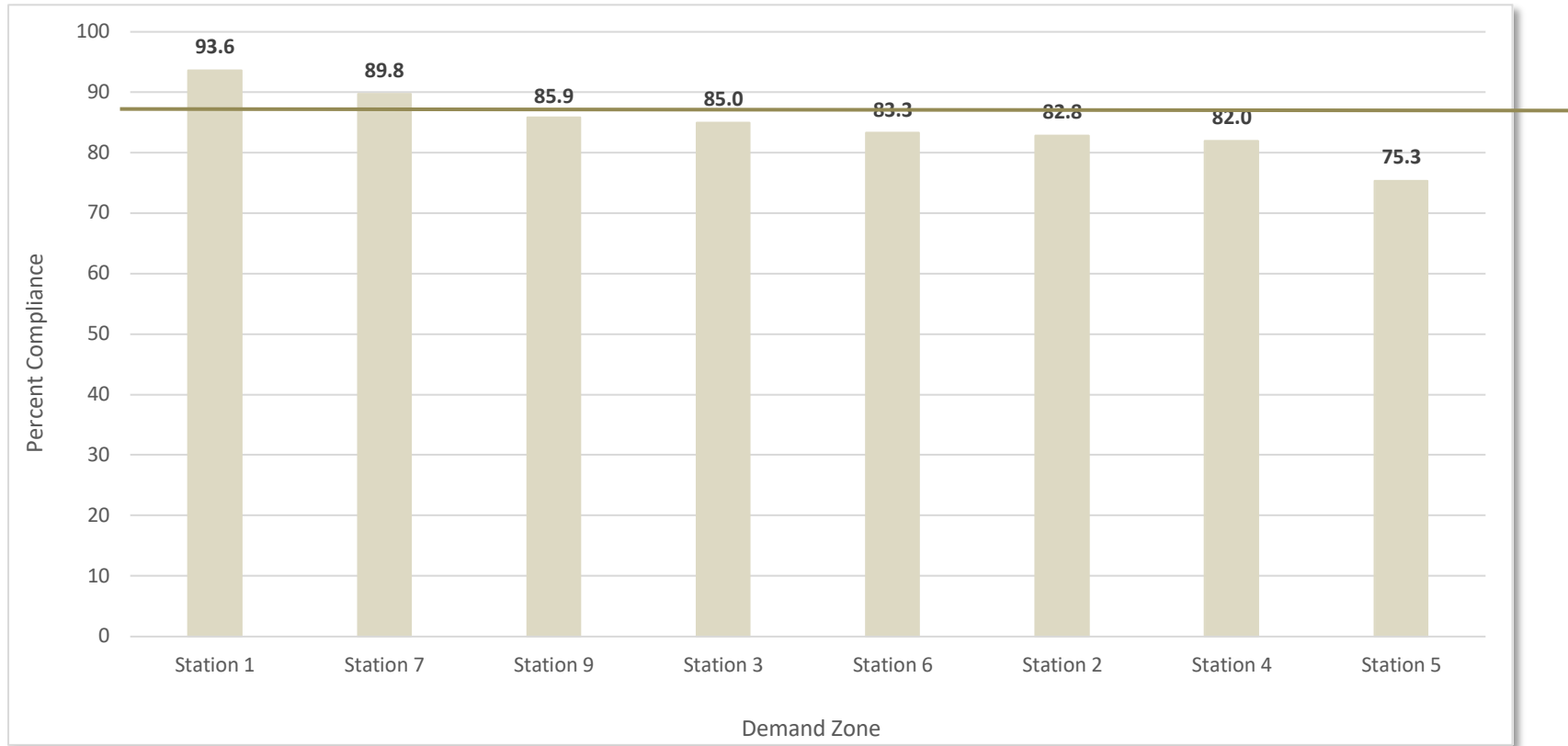
The reliability of the distribution model is a factor of how often the response model is available and able to respond to a call within the assigned demand zone. This analysis utilized all dispatched calls within RFD's demand zones, and performance included responses from any unit in RFD's department. Units assigned to all stations responded to calls within their respective demand zones  $\geq 82\%$  of the time, with the exception of Station 5. Units assigned to Station 1 achieved the highest percent compliance at 93.6 and Station 5 were the lowest at 75.3%.

Reliability is a surrogate measure for the assumption that the assigned station is always the closest station to the incident. A limitation of this analysis is that management decisions can influence the analyses. For example, if Station 5 is more frequently utilized to cover for training, physicals, and other activities that take units out of service throughout a shift, then the reliability will be negatively impacted as compared to other stations.

There is no national recommendation for the reliability of a station, and as such, a system of measures is recommended to ensure that any individual measure is evaluated within the context of the systems performance. For example, even though Station 5 is the lowest reliability at approximately 75%, the travel time performance in Station 5's area is better than both Stations 7 and 9 with reliability ratings of 89.8% and 85.9%, respectively.

Finally, since reliability is intended as surrogate measure for the closest station, the implementation of Automatic Vehicle Location (AVL) closest unit dispatching has, and will, eliminate any intended significance of "Reliability" as a measure. Therefore, the department should decide if there is any other intrinsic value of keeping the measure and defer to a system of measures as recommended.

**Figure 1: Percentage of First Due Compliance by Demand Zone**



**Observation:**

With the exception of Station 5, all stations have  $\geq 82\%$  reliability that the unit assigned to the station is available and responded to the call in their respective station area.

**Recommendation:**

The department should evaluate the efficacy of continuing to utilize Reliability as a useful measure now that the department has implemented the best practice of AVL closest unit dispatching.

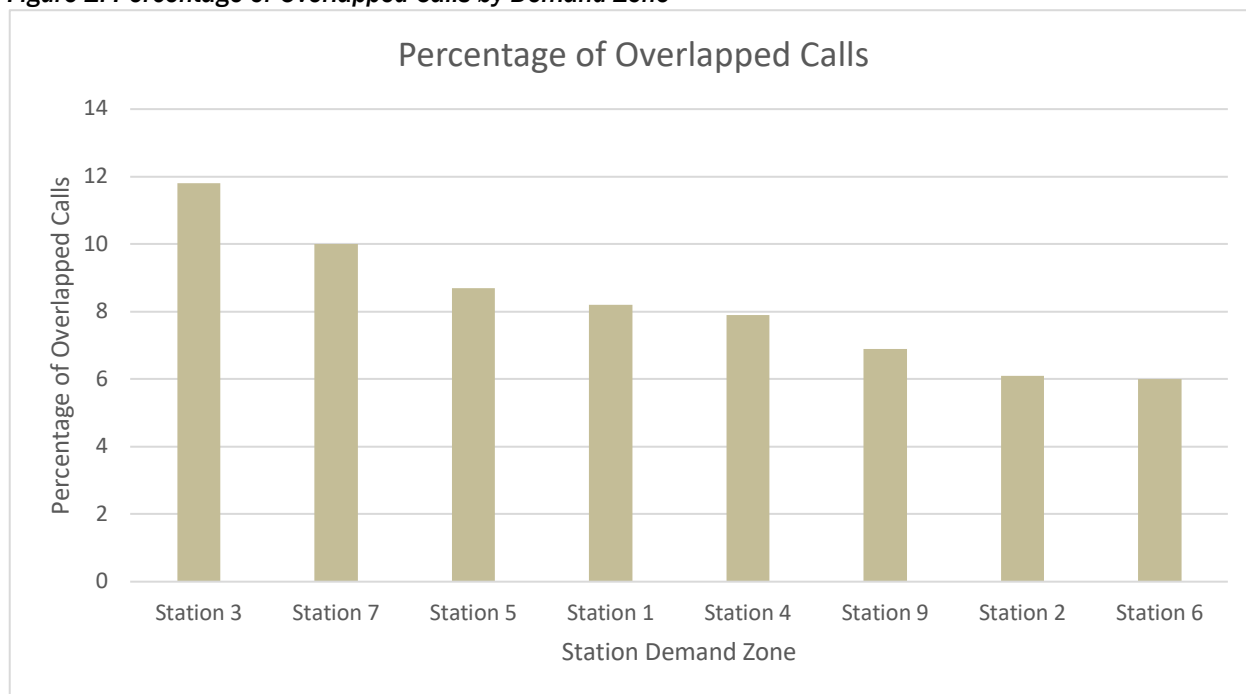
### **Overlapped or Simultaneous Call Analysis**

Overlapped or simultaneous calls are defined as another call being received in a demand zone or for a first due station while one or more calls are already ongoing for the same demand zone or first due station. For example, if there is an ongoing call in Station 6's zone wherein all units have not yet been cleared, and another request for service occurs in Station 6's zone, those two calls would be captured as overlapped calls.

Understanding the percentage of overlapped calls will help to determine the number of units to staff for each station. In general, the larger the call volume for a demand zone or first due station, the greater the likelihood of overlapped calls occurring. The distribution of the demand throughout the day will impact the chance of having overlapped calls. Additionally, the duration of a call plays a significant role; the longer it takes to clear a request, the greater the likelihood of having an overlapping request.

Station 3's demand zone had the highest percentage of overlapped calls during 2018 for overall calls (11.8%) and for EMS calls (8.6%). Station 1's demand zone had the highest percentage of overlapped calls during 2018 classified as fire calls (0.7%). Across all stations, there is greater than an 88% chance that the first call can be dispatched, handled, and the unit return to service prior to a second or greater call occurring within the same station area.

**Figure 2: Percentage of Overlapped Calls by Demand Zone**



#### **Observation:**

Across all stations, there is greater than an 88% chance that the first call can be dispatched, handled, and the unit return to service prior to a second or greater call occurring within the same station area.

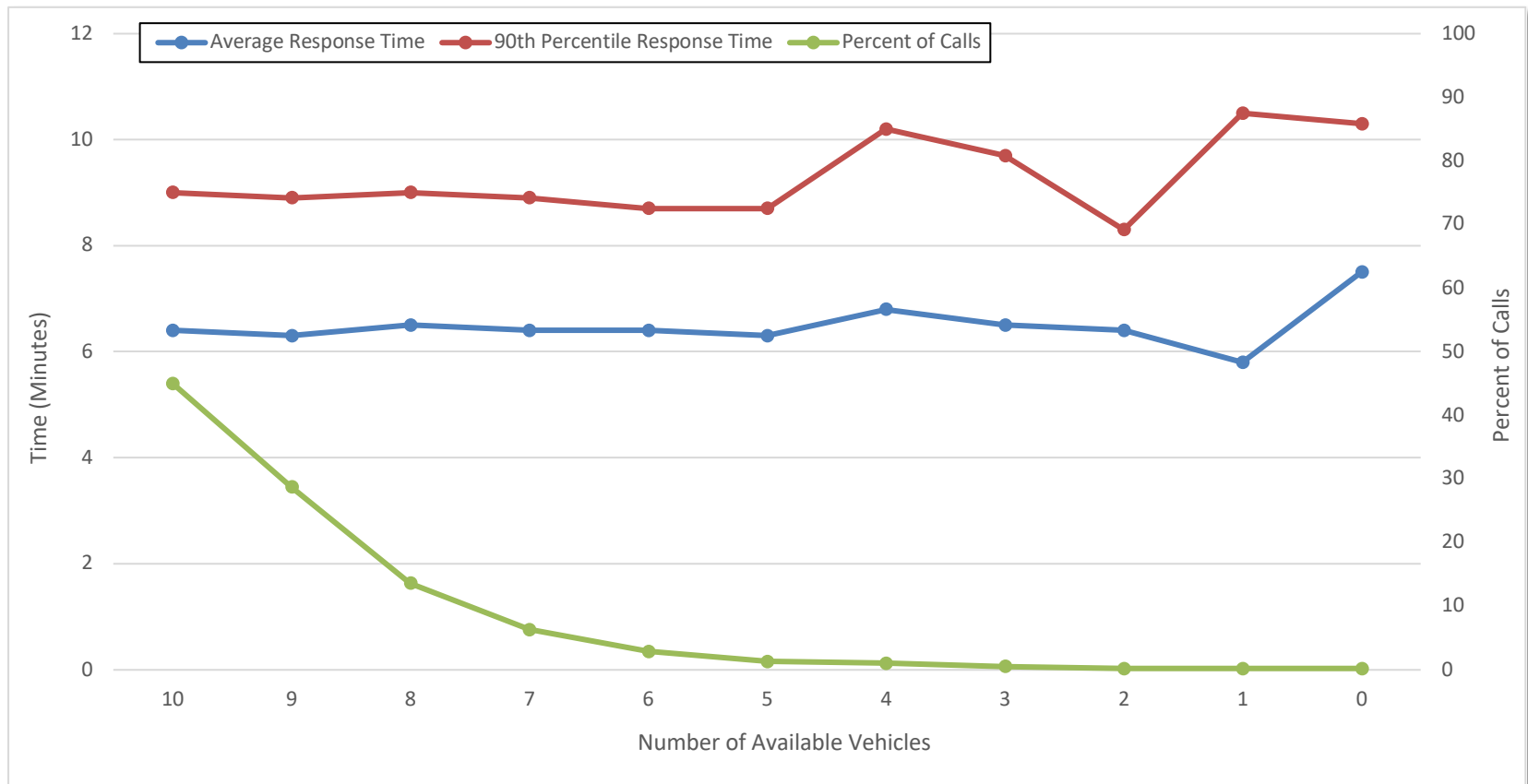
**Observation:**

Across all stations, there is greater than a 99% chance that the first fire related call can be dispatched, handled, and the unit return to service prior to a second or greater call occurring within the same station area.

### System Resiliency

Analyses were completed to measure the relative impact to response time in relation to the number of available units. The green line is the number of available units, and the see-saw nature is the fact that two units are dispatched to nearly every incident. The blue line is the average response time and the red line is the 90<sup>th</sup> percentile. Total response time varies by less than 18 seconds between 10 units and 5 units available at the 90<sup>th</sup> percentile. The total variance between all 10 units available (9.0 minutes) and 1 unit available (10.5 minutes) is 1.5 minutes at the 90<sup>th</sup> percentile.

**Figure 3: Average and 90<sup>th</sup> Percentile Response Times by Number of Available Vehicles**



**Observation:**

The model is robust and has considerable resiliency in the system as response times are minimally impacted at the system level.

**Observation:**

The system is highly resilient as a substantive increase in response time does not occur until there are 4 or less units available left in the system.

**Recommendation:**

The department may improve the overall system performance when units are depleted due to high call activity by adopting the recommended move-up plan provided.

**Observation:**

Overall, 45% of the time when a call occurs, all 10 resources were available.

**Observation:**

Overall, 93.6% of the time when a call occurs, all seven or more resources were available.

## Community Risk Assessment

In addition to the historical demands for services, a prospective review of occupancies within the jurisdiction was completed. Occupancy risk was evaluated across the jurisdiction utilizing data provided by the Insurance Services Office (ISO) that independently rates buildings within the community.

The occupancy level risk assessment process utilized the following variables:

- Needed Fire Flow
- Presence of a Sprinkler Systems
- Construction Classification Type
- Building Combustion Classification
- Number of Stories
- Total Square Footage

The risk ratings were moderated if the building had an automatic sprinkler system. Ultimately, a risk-rating matrix was developed that categorized 1,060 occupancies within the jurisdiction into high, moderate, and low risks.

Due to the relatively higher demands for personnel and apparatus required for fire events that have occupancy classifications deemed high risk, these risks garnished the highest ratings. Conversely, the presence of an automatic sprinkler system elicited a moderating value. In this manner, the fact that 96% of the fires are controlled with sprinkler activation is included into the matrix for a more realistic risk factor rating. The results of the risk assessment process categorized the 1,060 occupancies into 23 high-risk structures, 869 moderate structures, and 168 low risk structures.

The variables included in the risk matrix are the demand for services for each station demand zone, the number of high- and moderate-risk occupancies, and the impact of simultaneous events in each station demand zone. All measures were weighted equally, however, two variables have surrogate relationships with historical community demands and one variable is dedicated to prospective occupancy risk. Community demands were rated more heavily in an effort to provide a realistic balance between the potential risk and historical experience. The risk tool and the scoring template are provided below.

**Table 3: Station Demand Zone Risk Concentration Matrix**

| Station Demand Zone | Community Demand | Call Concurrence | High/Moderate Risk Occupancies | Total risk Score | Risk Rating |
|---------------------|------------------|------------------|--------------------------------|------------------|-------------|
| 1                   | 6                | 3                | 5                              | 26.92            | Moderate    |
| 2                   | 4                | 2                | 1                              | 6.48             | Low         |
| 3                   | 5                | 4                | 4                              | 22.98            | Moderate    |
| 4                   | 4                | 3                | 2                              | 11.05            | Low         |
| 5                   | 4                | 3                | 1                              | 9.19             | Low         |
| 6                   | 4                | 2                | 4                              | 13.86            | Low         |
| 7                   | 5                | 3                | 4                              | 19.61            | Moderate    |
| 9                   | 4                | 2                | 1                              | 6.48             | Low         |

**Observation:**

Overall, the risk assessment identified that the majority of station demand zones are of low risk (stations 2, 4, 5, 6, and 9) and three moderate risk stations (stations 1, 3, and 7).

**Recommendation:**

The department should identify the desired variables to utilize in a similar process in an ongoing manner that is supported by internal occupancy data such as inspection records. In this manner, the department would have a sustainable and proprietary data as opposed to relying on a sample of buildings provided by an outside partner.

## Establishing Desired Performance

The fire department's current performance is defined as a travel time of 5.5 minutes or less to 90% of the incidents. This is well aligned with the National Fire Protection Association's (NFPA) 1710 recommendations of 4-minutes or the Commission on Fire Accreditation International's (CFAI) recommendation of 5-minutes and 12-seconds.

Conversely, the evidenced-based research in emergency medical services and fire behavior suggests that if the agency cannot respond to the most critical of incidents within 5-minutes or

less from onset, the outcome is not strictly correlated to the response time. Therefore, the City has considerable latitude in establishing the desired service levels.

This study recognizes that the travel time of approximately 5.5-minutes is well-aligned with other larger urban/metropolitan fire department agencies and remains a local policy choice. Therefore, analyses focused on optimizing efficiencies within the context of maintaining the quality performance currently provided.

**Observation:**

The current performance of 5.5 minutes is well aligned with CFAI suggested response performance for a metro/urban population density. In addition, this performance is within the observed national experience of between 5 and 8 minutes.

**Observation:**

The implementation of Station 8 and the relocation of Station 5 will improve service to 5.0 minutes.

## Workload

A measure of time on task, is necessary to evaluate best practices in efficient system delivery and consider the impact workload has on personnel. Unit Hour Utilization (UHU) values represent the proportion of the work period (24 hours) that is utilized responding to requests for service.

Historically, the International Association of Fire Fighters (IAFF) has recommended that 24-hour units utilize 0.30, or 30% workload as an upper threshold.<sup>1</sup> In other words, this recommendation would have personnel spend no more than 7.2 hours per day on emergency incidents. These thresholds take into consideration the necessity to accomplish non-emergency activities such as training, health and wellness, public education, and fire inspections. The 4th edition of the IAFF EMS Guidebook no longer specifically identifies an upper threshold. However, *FITCH* recommends that an upper unit utilization threshold of approximately 0.30, or 30%, would be considered best practice. In other words, units and personnel should not exceed 30%, or 7.2 hours, of their workday responding to calls. These recommendations are also validated in the literature. For example, in their review of the City of Rolling Meadows, the Illinois Fire Chiefs Association utilized a UHU threshold of 0.30 as an indication to add additional resources.<sup>2</sup> Similarly, in a standards of cover study facilitated by the Center for Public Safety Excellence, the Castle Rock Fire and Rescue Department utilizes a UHU of 0.30 as the upper limit in their standards of cover due to the necessity to accomplish other non-emergency activities.<sup>3</sup>

All Roseville units had UHU values below 0.11, or approximately 2.64 hours per day on 911 related activity. Therefore, considerable capacity exists within the system.

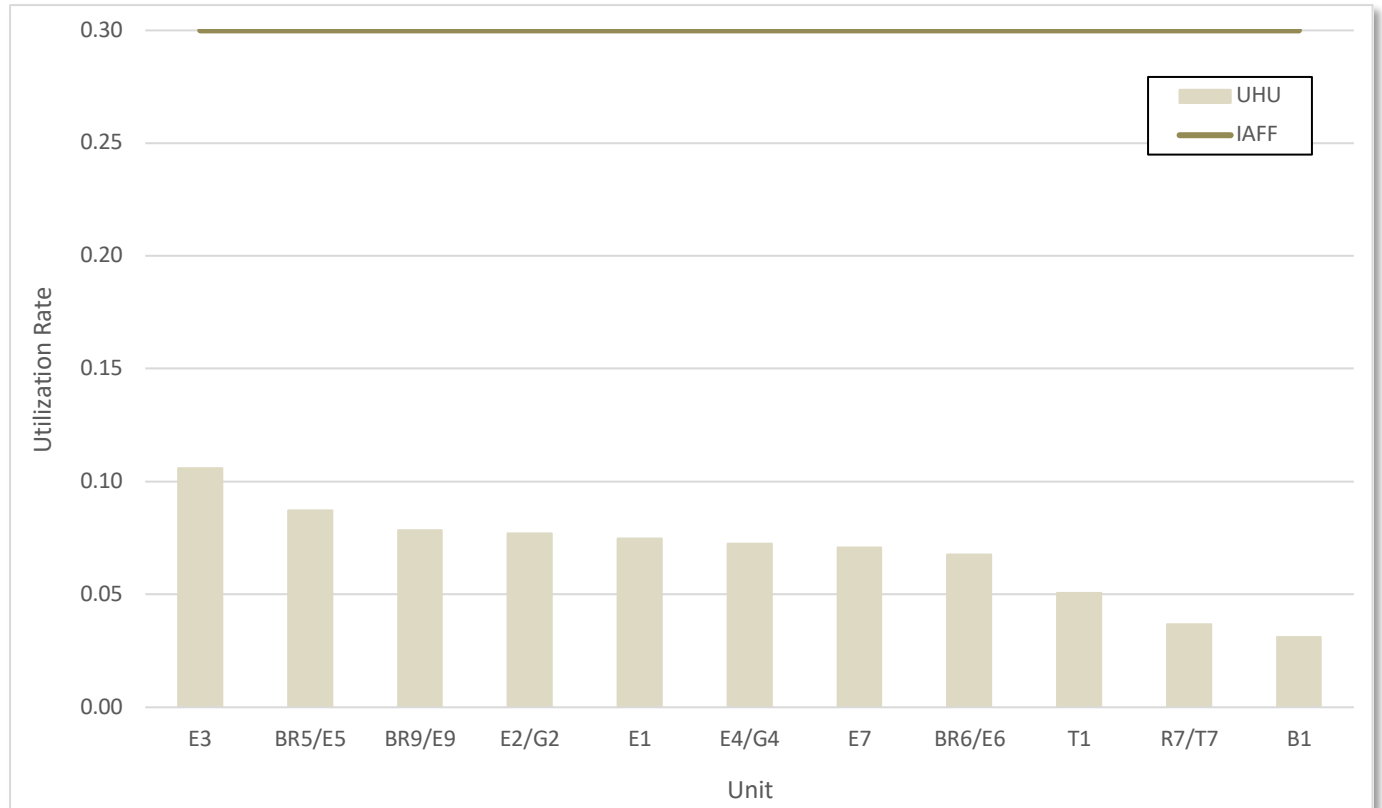
<sup>1</sup> International Association of Firefighters. (1995). *Emergency Medical Services: A Guidebook for Fire-Based Systems*. Washington, DC: Author. (p. 11)

<sup>2</sup> Illinois Fire Chiefs Association. (2012). *An Assessment of Deployment and Station Location: Rolling Meadows Fire Department*. Rolling Meadows, Illinois: Author. (pp. 54-55)

<sup>3</sup> Castle Rock Fire and Rescue Department. (2011). *Community Risk Analysis and Standards of Cover*. Castle Rock, Colorado: Author. (p. 58)



**Figure 4: Unit Hour Utilization**



**Observation:**

All Roseville units had UHU values below 0.11, or approximately 2.64 hours per day on 911 related activity.

**Observation:**

Considerable capacity exists within the system. In other words, the fire apparatus are on calls an average of 2.64 hours per 24-hour period. Therefore, excess capacity exists to absorb more work prior to any reinvestment in resources due to workload.

## Effective Response Force Assembly

There are two prevailing recommendations for the time to assemble an effective response force for structure fires. First, NFPA 1710 suggests that the Effective Response Force (ERF) should arrive in eight (8) minutes travel time or less. Second, the CFAI provides a baseline travel time performance objective of 10 minutes and 24 seconds 90% of the time or less as well as a 13-minute travel time ERF for suburban areas.

The following analyses evaluated an ERF of 16 personnel. Under the current configuration of eight stations, the Department can cover nearly 22% of the jurisdiction and assemble 16 personnel within 8 minutes. Approximately, 50% of the community can be covered within 10

minutes with 16 personnel, and 75% of the community can be covered within 13 minutes with 16 personnel.

*Table 4: Comparisons of ERF Configurations*

| Travel Time Objective | Current |
|-----------------------|---------|
| 8-Minute              | 21.88%  |
| 10-Minute             | 49.03%  |
| 13-Minute             | 74.81%  |
| 17-Minute             | 86.72%  |

Overall, the ERF coverage is more robust in the center of the jurisdiction where the greatest historical demand exists. The areas in the east and west of the City are challenged since they do not benefit from concentric response zones.

These analyses only contemplated RFD stations, units, and staffing. It is understood that outside agencies may contribute to improvement in actual performance.

**Observation:**

Like most agencies, the Department is challenged to assemble a 16-person ERF within the more restrictive national consensus standard.

## Alternative Staffing Strategy – Constant vs Continuous Staffing Models

Currently, the department operates from eight fixed-facility fire stations where each fire station operates at least one fire suppression engine or truck. All engines have a minimum of three person staffing and each truck has a minimum of four-person staffing. The minimum daily staffing is currently 33 personnel. The breakout of primary apparatus and personnel are provided below.

**Table 5: Current Staffing Strategy**

| Unit                         | ID  | UNIT TYPE | BC                       | Captain | Engineer | FF Medic | FF or FF Medic | TOTAL |
|------------------------------|-----|-----------|--------------------------|---------|----------|----------|----------------|-------|
| Battalion 1                  | B1  |           | 1                        |         |          |          |                | 1     |
| Engine 1                     | E1  | I         |                          | 1       | 1        | 1        |                | 3     |
| Truck 1                      | T1  |           |                          | 1       | 1        | 1        | 1              | 4     |
| Hazmat 1                     | HM1 | II        | Cross Staffed by E1 / T1 |         |          |          |                |       |
| Engine 2                     | E2  | I         |                          | 1       | 1        | 1        |                | 3     |
| Grass 2                      | G2  | VI        | Cross Staffed by E2      |         |          |          |                |       |
| Engine 3                     | E3  | I         |                          | 1       | 1        | 1        |                | 3     |
| Engine 4                     | E4  | I         |                          | 1       | 1        | 1        |                | 3     |
| Grass 4                      | G4  | VI        | Cross Staffed by E4      |         |          |          |                |       |
| Engine 5                     | E5  | I         |                          | 1       | 1        | 1        |                | 3     |
| Brush 5                      | BR5 | III       | Cross Staffed by E5      |         |          |          |                |       |
| Engine 6                     | E6  | I         |                          | 1       | 1        | 1        |                | 3     |
| Brush 6                      | BR6 | III       | Cross Staffed by E6      |         |          |          |                |       |
| Engine 7                     | E7  | I         |                          | 1       | 1        | 1        |                | 3     |
| Truck 7                      | T7  |           |                          | 1       | 1        | 1        | 1              | 4     |
| Rescue 7                     | R7  | MED       | Cross Staffed by E7 / T7 |         |          |          |                |       |
| Engine 9                     | E9  | I         |                          | 1       | 1        | 1        |                | 3     |
| Brush 9                      | BR9 | III       | Cross Staffed by E9      |         |          |          |                |       |
| Total Daily Minimum Staffing |     |           |                          |         |          |          |                | 33    |

The **Constant Staffing** strategy is utilized when the Department only has the exact number of personnel required to meet daily minimum staffing across the three shifts. The most notable item in a Constant Staffing model is that all daily vacancies are replaced with personnel on overtime as there is no relief staffing. The Roseville Fire Department utilizes a Constant Staffing Model.

A **Continuous Staffing** strategy is utilized to where the Department hires additional personnel to cover the average leave experienced on shift. In this manner, the additional personnel are available as “extra” personnel that are utilized to cover vacancies at the straight time more frequently and thus reducing the overtime liability.

The department allows 7 personnel off per day which drops the minimum staffing down to 26 (rather than 33) causing an increased frequency of overtime usage for daily minimum staffing (Constant Staffing Model).

**Observation:**

The Department allows 7 personnel off per day which drops the minimum staffing to 26 causing a higher frequency of overtime usage for daily minimum staffing to 33. In other words, most days will incur up to 168 hours of overtime prior to any sick or long-term injury leave.

**Continuous Staffing Model**

An optimized staffing analysis was conducted, utilizing mathematical formulae, to determine the most efficient allocation of personnel to maintain the desired staffing. Analyses found that the City was staffing in a responsible manner. However, the overall staffing strategy is requiring a greater potential reliance on overtime to maintain minimum daily staffing.

Optimal staffing is defined as sufficient staffing to cover all scheduled work hours, shift schedules, and the average employee leave experience. Maintaining the 33 daily minimum staffing, it would require a staffing multiplier of 3.71 to optimally staff the department. In other words, it would take 3.71 Full Time Equivalents (FTEs) for each of the 33 minimum staffed positions for a total of 122 personnel assigned per shift as opposed to the current allocation of 97 personnel. This additional 25 personnel would cost approximately the \$2.7 million overtime budget but would continue to maintain approximately \$348,000 in schedule driven overtime and average leave.

However, overtime will never be completely eliminated, and the calculations were based on average salary costs and did not specifically include pension, benefits, and/or legacy costs.

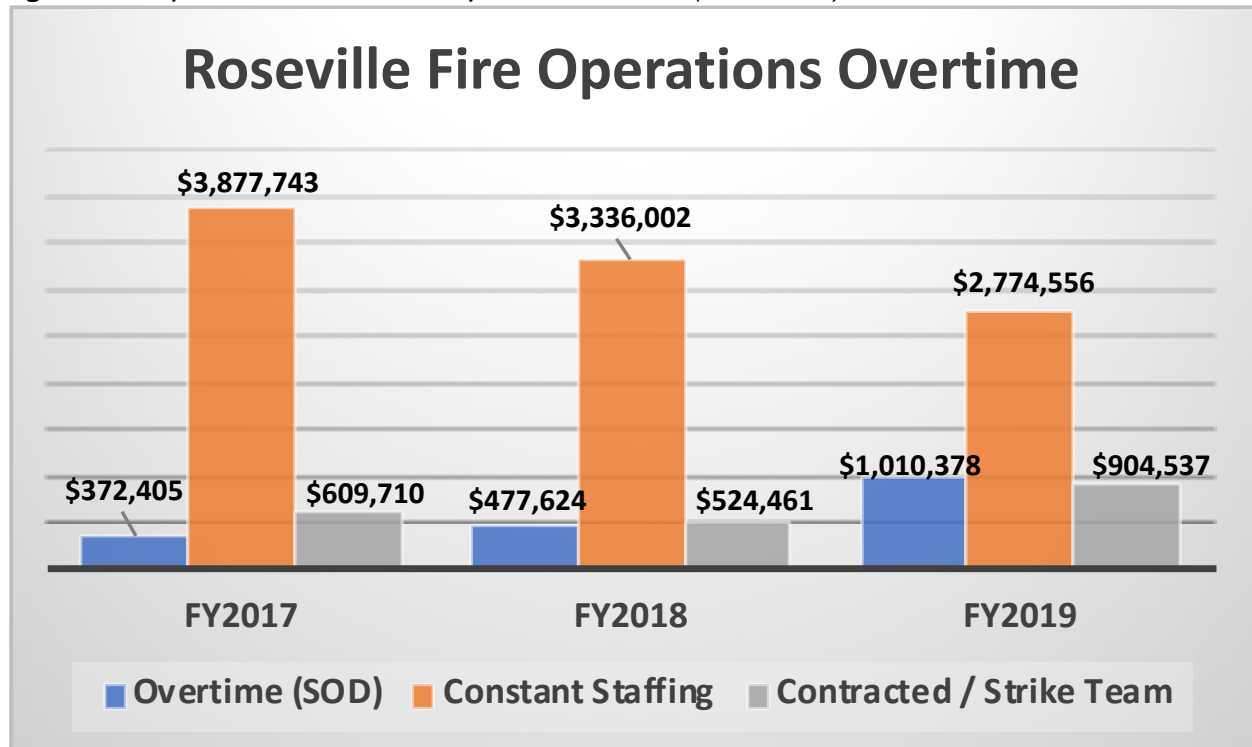
- Pros
  - Additional personnel for greater concentration of staffing when less than average leave
  - Reduces political sensitivity to high overtime utilization
  - Provides greater depth of residual personnel during wildfire season
  - Provides greater depth of personnel during major events
  - Reduces overtime expenditures
  - Reduces opportunity to work extended work periods
- Cons
  - Maintains benefit and pension rates for the additional personnel
  - Reduction in overtime earnings of personnel

**Recommendation:**

It is recommended that the Department consider the pros and cons of utilizing the constant, continuous, or a hybrid model as sensitivities to employee burnout and overtime utilization may arise.

The overtime experience of the department is provided here for context but will be re-examined independently in subsequent sections of this executive summary report. The constant staffing overtime liability is the largest category of usage. Finally, it is not known what the actual year end constant staffing overtime was in 2019, as these were preliminary. A final reconciliation should be considered as well as a 5-year rolling average to ensure that single year experiences do not unduly influence policy decisions.

**Figure 5: Comparison of Roseville Fire Operations Overtime (2017-2019)**



# ALTERNATIVES FOR CONSIDERATION

## Alternative 1: Consider Recommended Move-up Policy

Dynamically deployed systems are afforded greatest efficiency in the utilization of their resources. A traditional fire department model is a *static* system, where each of the resources are assigned a “home” station and after each call they attempt to get back to their home station. Through the lens of direct “home” station area, it passes the commonsense test as the assigned units are assumed to be the closest.

However, from a system or citywide perspective, efficiencies are lost as these vehicle movements are not engineered and are not as flexible as they could be during busy periods. The quantitative performance balanced against the GIS analyses may offer some insight into the benefit of a more flexible dynamic system design.

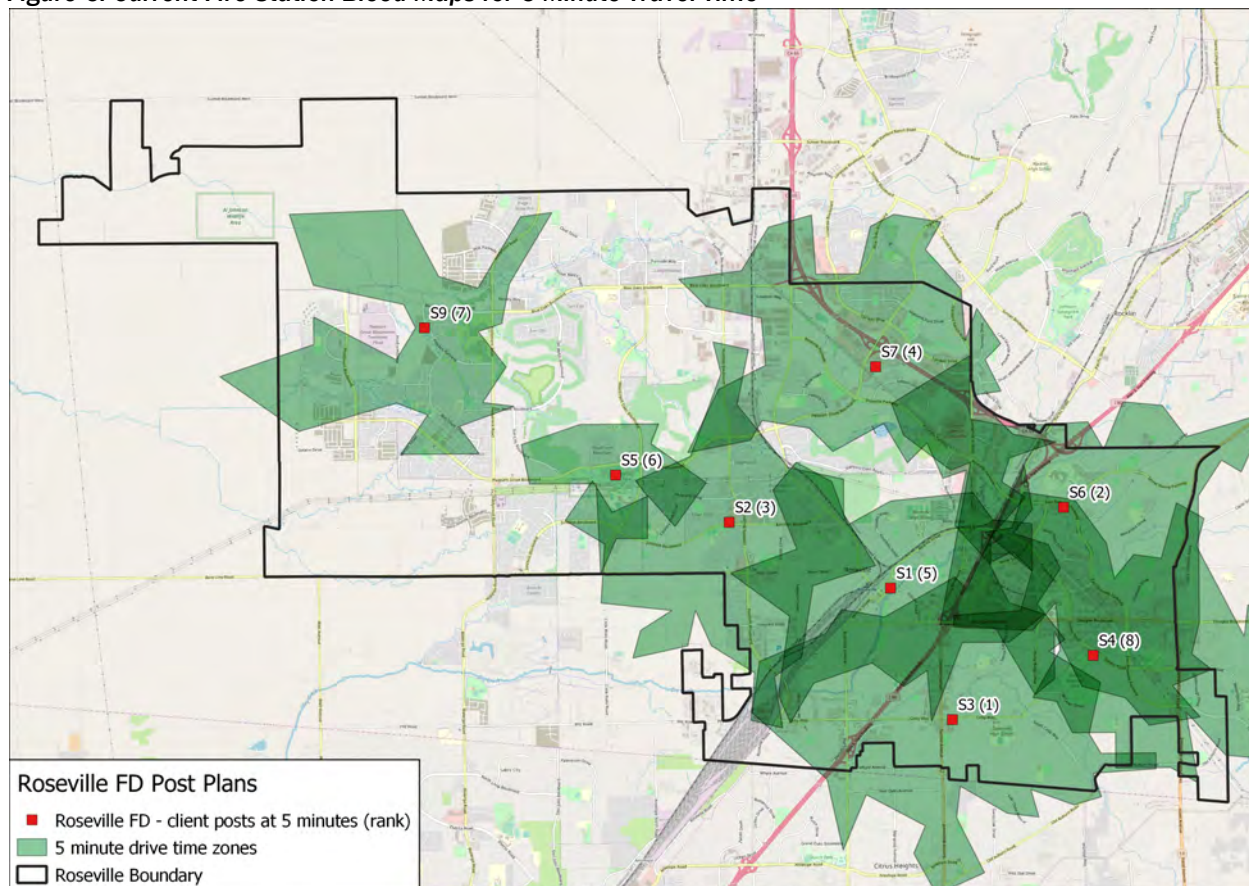
The overall performance through quantitative analyses resides between 5.5 and 6.0 minutes at the 90<sup>th</sup> percentile. This includes all units from the eight fixed fire station facilities. The GIS analyses suggested that all eight of the fire stations were needed to achieve approximately 81% coverage with a 5-minute travel time. However, four stations can cover approximately 69% of the risk within 5-minutes. This demonstrates the relative positive benefit of the Department utilizing a programmatic move up plan following the analyses.

Although the department follows a more geographically based move-up plan, the order of the stations provides an incremental efficiency in better aligning resources to the greatest probability of the occurrence of a call. Therefore, following these analyses, if the system was busy and only one unit was left available it should be located at Station 3. If two units, Station 3 and 6; and three units Stations 3, 6, and then 2, respectively. Finally, for four units Stations 3, 6, 2, and 7 would provide the greater probability of maintaining existing performance for 69% of the incidents. Under normal conditions, the remaining four stations collectively improve performance by approximately 12%. Therefore, the greatest return on investment is from the first four stations.

**Table 6: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S7      | 1,354           | 11,641        | 69.00%          |
| 5    | S1      | 944             | 12,585        | 74.60%          |
| 6    | S5      | 488             | 13,073        | 77.49%          |
| 7    | S9      | 438             | 13,511        | 80.08%          |
| 8    | S4      | 106             | 13,617        | 80.71%          |

**Figure 6: Current Fire Station Bleed Maps for 5-Minute Travel Time**



**Recommendation:**

It is recommended that the Department utilize this analysis to establish a move-up policy that moves units in the order identified that covers the greatest number of incidents within the desired performance.

**Recommendation:**

If the City/Department adopts the station location recommendations, then it is recommended that the Department utilize the analysis associated with (Scenario 2) to establish a move-up policy that moves units in the order identified that covers the greatest number of incidents within the desired performance.

## **Alternative 2: Additional Resource Allocation based on Risk Profile**

When considering resource allocation based on measured risk, the department currently has three moderate risk stations (1, 3, and 7) and the remaining stations are identified as low risk. Two of three moderate risk stations have multiple resources assigned to the station. The strategy with a risk-based deployment is to have a commensurate mitigation strategy (distribution and concentration) for like risk. Therefore, it is recommended that the department consider adding a



resource to Station 3 to align the risk to resource allocation for consistency. This additional resource would be placed for the risk assessment and not specifically for workload.

The station demand zone risk matrix and profile are replicated below for the readers convenience.

**Table 7: Station Demand Zone Risk Concentration Matrix**

| Station Demand Zone | Community Demand | Call Concurrency | High/Moderate Risk Occupancies | Total risk Score | Risk Rating |
|---------------------|------------------|------------------|--------------------------------|------------------|-------------|
| 1                   | 6                | 3                | 5                              | 26.92            | Moderate    |
| 2                   | 4                | 2                | 1                              | 6.48             | Low         |
| 3                   | 5                | 4                | 4                              | 22.98            | Moderate    |
| 4                   | 4                | 3                | 2                              | 11.05            | Low         |
| 5                   | 4                | 3                | 1                              | 9.19             | Low         |
| 6                   | 4                | 2                | 4                              | 13.86            | Low         |
| 7                   | 5                | 3                | 4                              | 19.61            | Moderate    |
| 9                   | 4                | 2                | 1                              | 6.48             | Low         |

**Recommendation:**

The department should consider placing an additional staffed apparatus at Station 3 to have a commensurate risk-based approach to resource allocation.

### Alternative 3: Reallocate Investment for Staffing Station 10 to an Additional Unit at Station 3

Prior to considering this alternative, analyses were completed to evaluate the projected future station locations and construction for future Fire Stations' 8 and 10, respectively. The following scenarios were created to validate and analyze the potential alternative configurations.

- Scenario 1: All existing stations with the addition of Station 8
- Scenario 2: All existing stations with the addition of Station 8 and relocated Station 5
- Scenario 3: All existing stations with the addition of Stations 8 and 10
- Scenario 4: All existing stations with the addition of Station 8, relocated Station 5, and Station 10

Scenario 2 proved to be the most fiscally and operationally efficient configuration analyzed. This scenario would maintain all existing stations but build Station 8 as designed and relocate Station 5. Adopting this scenario would eliminate the need for Station 10 in the foreseeable horizon.

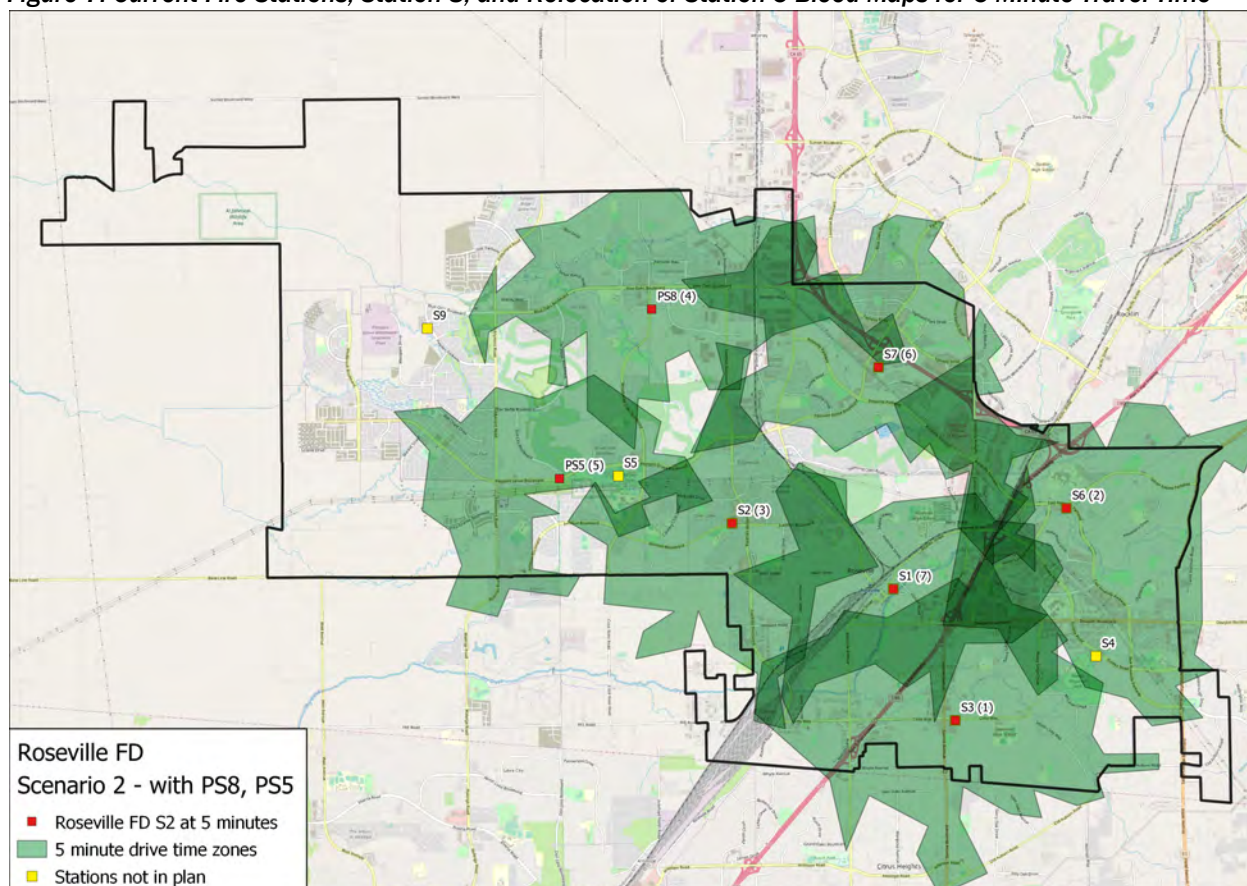


Results suggest that with all nine RFD fire stations, 92.56% of the incidents could be responded to within 5 minutes or less travel time. This is approximately an 11% improvement over the current configuration prior to the addition of Station 8 or relocation of Station 5.

**Table 8: Marginal Fire Station Contribution for 5-Minute Travel Time**

| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S5N     | 1,397           | 13,325        | 78.98%          |
| 6    | S7      | 967             | 14,292        | 84.71%          |
| 7    | S1      | 944             | 15,236        | 90.31%          |
| 8    | S9      | 274             | 15,510        | 91.93%          |
| 9    | S4      | 106             | 15,616        | 92.56%          |

**Figure 7: Current Fire Stations, Station 8, and Relocation of Station 5 Bleed Maps for 5-Minute Travel Time**



The analyses of the several alternatives reveal that Scenario 2 (Station 8 and Relocate Station 5) has the greatest return on investment. With very little variability, it requires only one additional station and the relocation of one station rather than two additional stations.

A summary of the alternative station configuration is provided below.

**Table 9: Summary of Alternative Station Configurations**

| Performance<br>(Minutes) | Current<br>Config. | Scenario<br>1 | Scenario<br>2 | Scenario<br>3 | Scenario<br>4 |
|--------------------------|--------------------|---------------|---------------|---------------|---------------|
| 4                        | 64.87%             | 70.20%        | 74.04%        | 71.26%        | 74.86%        |
| 5                        | 80.71%             | 87.85%        | 92.56%        | 88.64%        | 92.71%        |
| 6                        | 87.57%             | 95.09%        | 97.09%        | 95.64%        | 97.09%        |
| 7                        | 95.44%             | 98.75%        | 98.98%        | 98.77%        | 98.99%        |
| 8                        | 97.88%             | 99.05%        | 99.24%        | 99.05%        | 99.24%        |

**Observation:**

Results show that Scenario 2 (Station 8 and Relocate Station 5) provides the greatest return on investment and will cover nearly 93% of all incidents within 5 minutes or less.

**Observation:**

Scenario 2 represents approximately an 11% improvement over the current configuration.

**Observation:**

In all four scenarios, Station 10 provided less than a 1% improvement.

**Observation:**

The adoption of Scenario 2 (Station 8 and Relocate Station 5) would eliminate the need for Station 10 capital and recurring personnel costs.

**Recommendation:**

The City should consider reallocating the projected personnel investment associated with Station 10 to create a multi-company Station 3 presented in Alternative 2.

# PERSONNEL EXPENDITURES AUDIT

This review found that the City and the Fire Department are appropriately monitoring firefighter overtime use in the context of a constant staffing fire department model. Overtime needs can be reduced by employing a relief staffing calculation that determines the number of additional personnel to be hired for each rank. However, legacy costs, particularly California's pension requirements, would need to be considered and before hiring additional firefighters as a relief staffing pool.

Administrative and Operational policies and procedures are well established and serve as a guideline for daily activity. Challenges exist which limit the ability of the department to manage both community perceptions regarding overtime payments to individuals and to assure personnel safety. The specific findings and recommendations are incorporated here.

## Findings

The City has adopted a constant staffing model which, by definition, requires that firefighters backfill positions when responders are off-duty for a number of legitimate reasons.

Inadvertent actions such as City-wide hiring freezes or not hiring in advance of pending retirements exacerbate the need to backfill vacant positions and significantly increase overtime expenses.

The frequency of recent wildfires in the region has caused multiple deployments of Fire's Strike Team, thereby increasing overtime for backfill purposes.

The Department's Standard Operating Procedures are clear, detailed, assign responsibility and are updated on a regular schedule. Internal controls and ongoing monitoring of large and small purchases as well as overtime use, appear adequate to avoid abuse.

Department practice and policy is to allow up to seven 24-hour positions to be available for scheduled leave every day. The Department must therefore plan for a minimum of 168 hours of backfill overtime for each day of the year before considering unscheduled or unanticipated leave time.

The Department is exploring new revenue sources regarding first response fees and other opportunities related to treat and release for emergency medical responses.

## Introduction

As part of a larger study, Fitch & Associates (FITCH) was engaged by the City of Roseville, California to conduct a performance audit of the Roseville Fire Department. FITCH was to conduct a review of policies and practices related to personnel expenditures and to specifically review firefighter overtime usage and pay.

## **Methodology**

From a qualitative perspective, FITCH consultants met directly with the Roseville City Budget Manager, the Assistant Fire Chief for Support Services, and Fire's Administrative Analyst II. The City provided significant information as requested by FITCH. As analysis was undertaken, and as questions arose, City staff was responsive in clarifying or providing additional information.

Although previous presented from an operational standpoint, the discussion of constant vs continuous staffing is provided here in more detail as the evaluation is specific to personnel expenditures.

## **Roseville's Constant Staffing Model**

Constant staffing models such as Roseville's are typical in public safety organizations. These models rely on overtime to assure that every individual position is filled every day and every hour of the day.

The City has adopted a constant staffing model which, by definition, requires that firefighters backfill positions when responders are off-duty for a number of legitimate reasons including, but not limited to vacation, medical or sick leave, injury recovery and training.

Keeping overtime within reason is a balancing act between the reality of needing to hire overtime for planned and unplanned absences versus the cost of hiring extra or "relief" personnel who may or may not be needed on any given day. One argument for utilizing overtime rather than hiring relief personnel is that overtime saves on "legacy costs" such as insurance and pension. A counter argument is that personnel can become burned out by requirements for mandatory overtime work or by working continuous hours to excess, even if voluntary.

Inadvertent actions such as City-wide hiring freezes or not hiring in advance of pending retirements exacerbate the need to backfill vacant positions and significantly increase overtime expenses. In addition, frequent deployments of the Department's regional Strike Team to wildland fires also result in increased overtime for backfill purposes. Strike Team and Urban Search and Rescue (USAR) Team training exercises and deployments are often for extended periods of time. There is some budget relief in the form of reimbursements from state and federal agencies, which the City does pursue. However, overtime is needed to fulfill the Departments' minimum staffing numbers for emergency coverage and result in either mandatory or voluntary overtime hours.

## **Establishing a Relief Staffing Factor**

Fire agencies typically analyze historical leave time use for all categories to determine a hiring factor for each new position. Roseville management has analyzed leave usage and conducted an analysis of how effective relief staffing could be. They concluded that a relief staffing would not be effective for their Department. FITCH believes that a different relief staffing calculation that may be of use to the Department in determining the need for relief personnel.

Roseville Fire procedures prescribe the number of 24-hour shift positions on the daily leave calendar that can occur each day. These positions are referred to as “slots” and are used to grant vacation, holiday and compensatory time off. The number of slots is determined by a long-standing formula based on the number of shift personnel per day (excluding Battalion Chiefs) times a factor of 20%. Any resulting decimal is rounded up to the next whole number. Currently, there are 32 shift positions per day excluding the Battalion Chief. Applying the 20% factor results in 6.4 which is rounded to 7. This represents the number of 24 hour positions each day for which personnel may be off-duty and for which backfill overtime must be provided. This equates to 168 hours a day across the various ranks that require backfill overtime.

This formula may be generous, but it has been past practice for a number of years and is codified in the several official City documents including the Roseville Firefighters, Local 1592, Memorandum of Understanding, the Department’s 2018 Staffing Manual, and the Standard Operating Procedure #2.04.070, Scheduling Time Off.

A shift relief factor estimates the number of hours required to fill a 24 hour position when the firefighter who is regularly assigned to that position on that shift day is unavailable because he or she is occupied elsewhere, either on annual leave, sick leave, attending training, injured or otherwise not available. To account for the time that the regularly assigned firefighter is not available, additional staff time must be allocated to that position either through backfill overtime or through by having relief personnel available to fill in.

Using a mathematical formula to establish the requisite relief multiplier for a minimum daily staffing of 33 personnel, and the approximate average leave of 550.5 hours per shift-based employee, the relief multiplier should be 3.71. In other words, it would require 3.71 personnel for each position of the daily minimum staffing.

Therefore, it would require 122 total personnel assigned to the various shifts ( $33 \times 3.71 = 122.4$ ). Understanding the current shift-based assignment of 97 personnel, this would require the department to hire an additional 25 personnel ( $122 - 97 = 25$ ).

Utilizing the cost of a new hire, fully loaded with full benefits, the hourly rate for a is: \$36.60/hour for an annual cost for 2912 hours = \$ 106,587. Source: “Current Salary, Steps, Rates 2018” excel spreadsheet provided by Department. Therefore, the estimated additional expenditures would be \$2,664,675 ( $25 \times 106,587 = \$2,664,675$ ).

### ***Pros of a Continuous Staffing Model***

The positive benefits of utilizing a continuous staffing model include the following:

- Additional personnel for greater concentration of staffing when less than average leave
- Reduces political sensitivity to high overtime utilization
- Provides greater depth of residual personnel during wildfire season
- Provides greater depth of personnel during major events
- Reduces overtime expenditures
- Reduces opportunity to work extended work periods

### **Cons of a Continuous Staffing Model**

Potentially negative considerations of utilizing a continuous staffing model includes the following:

- Maintains benefit and pension rates for the additional personnel
- Reduction in overtime earnings of personnel

With the overtime budget in 2019 for Constant Staffing at approximately \$2.7 million the option to staff with a relief multiplier is nearly a neutral endeavor. Therefore, it would remain a policy decision after considering the pros/cons of the policy consideration.

### **Timekeeping Procedures, Overtime and Internal Controls**

Fire management continuously monitors overtime and other categories of time usage as a priority. The City utilizes Workforce TeleStaff for Public Safety, a product of Kronos, a US company that specializes in human capital and workforce management. TeleStaff automates firefighter scheduling and time tracking. It is designed to optimize the communications, and deployment of public safety personnel. The company website claims that it services more than 2,000 government agencies.<sup>4</sup>

The level of time tracking detail in the City's TeleStaff version is impressive. Overtime is currently tracked in the system under five primary TeleStaff codes:

- **Scheduled Overtime Duty (SOD)** — this is designed to fill long-term vacancies of eight hours or more. These vacancies occur for a number of reasons such as planned vacations, military deployment, and attendance at training events.
- **Force Hire Overtime** — this is a mandatory assignment of overtime and occurs when no volunteers are available to work overtime and personnel are needed to meet the City's constant staffing policy.
- **Compensatory Time Earned** for working scheduled overtime duty (SOD) — an employee may choose to bank comp time in lieu of cash payment; personnel may accrue no more than 112 hours at a time before it has to be used or paid out. The firefighter can then accrue up to 112 hours of comp time again. Other rules apply regarding cashing out and end of year balances.
  - It is noteworthy to understand that when the firefighter takes their comp time as time off at a later date as opposed to receiving pay, the need for overtime is created to backfill their position.
- **Strike Team Overtime** — this occurs when firefighters are deployed to train on or to respond to major events in the region such as wildland fires. In some instances, the City seeks reimbursement from state or federal agencies depending on the emergency declaration status.
- **Urban Search and Rescue Overtime** — this occurs when the USAR Team is deployed to train on or respond to specialized rescue efforts such as an earthquake response or a major building collapse, often outside of the region. In most instances, the City can seek reimbursement from federal agencies.

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<sup>4</sup> Workforce TeleStaff for Public Safety, [www.Kronos.com](http://www.Kronos.com), accessed August 2019.

**Observation:**

The level of time tracking detail in the City's TeleStaff version is impressive.

Roseville Fire appears to have adequate approval mechanisms in place for overtime hiring and time keeping. The Department's April 2018 Staffing Manual is comprehensive and lays out procedures in a very effective manner. Battalion Chiefs and Captains are the primary approval levels for most of the overtime needs.

**Observation:**

The Roseville Fire Department has adequate approval mechanisms in place for overtime hiring and time keeping.

As noted above, Roseville relies on overtime to maintain constant staffing in lieu of hiring extra or relief personnel. Extensive procedures are provided in the Department's Staffing Manual whereby overtime requests are first rotated through the workforce until someone volunteers to fill a slot. If there are no volunteers then, the process reverts to Mandatory or Force Hire for overtime. While Force Hire is needed from time to time, it is always preferable to find volunteers for overtime as opposed to over utilizing Force Hire which can create personnel morale issues.

Ongoing review and analysis of overtime use at the individual firefighter level is used by management to spot unusual trends. Management was forthcoming and described a past abuse of compensatory time that was manipulated to create overtime between two individuals. Due to ongoing monitoring of leave and overtime usage on an individual basis, Fire Management noted the problem and has increased diligence in that area.

**When Is It Abuse?**

In every organization that utilizes constant staffing, there are individuals who, for any number of personal reasons, are keen to volunteer for overtime. An internet search of "firefighter overtime abuse" results in numerous articles from areas across the US. Some describe actual fraudulent actions by individuals, but most appear to report on the *amount* of money earned by frequent overtime volunteers.

There were 21 Roseville firefighters who earned \$50,000+ in overtime pay by the end of FY16-17. Figure 1 below indicates by rank the range of overtime hours worked and the range in overtime pay. The overtime hours worked are equated to the number of 24-hour shifts as a means for comparison. Roseville firefighters work a 56-hour workweek or 2,912 hours, which equates to 121.3 shifts at 24 hours per shift. The equivalent of the overtime hours worked ranged from 35 shifts or 29% more than their regular work schedule to a high of 72.6 shifts or 68% more shifts than the regular work schedule.



**Table 10: Roseville Firefighters Earning Greater than \$50,000 for Overtime in FY 16-17**

| <b>Rank</b>   | <b>Number</b> | <b>Range:<br/>OT Hours<br/>Worked</b> | <b>Range:<br/>Equivalent 24<br/>Hr. Shifts</b> | <b>Range:<br/>OT Pay<br/>Received</b> |
|---------------|---------------|---------------------------------------|------------------------------------------------|---------------------------------------|
| Captain       | 11            | 848 to 1,742                          | 35 to 72.6                                     | \$52,313 to<br>\$102,479              |
| Fire Engineer | 4             | 1,168 to 1,644                        | 48.6 to 68.5                                   | \$59,137 to<br>\$83,202               |
| Fire Medic    | 6             | 1,218 to 1,982                        | 50.75 to 82.58                                 | \$54,553 to<br>\$100,309              |

While the numbers may appear to be excessive, this is not evidence of abuse, but rather individuals eager to legitimately fill vacant slots and legitimately bank funds for their own purposes. Managing the public’s perception of firefighter overtime pay is a challenge. Telling the public that overtime pay is due to “constant staffing” does not always translate well. A simpler explanation may be to compare it to an absent classroom teacher. The class is not cancelled, but rather the position is always backfilled with a substitute. The difference is that a firefighter position must be filled by a certified firefighter from within the same organization, with the same certifications and at the same rank or working out-of-class in that higher rank — thereby incurring overtime.

**Observation:**

Assessment did not suggest or provide any evidence of abuse with respect to overtime utilization by personnel.

From a safety viewpoint, the primary concern regarding overtime is to assure that firefighters are not on duty for excessive hours such that the individual, their crew and the public, are not put at risk. Roseville Fire policy states that if a firefighter is on duty for more than 96 consecutive hours, then that person must go off-duty for at least eight consecutive hours.<sup>5</sup>

Is an eight-hour reprieve enough time to regain rest and sleep after 96 hours on shifts with a varying and unpredictable number of responses? It is important to monitor whether a firefighter works a series of 96 hour/8-hour work stints. In June 2007, the International Association of Fire Chiefs published, “The Effects of Sleep Deprivation on Fire Fighters and EMS Responders”. A close review of this report may provide answers and suggestions for the City’s risk managers regarding excessive work hours and potential liability.

<sup>5</sup> “Consecutive Hours Worked Limit”, Roseville Fire Department Staffing Manual, dated April 2018, Version 4, p. 16.



## Department Overtime Expense

The City's financial system reports Fire Department overtime in three categories: 1) Overtime which represents scheduled overtime on duty or SOD, 2) Constant Staffing, and 3) Contracted/ST [Strike Team] Overtime. The table below indicates the actual expenditures of salaries and overtime based on the preliminary year end, June 30, 2019, financial reports and indicates overtime as a percent of salaries.

**Table 11: Actual Salary and Overtime Expenditures - Preliminary FY19 Year-End Report<sup>6</sup>**

| Expenditures              | Fire Admin | Fire Prevention | Fire Operations | Fire Training | Support Services | Totals       |
|---------------------------|------------|-----------------|-----------------|---------------|------------------|--------------|
| Salaries                  | \$382,092  | \$ 851,993      | \$10,044,85     | \$439,933     | \$271,167        | \$11,990,085 |
| Overtime (SOD)            | -10        | 32,778          | 1,010,378       | 19,421        | 271,167          | 1,075,400    |
| Constant Staffing         | 0          | 0               | 2,774,556       | 0             | 0                | 2,774,556    |
| Contract/Strike Team      |            | 7,413           | 904,537         | 2,740         | 15,020           | 962,706      |
| Subtotal All Overtime     | \$32,986   | \$40,191        | \$ 4,689,472    | \$22,161      | \$27853          | \$4,812,662  |
| Overtime as % of Salaries | <b>9%</b>  | <b>5%</b>       | <b>47%</b>      | <b>5%</b>     | <b>10%</b>       | <b>40%</b>   |

Overtime expenses related to Strike and USAR Teams' training and deployments are reimbursed to the City but are part of the departments' overtime needs.

Due to constant staffing needs, the Operations Division incurs the largest amount of overtime expenses. Figure 3 indicates all overtime expenses for the Operations Division for the three fiscal years 2017, 2018 and the preliminary report for FY2019.

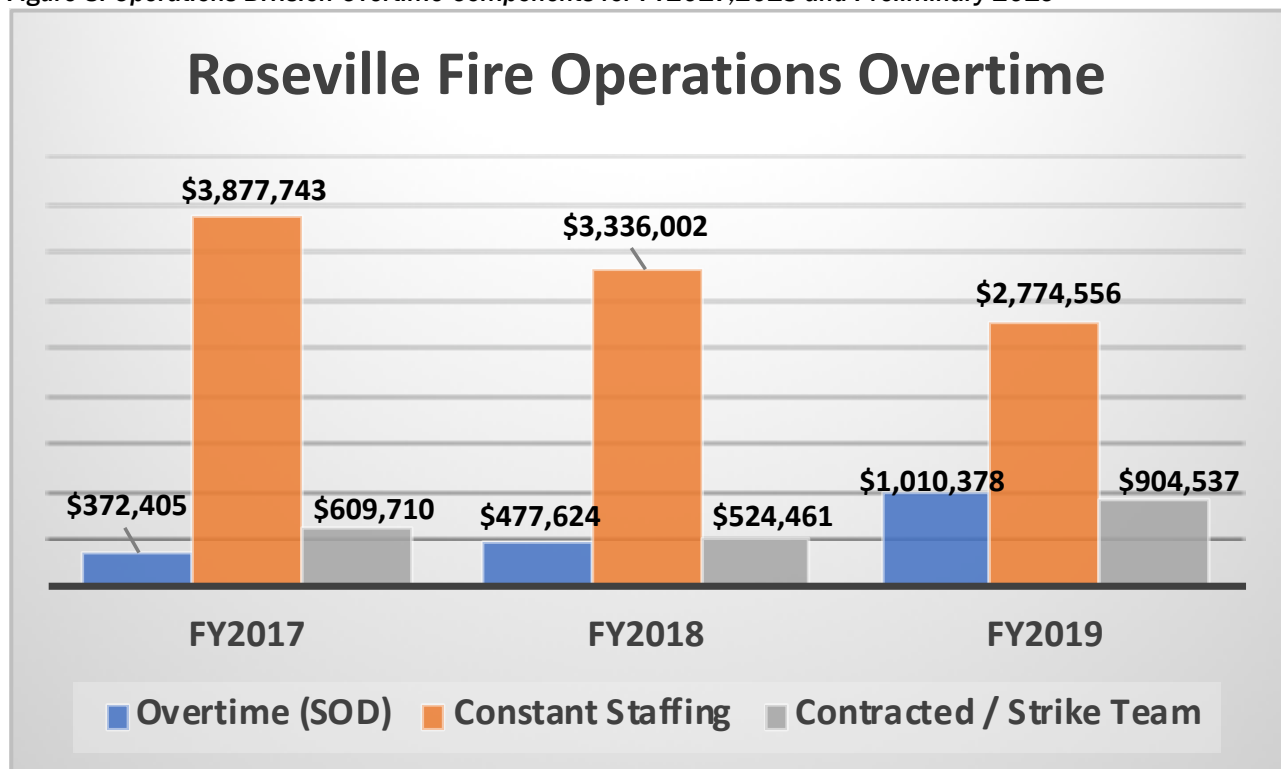
**Table 12: All Operations Division Overtime for FY2017, 2018, and Preliminary 2019**

| Operations Division            | FY2017       | FY2018       | FY2019       |
|--------------------------------|--------------|--------------|--------------|
| Total: All Operations Overtime | \$ 4,859,858 | \$ 4,338,087 | \$ 4,689,471 |

The figure below reflects the overtime components for the Operations Division for the same three fiscal years as above.

<sup>6</sup> City of Roseville, DRAFT General Ledger, Budget to Actual w/ Encumbrances, Fire Department, as of 6/30/2019, Run Date 8/29/2019.

Figure 8. Operations Division Overtime Components for FY2017,2018 and Preliminary 2019



Scheduled overtime increased significantly in FY2019 and reflects management's comments that there were approximately 11 firefighters on extended leave due to injuries or other issues and in addition, there were several vacant positions.

City Finance and Fire Management should continue to analyze the benefit of hiring firefighters in anticipation of retirements that tend to occur in waves. Revisiting relief hiring formulas is warranted in light of relatively high overtime costs. However, as part of any analysis, it is important to account for the legacy costs that come with new hires, particularly in light of increasing contributions required by the California pension systems.

## Purchasing Policies & Internal Controls

FITCH consultants reviewed the following Fire Department Standard Operating Procedures (SOP):

- Financial Management
- Program Budget Responsibilities
- Purchasing
- Monthly Financial Reporting
- Payroll Procedures
- Wells Fargo Credit Card Usage Reconciliation

The Department assigns a responsible person to review and update each SOP on a prescribed schedule. The SOPs were clearly written, detailed and appear to be relevant to the matter at hand. Budget processes describe a program budgeting model that identifies specific impacts/outcomes

for each program. This model links funding and results with risk levels. The SOP calls for a formal review of program performance at the six-month point in the budget year. The budget process is distributed down to the individual station level to provide Company Officers with the responsibility and process to obtain materials, supplies and minor equipment on a readily available basis. Roseville's budget processes exhibit best practices.

**Observation:**

The Roseville Fire Department's budget process exhibit best practices.

Policies and procedures are only as good as the intention to integrate them into the organization's culture. Consultant interviews with the Assistant Chief for Support Services and the Administrative Analyst II, provided insight into the level of administrative oversight given to budgeting and purchasing procedures. Both individuals are well-versed in the status and issues for department expenditures and revenues. City procedures for purchases greater than \$1,000 are guided by the City's Purchasing Division. The multiple levels of approval for these and other larger purchases provide sufficient security to flag unusual or irregular purchases.

**Observation:**

The multiple levels of approval for these and other larger purchases provide sufficient security to flag unusual or irregular purchases.

Purchases less than \$1,000 are acquired directly by Program Managers, and Company Officers using a City credit card, an open purchase order or other appropriate means. The Administrative Analyst monitors bills monthly and flags any questionable purchases for review. Other fire departments also compare usage trends station by station (and at times by shift within each station) for both credit card purchases and central supply orders. This process allows management to identify any unusual supply usage that may indicate items being diverted for personal use. Overall, considering the consistent level of Fire management's oversight, the potential for abuse through credit card or purchasing is minimal.

**Observation:**

Overall, considering the consistent level of Fire management's oversight, the potential for abuse through credit card or purchasing is minimal.

## **Budgets Policies and Revenue Opportunities**

The Department engages in a monthly review of financial reports at the station level for Captain Management accounts. Issues are brought to the attention of the Administrative Analyst for resolution. The monthly reports are then reviewed by Department Senior Staff, which includes a review and reclassification of overtime use, as needed.

Revenues in the form of fees charged for services are typical for fire departments. The Fire Prevention Division collects fees for occupancy permits, plan reviews and various inspection fees that somewhat offset personnel costs.

The Department is in the early stages of looking into new revenues in the form of an emergency medical services response fees. The Center for Medicare and Medicaid (CMS) has recently released a pilot program, Emergency, Treat, Triage and Transport (ET3) that may provide opportunities for the Department as they work with the contracted transport provider.

# **OBSERVATIONS AND RECOMMENDATIONS**

## **Summary of Recommendations**

1. It is recommended that the department utilize MPDS as a risk management tool to expand the use of non-emergency responses. This reduces risk to both the first responders as well as the public.
2. It is recommended that the department work to align turnout time with best practices.
3. The department should evaluate the efficacy of continuing to utilize Reliability as a useful measure now that the department has implemented the best practice of AVL closest unit dispatching.
4. The department may improve the overall system performance when units are depleted due to high call activity by adopting the recommended move-up plan provided.
5. The department should identify the desired variables to utilize in a similar process in an ongoing manner that is supported by internal occupancy data such as inspection records. In this manner, the department would have a sustainable and proprietary data as opposed to relying on a sample of buildings provided by an outside partner.
6. It is recommended that the Department consider the pros and cons of utilizing the constant, continuous, or a hybrid model as sensitivities to employee burnout and overtime utilization may arise.
7. It is recommended that the Department utilize this analysis to establish a move-up policy that moves units in the order identified that covers the greatest number of incidents within the desired performance.
8. If the City/Department adopts the station location recommendations, then it is recommended that the Department utilize the analysis associated with (Scenario 2) to establish a move-up policy that moves units in the order identified that covers the greatest number of incidents within the desired performance.
9. The department should consider placing an additional staffed apparatus at Station 3 to have a commensurate risk-based approach to resource allocation.
10. The City should consider reallocating the projected personnel investment associated with Station 10 to create a multi-company Station 3 presented in Alternative 2.

## Summary of Observations

1. The department is sending a single resource to nearly all EMS incidents and has an overall department average of 1.2 units per response. Understanding that the department does not transport, this is a minimal and efficient use of resources, particularly for EMS related incidents.
2. Utilization of Medical Priority Dispatch (MPDS) would allow the department the confidence to better align resource allocation to the severity of risk. However, the cost avoidance strategy at this point could be in conflict with the department's desire to seek alternative revenue sources for providing first response for EMS incidents.
3. In 2018, the average busy minutes per response for RFD was 19.3 minutes from dispatch to available.
4. The dispatch time is at the upper threshold of 2.0 minutes for 90<sup>th</sup> percentile dispatch interval. Opportunities for incremental improvements may be available.
5. The turnout time is not well aligned with national best practices of 1 minute for EMS incidents and 1.5 minutes for fire related incidents.
6. The travel time is excellent and within the national experience. It is common for urban/suburban areas to perform between 5 and 8 minutes at the 90<sup>th</sup> percentile.
7. The travel time for Station 9 is the longest in the City's system. This may be directly related to the fact that Station 9 is covering the geographic area associated with the proposed Station 8 location.
8. With the exception of Station 5, all stations have  $\geq 82\%$  reliability that the unit assigned to the station is available and responded to the call in their respective station area.
9. Across all stations, there is greater than an 88% chance that the first call can be dispatched, handled, and the unit return to service prior to a second or greater call occurring within the same station area.
10. Across all stations, there is greater than a 99% chance that the first fire related call can be dispatched, handled, and the unit return to service prior to a second or greater call occurring within the same station area.
11. The model is robust and has considerable resiliency in the system as response times are minimally impacted at the system level.
12. The system is highly resilient as a substantive increase in response time does not occur until there are 4 or less units available left in the system.
13. Overall, 45% of the time when a call occurs, all 10 resources were available.

14. Overall, 93.6% of the time when a call occurs, all seven or more resources were available.
15. Overall, the risk assessment identified that the majority of station demand zones are of low risk (stations 2, 4, 5, 6, and 9) and three moderate risk stations (stations 1, 3, and 7).
16. The current performance of 5.5 minutes is well aligned with CFAI suggested response performance for a metro/urban population density. In addition, this performance is within the observed national experience of between 5 and 8 minutes.
17. The implementation of Station 8 and the relocation of Station 5 will improve service to 5.0 minutes.
18. All Roseville units had UHU values below 0.11, or approximately 2.64 hours per day on 911 related activity.
19. Considerable capacity exists within the system. In other words, the fire apparatus are on calls an average of 2.64 hours per 24-hour period. Therefore, excess capacity exists to absorb more work prior to any reinvestment in resources due to workload.
20. Like most agencies, the Department is challenged to assemble a 16-person ERF within the more restrictive national consensus standard.
21. The Department allows 7 personnel off per day which drops the minimum staffing to 26 causing a higher frequency of overtime usage for daily minimum staffing to 33. In other words, most days will incur up to 168 hours of overtime prior to any sick or long-term injury leave.
22. Results show that Scenario 2 (Station 8 and Relocate Station 5) provides the greatest return on investment and will cover nearly 93% of all incidents within 5 minutes or less.
23. Scenario 2 represents approximately an 11% improvement over the current configuration.
24. In all four scenarios, Station 10 provided less than a 1% improvement.
25. The adoption of Scenario 2 (Station 8 and Relocate Station 5) would eliminate the need for Station 10 capital and recurring personnel costs.
26. The level of time tracking detail in the City's TeleStaff version is impressive.
27. The Roseville Fire Department has adequate approval mechanisms in place for overtime hiring and time keeping.
28. Assessment did not suggest or provide any evidence of abuse with respect to overtime utilization by personnel.

29. The Roseville Fire Department's budget process exhibit best practices.
30. The multiple levels of approval for these and other larger purchases provide sufficient security to flag unusual or irregular purchases.
31. Overall, considering the consistent level of Fire management's oversight, the potential for abuse through credit card or purchasing is minimal.



# REPORT PRESENTATION BODY



Fire Department Performance Audit, Community  
Risk Analysis, and Standards of Cover

City of Roseville, CA



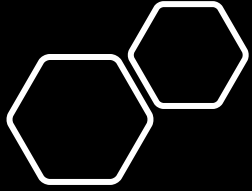


## Community Response History

# Community Demand

- EMS accounts for largest share of community requests for service
- Total of 16,930 unique incidents in 2018
- 46.4 calls per day
- Year over year growth in calls varied between 3% and 11.3%
- National experience is between 3% and 7% in EMS growth

| Call Category <sup>1</sup>        | Number of Calls | Average Calls per Day | Call Percentage |
|-----------------------------------|-----------------|-----------------------|-----------------|
| EMS                               | 10,247          | 28.1                  | 60.5            |
| False Alarm & False Call          | 739             | 2.0                   | 4.4             |
| Fire (Not Building or Wildland)   | 92              | 0.3                   | 0.5             |
| Building Fire                     | 130             | 0.4                   | 0.8             |
| Wildland Fire                     | 103             | 0.3                   | 0.6             |
| Fire (All)                        | 325             | 0.9                   | 1.9             |
| Good Intent Call                  | 2,594           | 7.1                   | 15.3            |
| Hazardous Conditions (No Fire)    | 261             | 0.7                   | 1.5             |
| Rescue                            | 928             | 2.5                   | 5.5             |
| Service Call                      | 1,804           | 4.9                   | 10.7            |
| Severe Weather & Natural Disaster | 3               | 0.0                   | 0.0             |
| Special Incident Type             | 29              | 0.1                   | 0.2             |
| <b>Total</b>                      | <b>16,930</b>   | <b>46.4</b>           | <b>100.0</b>    |



# Community Demand

- EMS accounts for 55.4% of the time on task for 911 related activity.
- Fire related incidents accounts for 10.7% of the time on task
- All non-EMS incidents accounted for 44.6% of the time on task
- Special risks such as hazmat and technical rescue are combined 12.4% of the total busy hours..

| Call Category                     | Number of Calls <sup>1</sup> | Number of Responses <sup>2</sup> | Average Responses per Call | Responses with Time Data <sup>3</sup> | Total Busy Hours | Average Busy Minutes per Response | Percentage of Total Busy Hours |
|-----------------------------------|------------------------------|----------------------------------|----------------------------|---------------------------------------|------------------|-----------------------------------|--------------------------------|
| EMS                               | 10,244                       | 11,101                           | 1.1                        | 10,976                                | 3,671.3          | 20.1                              | 55.4                           |
| False Alarm & False Call          | 739                          | 1,024                            | 1.4                        | 1,008                                 | 261.5            | 15.6                              | 3.9                            |
| Fire (Not Building or Wildland)   | 92                           | 235                              | 2.6                        | 233                                   | 90.5             | 23.3                              | 1.4                            |
| Building Fire                     | 130                          | 511                              | 3.9                        | 506                                   | 357.7            | 42.4                              | 5.4                            |
| Wildland Fire                     | 103                          | 365                              | 3.5                        | 359                                   | 261.3            | 43.7                              | 3.9                            |
| Fire (All)                        | 325                          | 1,111                            | 3.4                        | 1,098                                 | 709.5            | 38.8                              | 10.7                           |
| Good Intent Call                  | 2,583                        | 3,235                            | 1.3                        | 3,190                                 | 459.4            | 8.6                               | 6.9                            |
| Hazardous Conditions (No Fire)    | 261                          | 625                              | 2.4                        | 601                                   | 279.5            | 27.9                              | 4.2                            |
| Rescue                            | 925                          | 1,528                            | 1.7                        | 1,499                                 | 544.9            | 21.8                              | 8.2                            |
| Service Call                      | 1,799                        | 2,182                            | 1.2                        | 2,133                                 | 690.0            | 19.4                              | 10.4                           |
| Severe Weather & Natural Disaster | 3                            | 5                                | 1.7                        | 5                                     | 3.3              | 39.8                              | 0.1                            |
| Special Incident Type             | 29                           | 36                               | 1.2                        | 36                                    | 5.0              | 8.4                               | 0.1                            |
| <b>Total</b>                      | <b>16,908</b>                | <b>20,847</b>                    | <b>1.2</b>                 | <b>20,546</b>                         | <b>6,624.4</b>   | <b>19.3</b>                       | <b>100.0</b>                   |



# 2018 Historical Performance

- Considering “Travel Time”
- EMS is at 5.4 minutes
- Fire is at 5.5 minutes without influence of wildland performance
- Roseville system performance is at 5.5 minutes overall

| Call Category                     | Dispatch Time (Minutes) |           |                         | Turnout Time (Minutes) |           |                                      | Travel Time (Minutes) |           |                         | Response Time (Minutes) |           |                                      | Sample Size <sup>1</sup> |
|-----------------------------------|-------------------------|-----------|-------------------------|------------------------|-----------|--------------------------------------|-----------------------|-----------|-------------------------|-------------------------|-----------|--------------------------------------|--------------------------|
|                                   | Observed                | Benchmark | % At or Below Benchmark | Observed               | Benchmark | % At or Below Benchmark <sup>2</sup> | Observed              | Benchmark | % At or Below Benchmark | Observed                | Benchmark | % At or Below Benchmark <sup>3</sup> |                          |
| EMS                               | 2.1                     | 1.0       | 57.4                    | 2.2                    | 1.0       | 26.7                                 | 5.4                   | 5.2       | 88.3                    | 8.2                     | 7.2       | 80.4                                 | 9,922                    |
| False Alarm & False Call          | 2.6                     | --        | --                      | 2.6                    | --        | --                                   | 6.1                   | --        | --                      | 9.4                     | --        | --                                   | 304                      |
| Fire (Not Building or Wildland)   | 2.5                     | 1.0       | 44.2                    | 2.2                    | 1.7       | 63.4                                 | 5.4                   | 5.2       | 87.2                    | 8.9                     | 7.9       | 85.4                                 | 86                       |
| Building Fire                     | 2.4                     | 1.0       | 44.0                    | 2.4                    | 1.7       | 45.9                                 | 5.5                   | 5.2       | 88.4                    | 8.7                     | 7.9       | 84.5                                 | 116                      |
| Wildland Fire                     | 2.5                     | 1.0       | 42.3                    | 3.2                    | 1.7       | 50.0                                 | 8.8                   | 5.2       | 73.7                    | 13.3                    | 7.9       | 71.1                                 | 97                       |
| Fire (All)                        | 2.5                     | 1.0       | 43.5                    | 2.4                    | 1.7       | 52.3                                 | 6.0                   | 5.2       | 83.3                    | 9.6                     | 7.9       | 80.5                                 | 299                      |
| Good Intent Call                  | 3.0                     | --        | --                      | 2.3                    | --        | --                                   | 5.4                   | --        | --                      | 8.8                     | --        | --                                   | 900                      |
| Hazardous Conditions (No Fire)    | 3.4                     | 1.0       | 22.8                    | 2.6                    | 2.0       | 77.9                                 | 6.0                   | 5.2       | 82.8                    | 9.3                     | 8.2       | 78.9                                 | 170                      |
| Rescue                            | 3.1                     | 1.0       | 41.0                    | 2.2                    | 1.7       | 73.1                                 | 5.4                   | 5.2       | 87.7                    | 9.5                     | 7.9       | 80.9                                 | 870                      |
| Service Call                      | 3.9                     | --        | --                      | 2.7                    | --        | --                                   | 7.6                   | --        | --                      | 12.1                    | --        | --                                   | 738                      |
| Severe Weather & Natural Disaster | --                      | --        | --                      | --                     | --        | --                                   | --                    | --        | --                      | --                      | --        | --                                   | 2                        |
| Special Incident Type             | --                      | --        | --                      | --                     | --        | --                                   | --                    | --        | --                      | --                      | --        | --                                   | 0                        |
| Total                             | 2.4                     | --        | --                      | 2.2                    | --        | --                                   | 5.5                   | --        | --                      | 8.6                     | --        | --                                   | 13,205                   |

# 90<sup>th</sup> Percentile Performance by Station Demand Zone

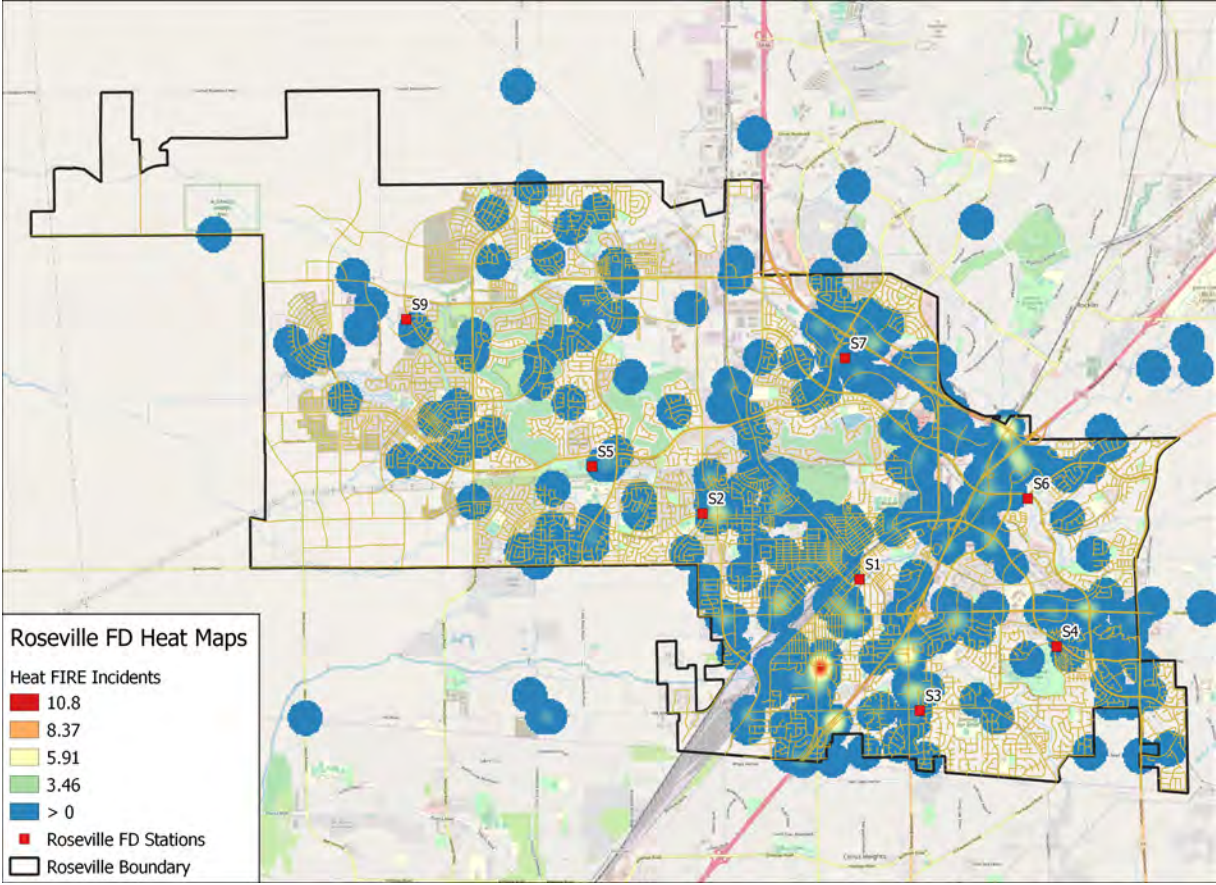
- Turnout Time has relatively little variability
- While it may offer an opportunity for improvement, the data does not suggest a per station bias in performance
- The travel times across the station areas varies between a low of 4.3 minutes up to 6.3 minutes
- Station 9 has the longest response time
- However, all station areas are providing high quality experience
- Our national experience observes between 5- and 8-minutes travel time a the 90<sup>th</sup> percentile.

| Demand Zone        | Dispatch Time | Turnout Time | Travel Time | Response Time |
|--------------------|---------------|--------------|-------------|---------------|
| Station 1          | 3.2           | 2.3          | 4.3         | 7.6           |
| Station 2          | 2.2           | 2.3          | 5.1         | 8.2           |
| Station 3          | 2.2           | 2.0          | 5.0         | 7.8           |
| Station 4          | 2.2           | 2.2          | 4.9         | 7.8           |
| Station 5          | 2.0           | 2.3          | 5.8         | 8.7           |
| Station 6          | 2.4           | 2.1          | 5.5         | 8.8           |
| Station 7          | 2.7           | 2.4          | 6.0         | 9.3           |
| Station 9          | 1.9           | 2.3          | 6.3         | 9.3           |
| Total <sup>1</sup> | 2.4           | 2.2          | 5.5         | 8.6           |

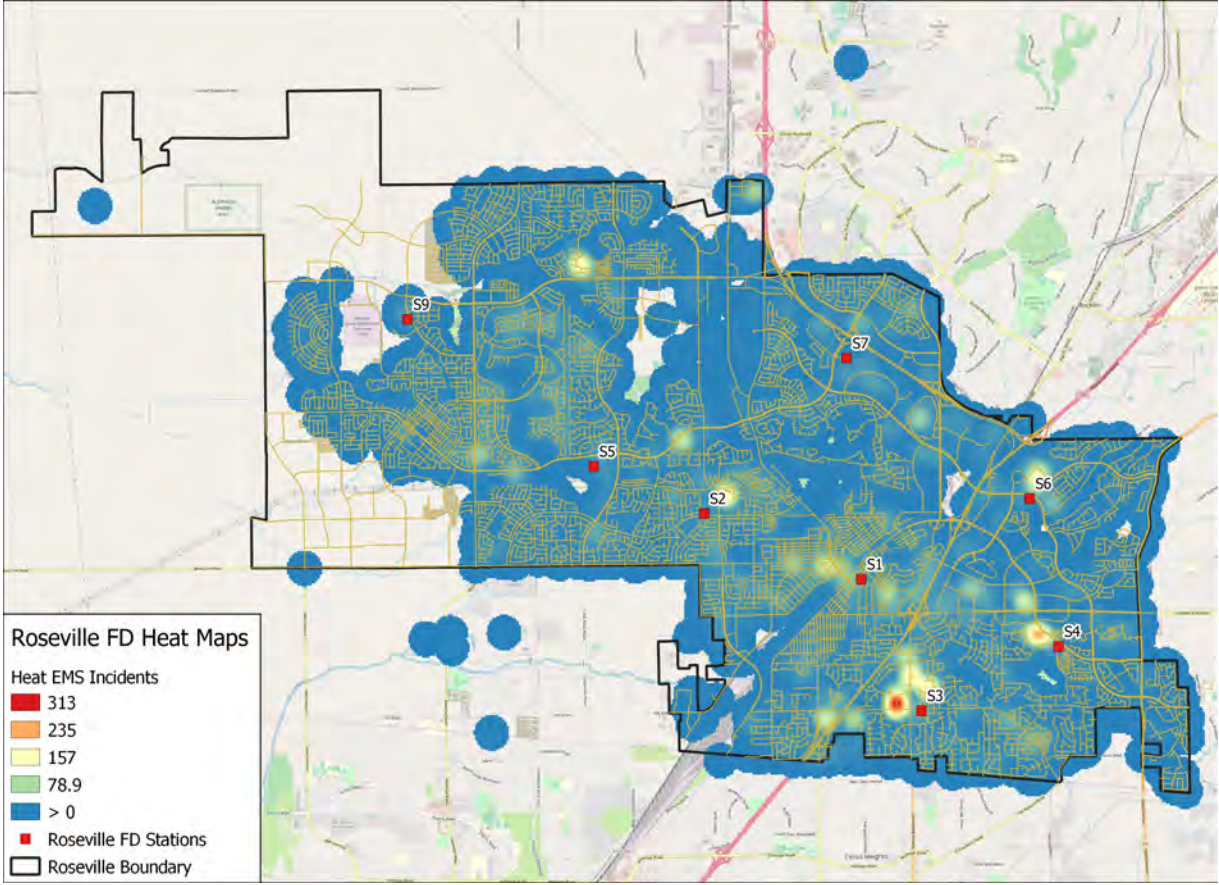
# Risk Assessment



Fire Incidents



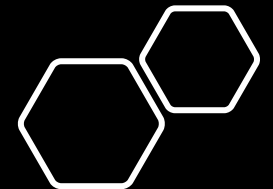
EMS Incidents



| Risk Class | Fire Flow |                      | Number of Stories |             | Square Footage |                      | Construction Class |                                                           | Building Combustion Class |                                 | Full Credit Sprinkler System | Total Risk Score |       |
|------------|-----------|----------------------|-------------------|-------------|----------------|----------------------|--------------------|-----------------------------------------------------------|---------------------------|---------------------------------|------------------------------|------------------|-------|
|            | Value     | Scale                | Value             | Scale       | Value          | Scale                | Value              | Scale                                                     | Value                     | Scale                           | (Yes/No)                     | Value            | Scale |
| High       | 3         | ≥ 1500 gpm           | 5                 | ≥ 4         | 5              | ≥ 100k GPM           | 5                  | Combustible or Frame                                      | 5                         | Quick<br>Free and Rapid Burning | -10/0                        | ≥ 16             |       |
| Moderate   | 2         | > 499 and < 1500 gpm | 3                 | > 1 and < 4 | 3              | > 10k gpm < 100k GPM | 3                  | Joisted Masonry                                           | 3                         | Combustible                     | -10/0                        | >6 and <16       |       |
| Low        | 1         | ≤ 499 gpm            | 1                 | 1           | 1              | < 10k GPM            | 1                  | Non-Combustible Masonry<br>Non-Combustible Fire Resistive | 1                         | Slow<br>Non/Limited Combustible | -10/0                        | ≤ 6              |       |

## Occupancy Level Risk Matrix

- Utilized ISO occupancy data to categorized 483 occupancies
  - 27 High Risk
  - 243 Moderate Risk
  - 213 Low Risk



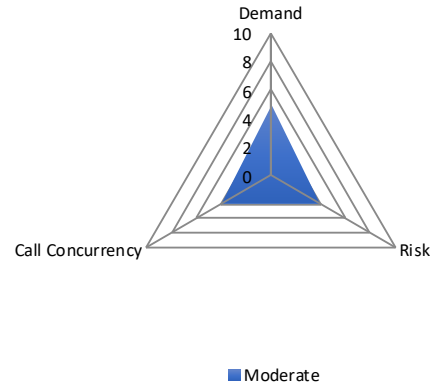
## Station Risk Profiles

| Risk Class | Community Demand (D) |                     | Call Concurrency (C) |                 | High/Moderate Risk Occupancies (R) |                     | Total Risk Score                            |
|------------|----------------------|---------------------|----------------------|-----------------|------------------------------------|---------------------|---------------------------------------------|
|            | Value                | Scale (Calls)       | Value                | Scale (%)       | Value                              | Scale (Occupancies) | $\sqrt{\frac{(CD)^2 + (CR)^2 + (RD)^2}{2}}$ |
| Maximum    | ≥10                  | ≥5,400              | ≥10                  | ≥ 31.5          | ≥10                                | ≥450                | ≥72                                         |
| High       | 7 – 9                | ≥ 3,600 and < 5,400 | 7 – 9                | ≥ 21 and < 31.5 | 7 to 9                             | ≥ 300 and <449      | ≥ 39.35 and < 72                            |
| Moderate   | 4 to 6               | ≥ 1,800 and < 3,600 | 4 to 6               | ≥ 10.5 and < 21 | 4 to 6                             | ≥ 150 and < 300     | ≥ 16.49 and < 39.35                         |
| Low        | 1 to 3               | < 1,800             | 1 to 3               | < 10.5          | 1 to 3                             | < 150               | < 16.49                                     |

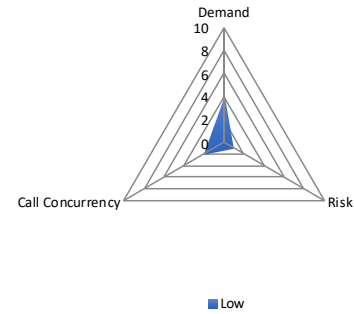
| Station Demand Zone | Community Demand | Call Concurrency | High/Moderate Risk Occupancies | Total risk Score | Risk Rating |
|---------------------|------------------|------------------|--------------------------------|------------------|-------------|
| 1                   | 6                | 3                | 5                              | 26.92            | Moderate    |
| 2                   | 4                | 2                | 1                              | 6.48             | Low         |
| 3                   | 5                | 4                | 4                              | 22.98            | Moderate    |
| 4                   | 4                | 3                | 2                              | 11.05            | Low         |
| 5                   | 4                | 3                | 1                              | 9.19             | Low         |
| 6                   | 4                | 2                | 4                              | 13.86            | Low         |
| 7                   | 5                | 3                | 4                              | 19.61            | Moderate    |
| 9                   | 4                | 2                | 1                              | 6.48             | Low         |

## Station Risk Profiles

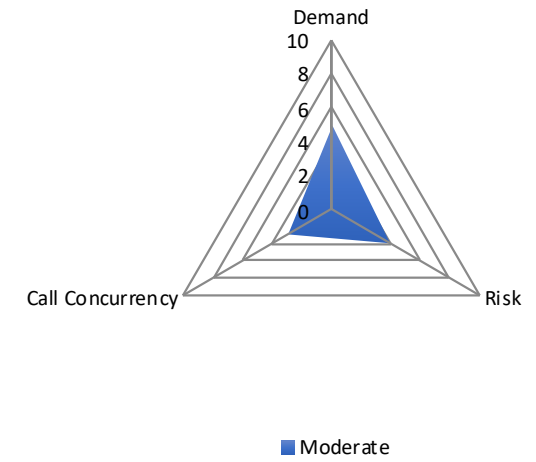
### Station 3



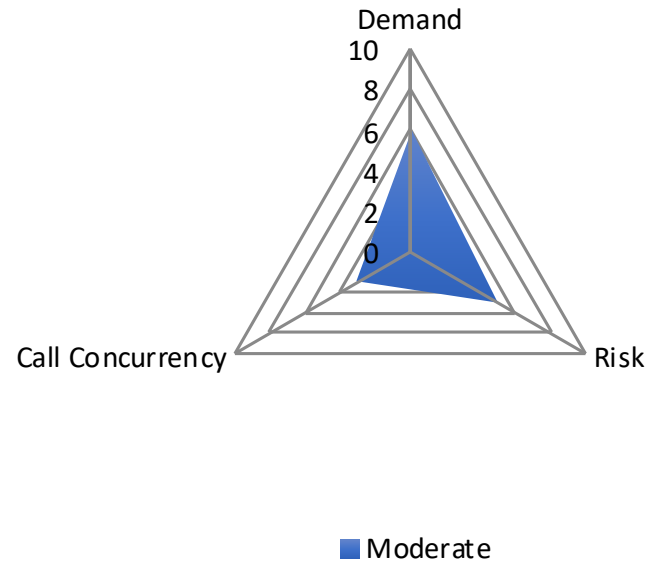
### Station 9



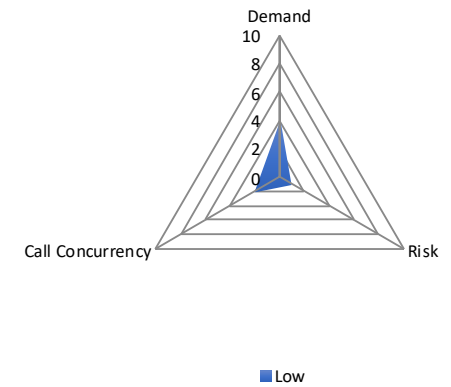
### Station 7



### Station 1



### Station 2

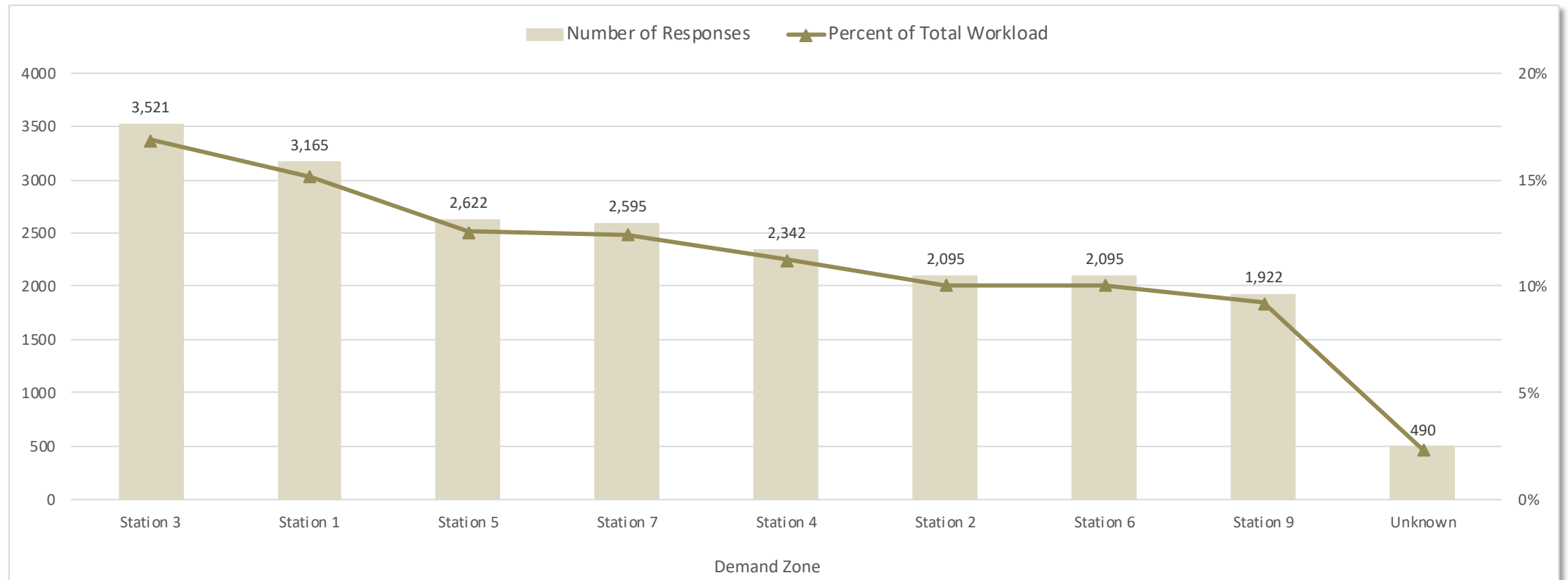




# Workload

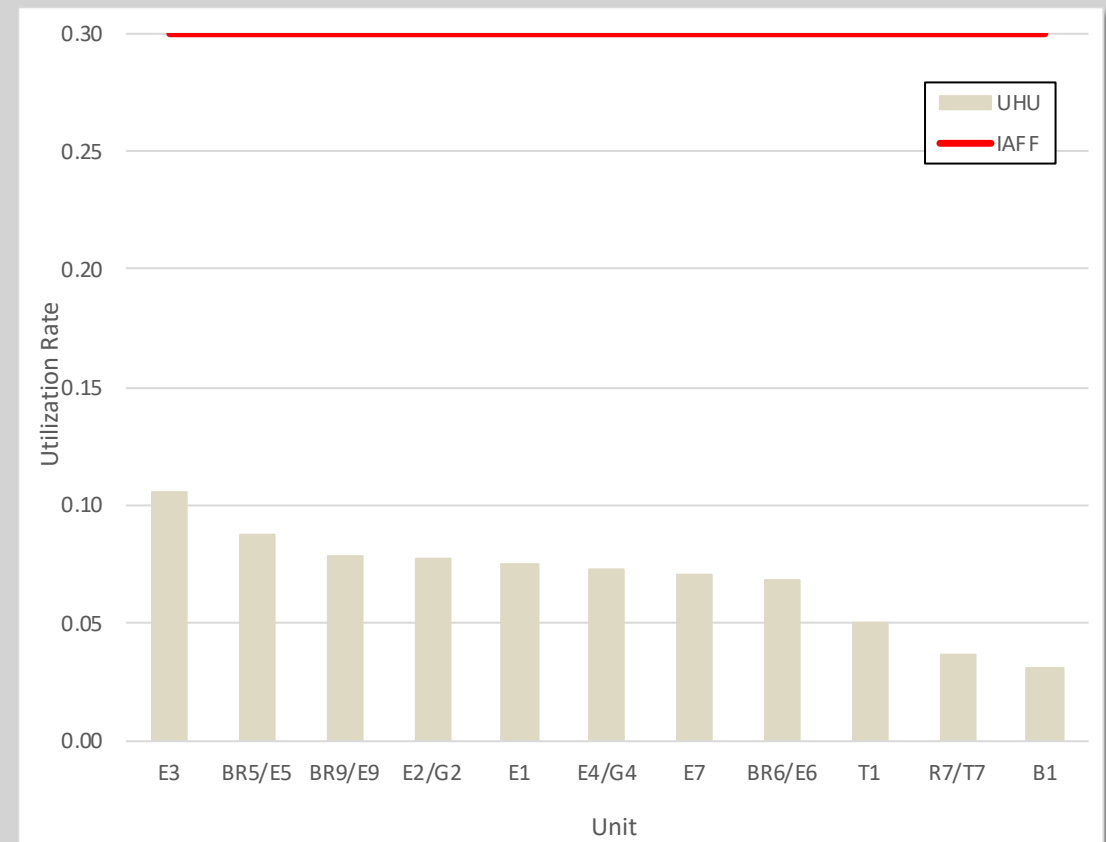


# Workload Distribution by Station Area



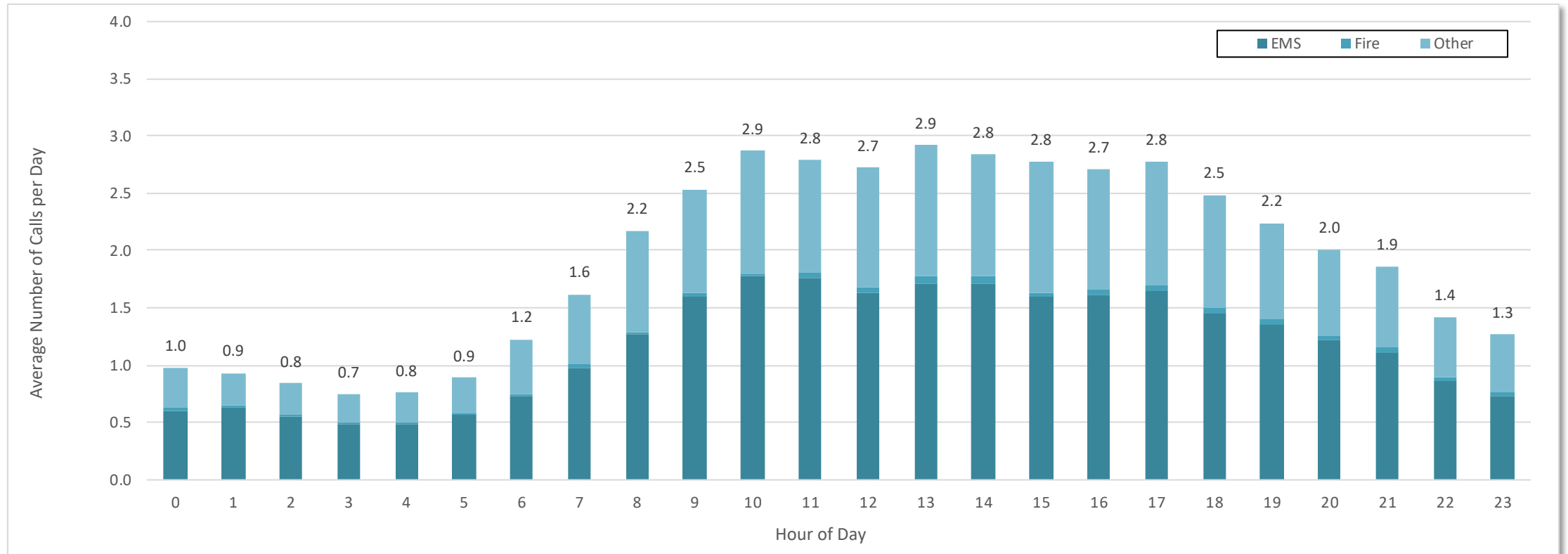
# Unit Hour Utilization

- Considering how much work is to much work
- Best practice is not to exceed 0.25 to 0.30-unit hour utilization within a 24-hour shift
- The current workload indicates that there is excess capacity in the system and therefore can absorb more work
- Affords the city the ability to cost avoid future investments for the sole purpose of alleviating workload





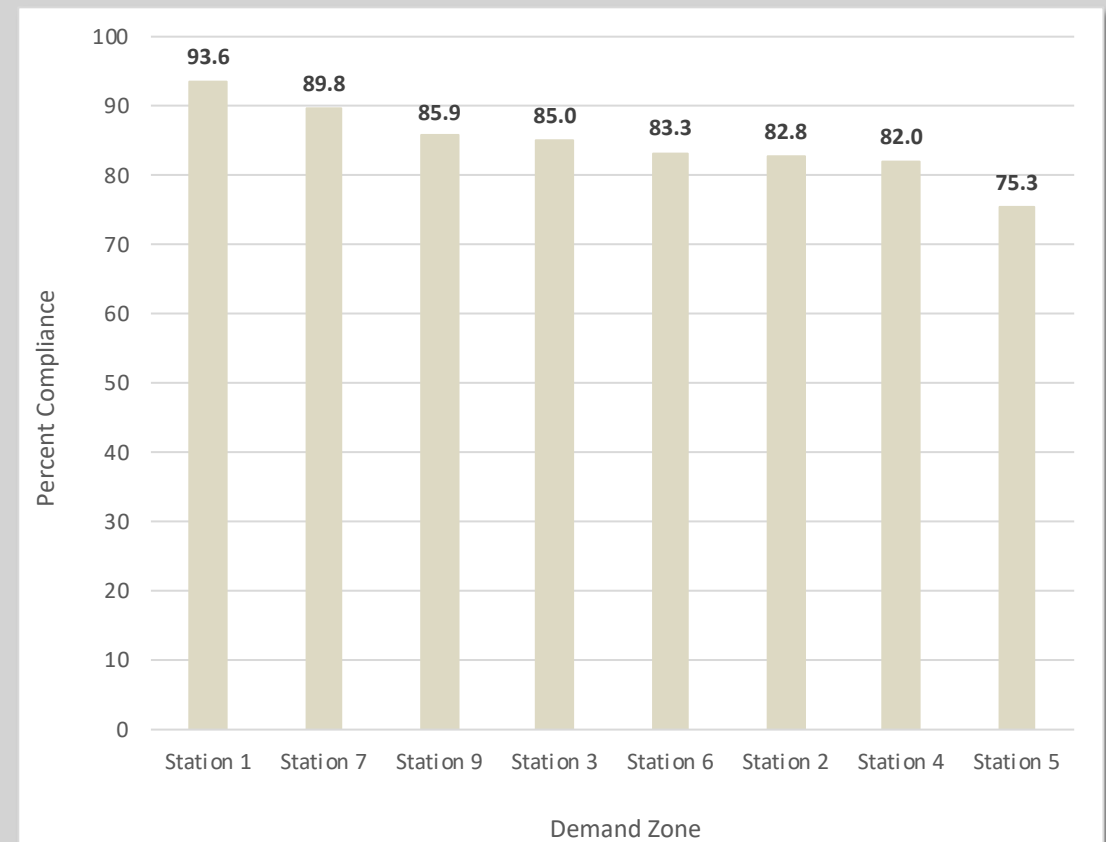
# Average Calls/Hour Day



# System Resiliency

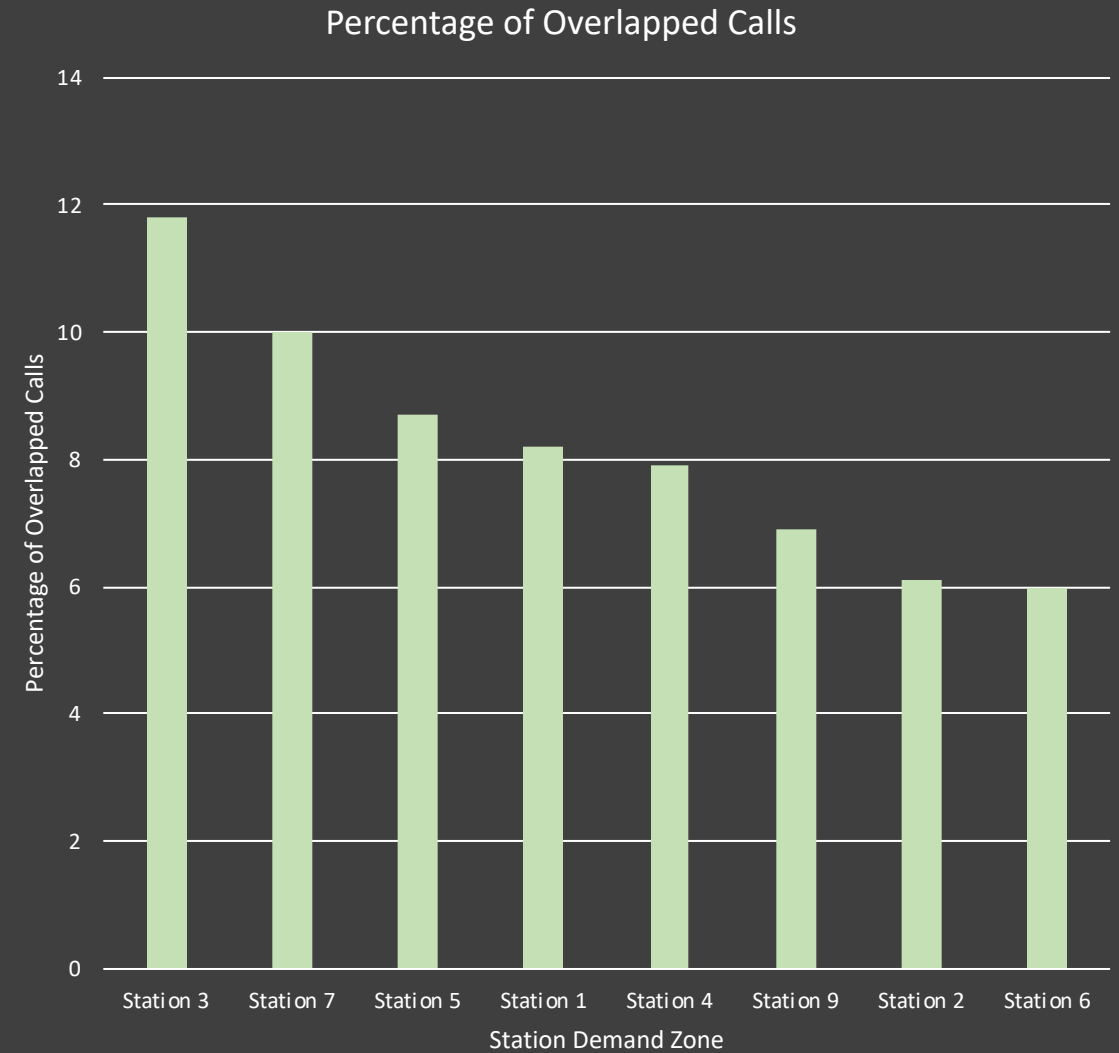
# Station Reliability

- Defined by the ability of the resources assigned to a specific station to answer all calls within the assigned area
- This is a measure of the robustness of the current resource allocation
- Excluding Station 5, each of all stations are greater than 82% reliable
  - Station 5 is at 75.3%
- Would recommend maintaining an 80% threshold as an independent measure
- However, the City is encouraged to use a system of measures to avoid investments with lower return



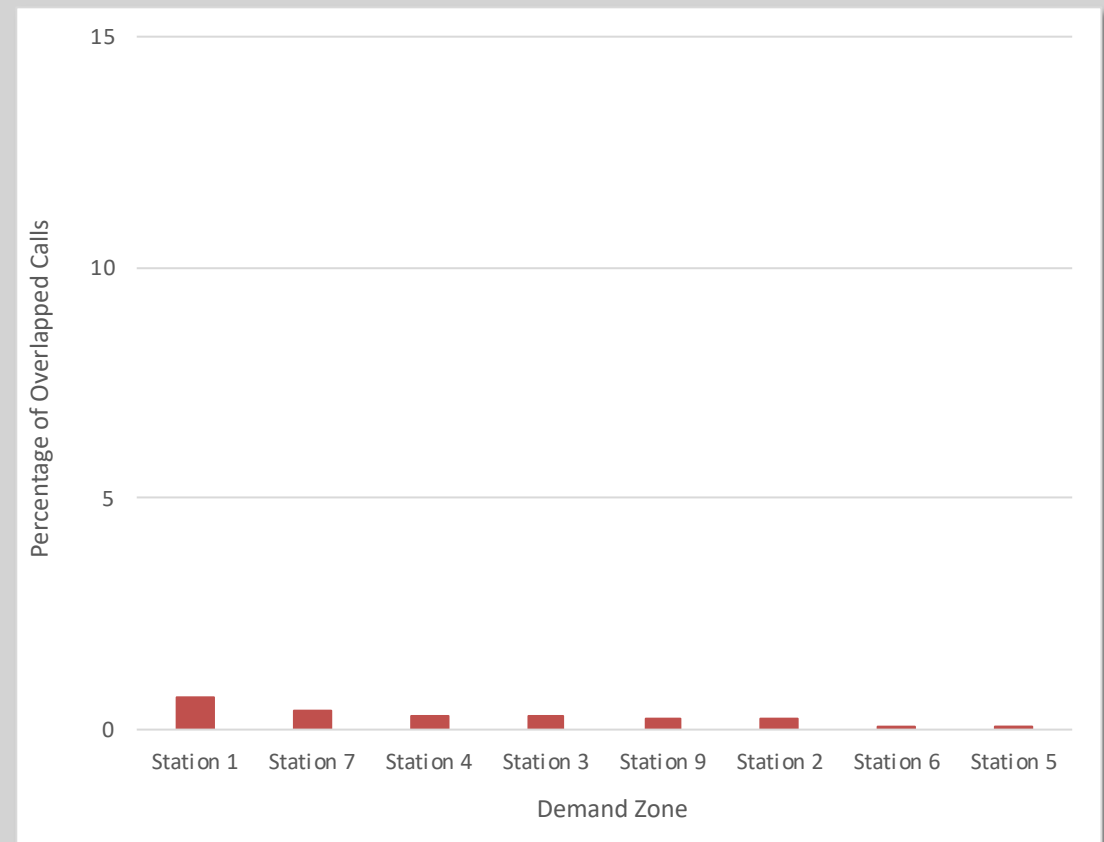
# Simultaneity

- Defined as the percentage of time that a call occurs within a station demand zone and a second or greater call occurs within the demand zone prior to the first call coming to fruition
  - In other words, the percentage of concurrent calls by station area
- The busiest station, Station 3 is less than 12% call concurrency or simultaneity
  - In other words, 88% of the time, a call can occur and be brought to fruition prior to another call occurring
- This is a measure of the robustness of the current resource allocation



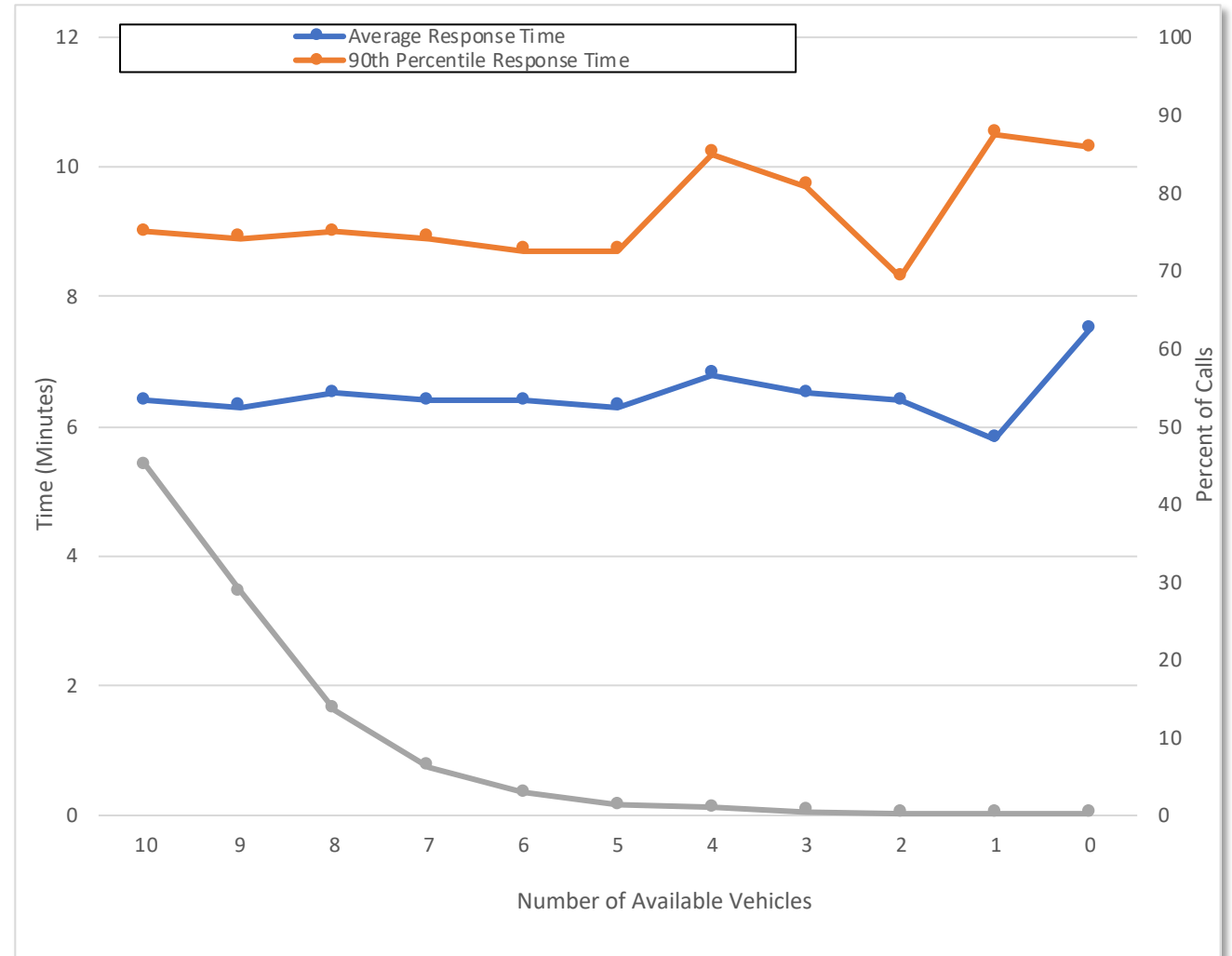
# Fire Related Simultaneity

- Defined as the percentage of time that a fire call occurs within a station demand zone and a second or greater call occurs within the demand zone prior to the first call coming to fruition
  - In other words, the percentage of concurrent fire calls by station area
- All stations are less than 1% call concurrency on fire related incidents within the respective station demand zone
  - In other words, 99% of the time, a call can occur and be brought to fruition prior to another fire call occurring within the same station demand zone
- This is a measure of the robustness of the current resource allocation



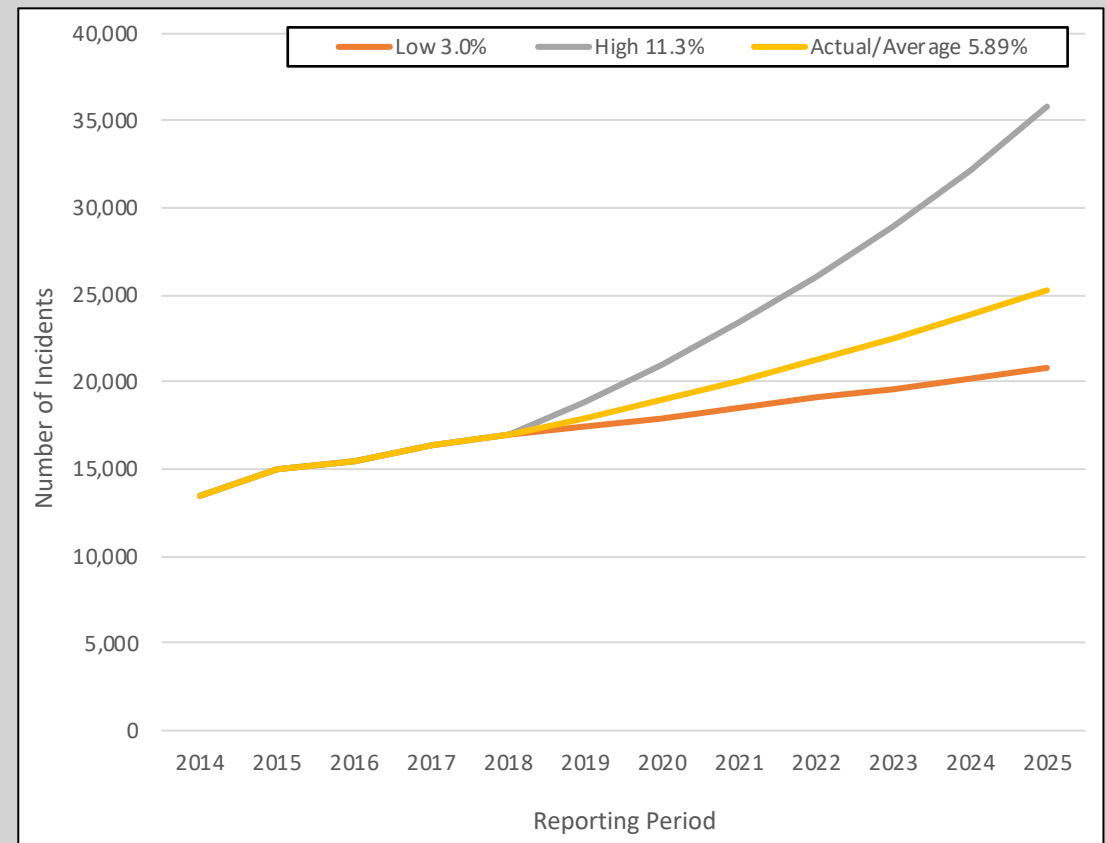
# System Resiliency and the Impact on Response Time Performance

- 45% of the time, all 10 units were available when a call occurred
- 93.6% of the time when a call occurred, there were 7 or more units available
- Very robust resiliency in the system
- The response time is very stable as units are drawn down
- The first substantive shift in response time doesn't occur until there are 4 units or less available
- Supports the station distribution strategies
- Might have some systematic improvement with modifications in a move-up policy



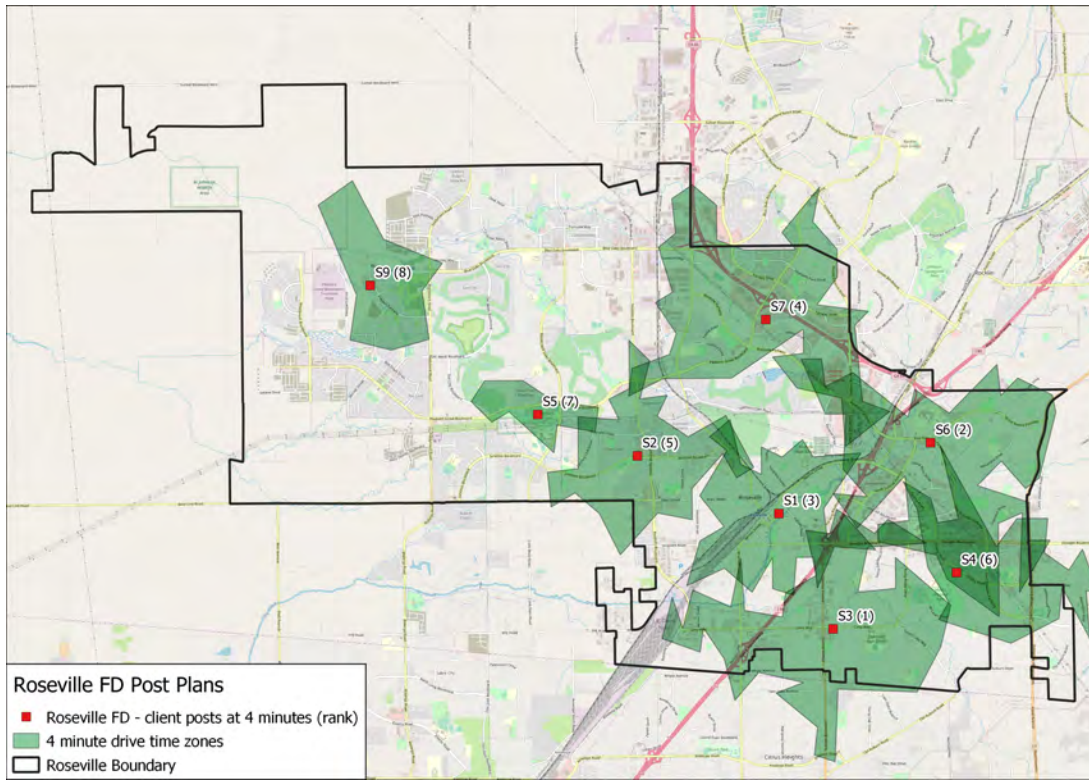
# Projected Growth

- Community requests for services had a year of year growth of 5.89% over the study period
- If the analysis is representative of the future, demand will be relatively stable
- City will need to monitor on a 5-year rolling average and will have to reinvest and/or manage workload in the future
- In our experience most of the country is growing by 3% to 7% per year in EMS incidents



# Current Station Locations and Efficiencies

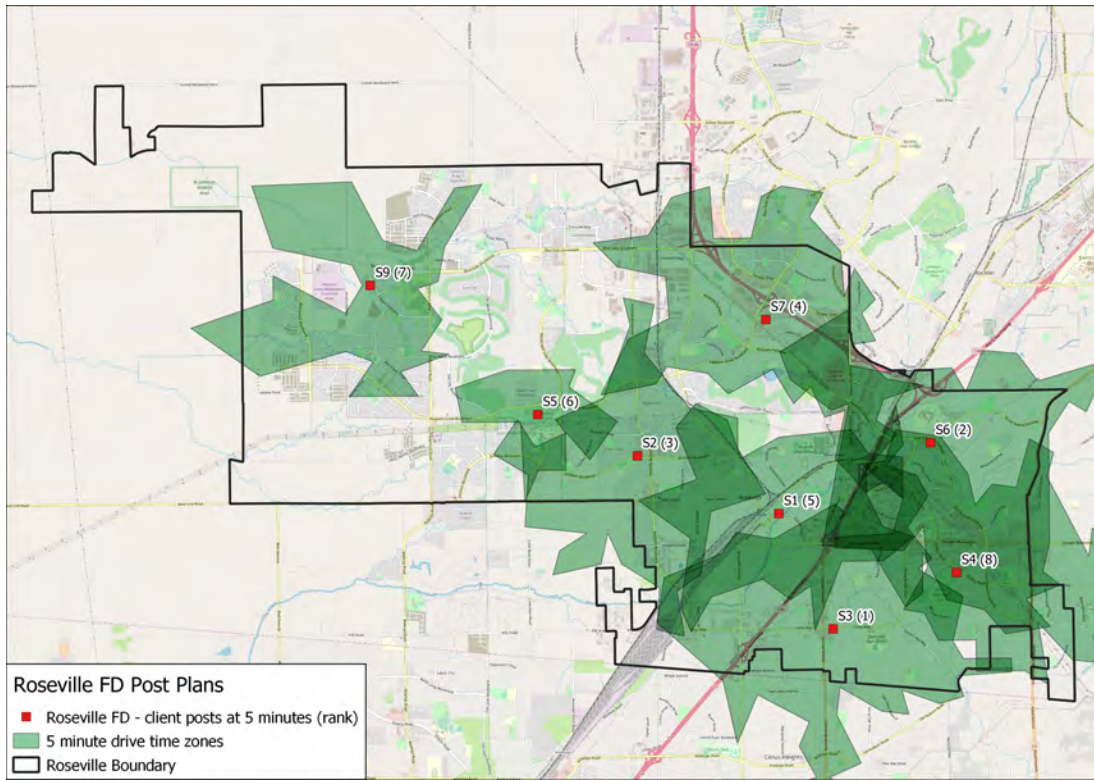




| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 3,481           | 3,481         | 20.63%          |
| 2    | S6      | 2,319           | 5,800         | 34.38%          |
| 3    | S1      | 1,606           | 7,406         | 43.90%          |
| 4    | S7      | 1,527           | 8,933         | 52.95%          |
| 5    | S2      | 1,146           | 10,079        | 59.74%          |
| 6    | S4      | 440             | 10,519        | 62.35%          |
| 7    | S5      | 284             | 10,803        | 64.03%          |
| 8    | S9      | 142             | 10,945        | 64.87%          |

## 4-Minute Travel Time

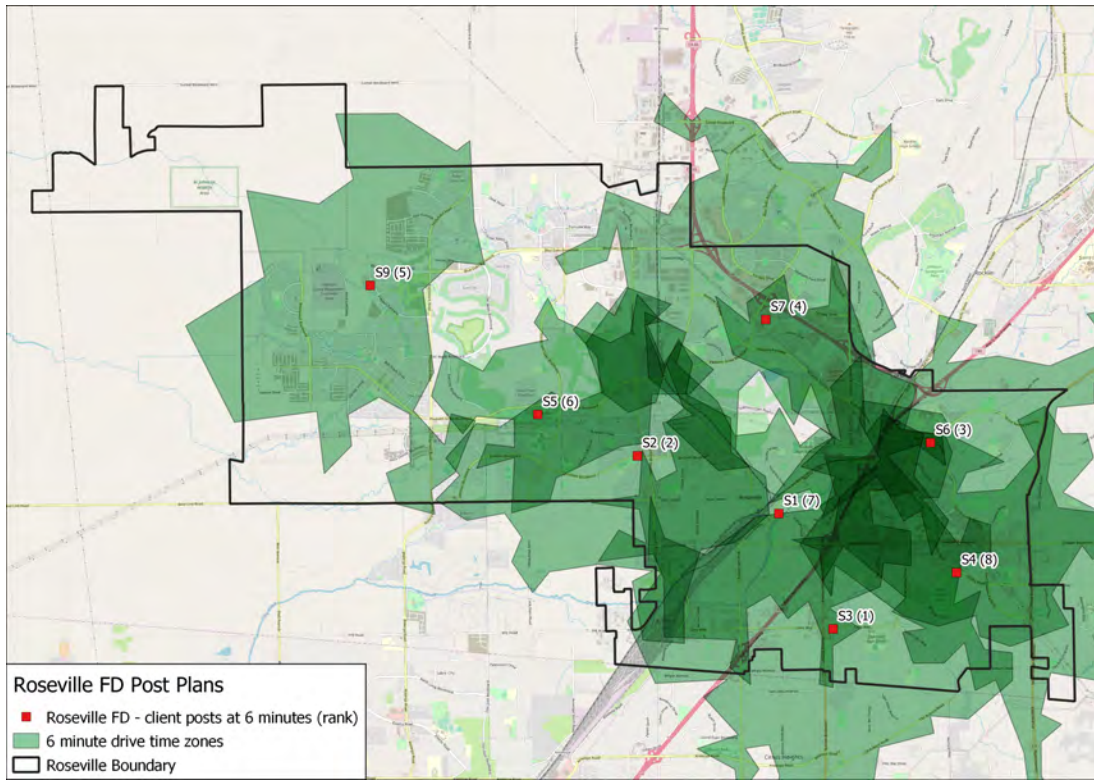
- The current configuration can meet approximately 65% of the incidents within 4-minutes travel time or less



| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S7      | 1,354           | 11,641        | 69.00%          |
| 5    | S1      | 944             | 12,585        | 74.60%          |
| 6    | S5      | 488             | 13,073        | 77.49%          |
| 7    | S9      | 438             | 13,511        | 80.08%          |
| 8    | S4      | 106             | 13,617        | 80.71%          |

## 5-Minute Travel Time

- Current configuration can meet approximately 81% of the incidents within 5-minutes travel time or less



| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 6,457           | 6,457         | 38.27%          |
| 2    | S2      | 2,953           | 9,410         | 55.78%          |
| 3    | S6      | 2,696           | 12,106        | 71.76%          |
| 4    | S7      | 908             | 13,014        | 77.14%          |
| 5    | S9      | 785             | 13,799        | 81.79%          |
| 6    | S5      | 644             | 14,443        | 85.61%          |
| 7    | S1      | 277             | 14,720        | 87.25%          |
| 8    | S4      | 54              | 14,774        | 87.57%          |

## 6-Minute Travel Time

- Current configuration can meet approximately 88% of the incidents within 6-minutes travel time or less

# Proposed Station Locations and Efficiencies

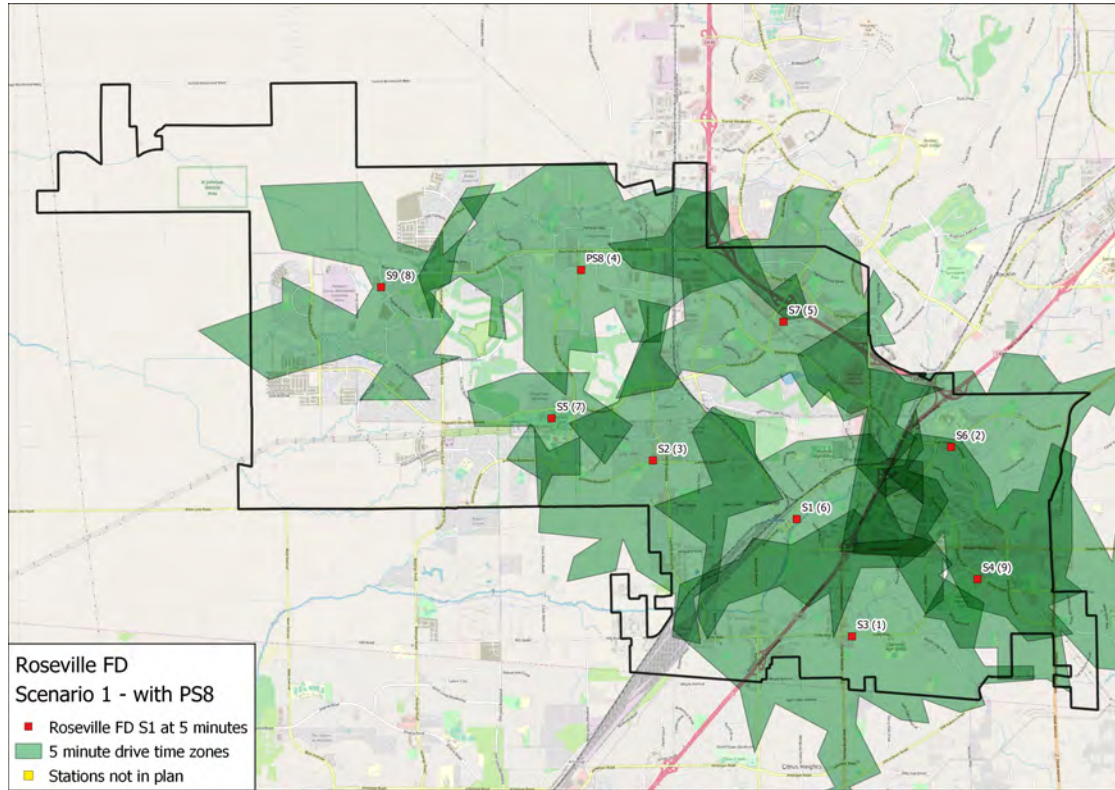




# Alternative Station Locations

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- Four alternative scenarios were created and evaluated at 4, 5, 6, 7, and 8-minute performance objectives
- Scenario 1: All existing stations with the addition of Station 8
- Scenario 2: All existing stations with the addition of Station 8 and relocated Station 5
- Scenario 3: All existing stations with the addition of Stations 8 and 10
- Scenario 4: All existing stations with the addition of Station 8, relocated Station 5, and Station 10
- For succinctness, only the 5-minute travel times are presented here

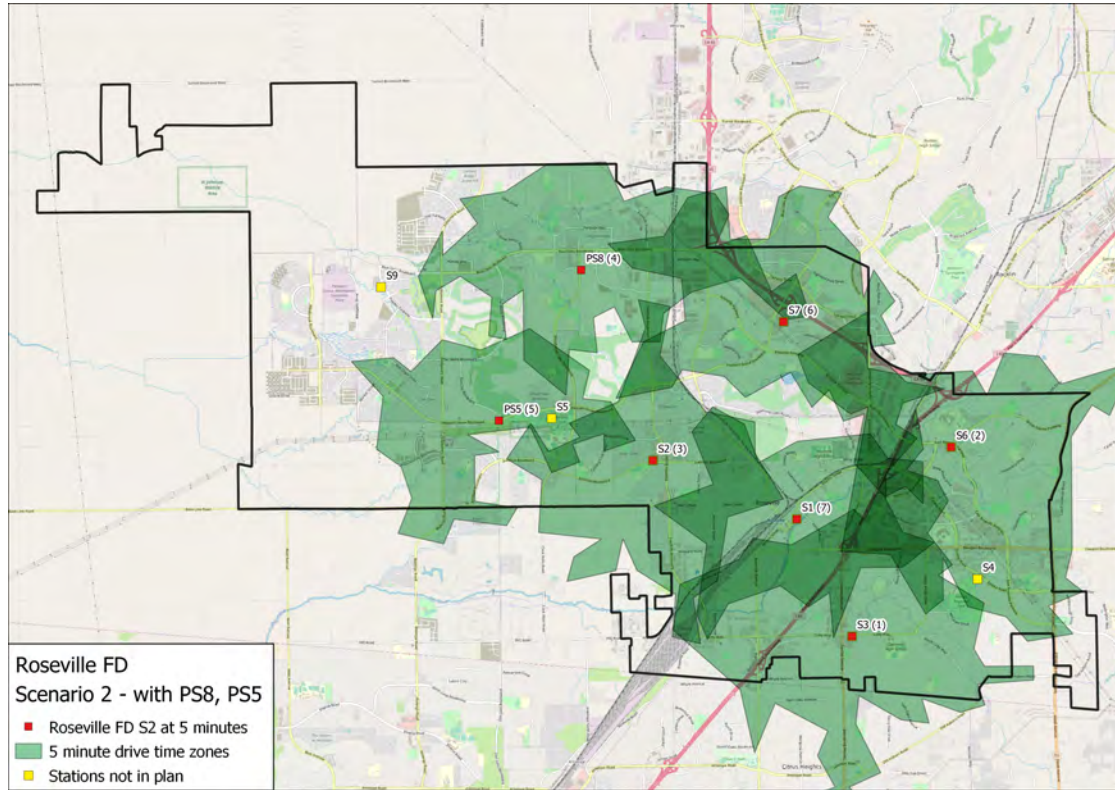


| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S7      | 967             | 12,895        | 76.43%          |
| 6    | S1      | 944             | 13,839        | 82.03%          |
| 7    | S5      | 474             | 14,313        | 84.84%          |
| 8    | S9      | 403             | 14,716        | 87.23%          |
| 9    | S4      | 106             | 14,822        | 87.85%          |

## Scenario 1: 5-Minute Travel Time

- Results suggest that with all nine RFD fire stations, 87.85% of the incidents could be responded to within 5 minutes or less travel time.
- This is approximately a 7% improvement over the current configuration prior to the addition of Station 8.

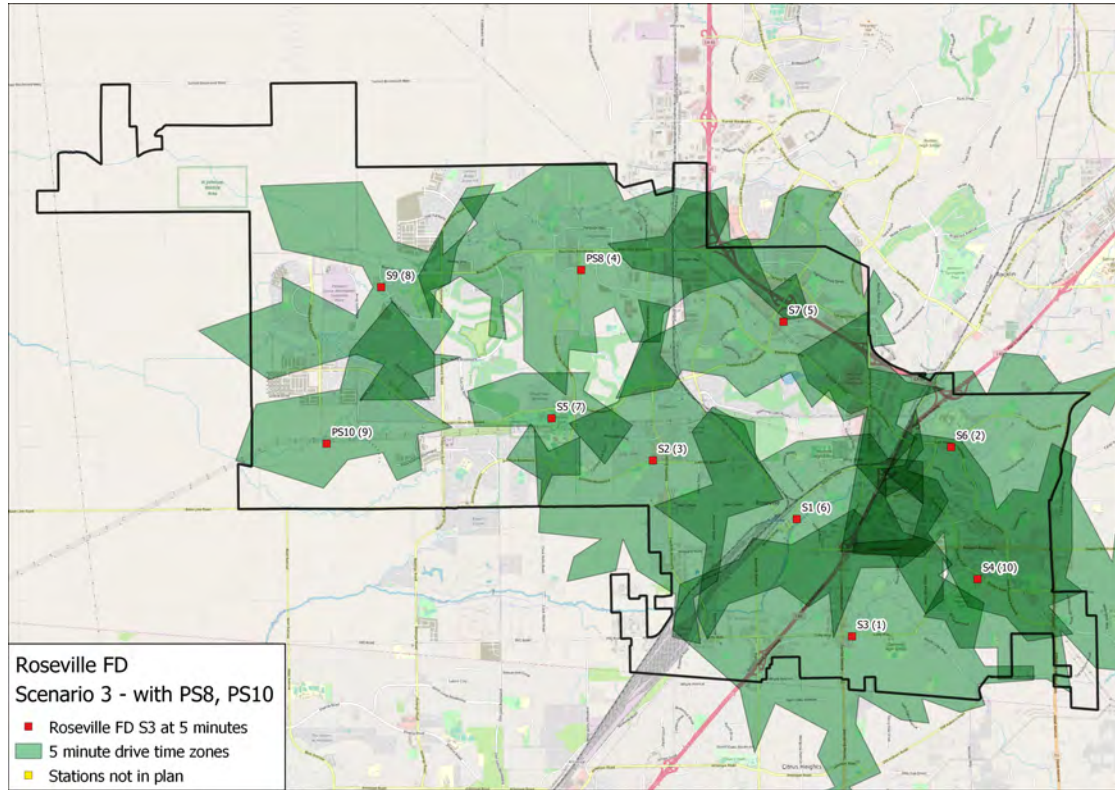




| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S5N     | 1,397           | 13,325        | 78.98%          |
| 6    | S7      | 967             | 14,292        | 84.71%          |
| 7    | S1      | 944             | 15,236        | 90.31%          |
| 8    | S9      | 274             | 15,510        | 91.93%          |
| 9    | S4      | 106             | 15,616        | 92.56%          |

## Scenario 2: 5-Minute Travel Time

- Results suggest that with all nine RFD fire stations, 92.56% of the incidents could be responded to within 5 minutes or less travel time.
- This is approximately an 11% improvement over the current configuration prior to the addition of Station 8 or relocation of Station 5.

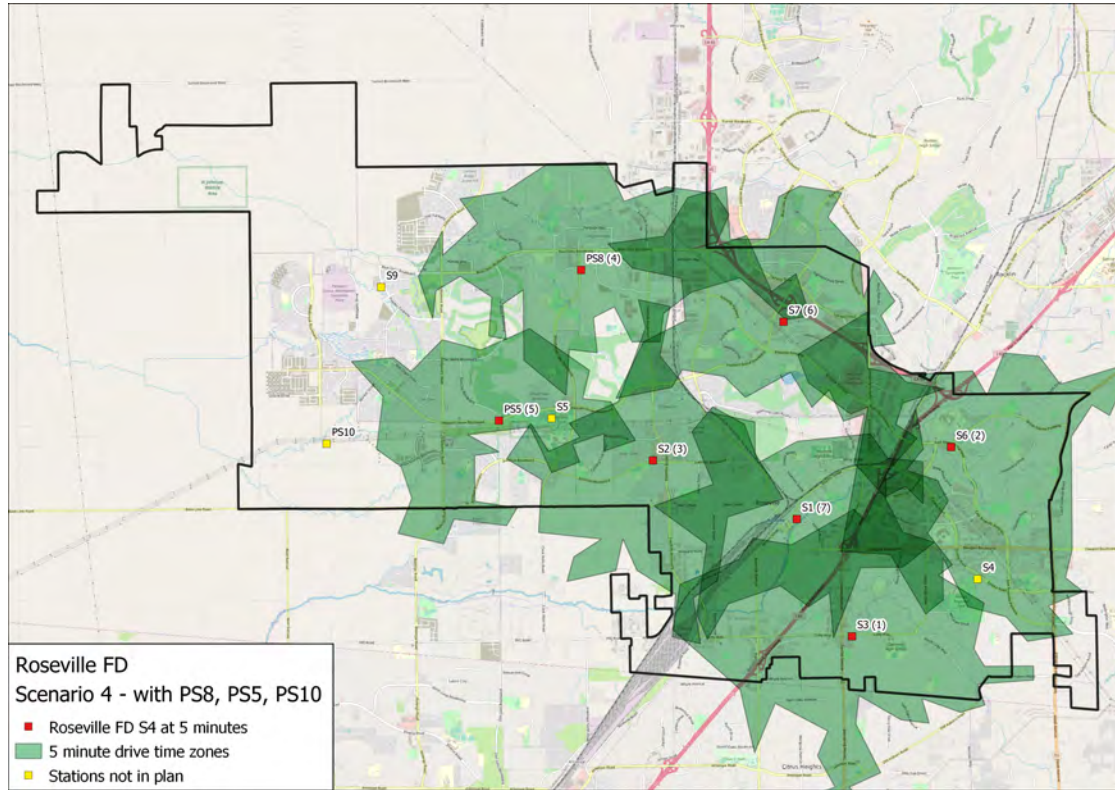


| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S7      | 967             | 12,895        | 76.43%          |
| 6    | S1      | 944             | 13,839        | 82.03%          |
| 7    | S5      | 474             | 14,313        | 84.84%          |
| 8    | S9      | 403             | 14,716        | 87.23%          |
| 9    | S10     | 133             | 14,849        | 88.01%          |
| 10   | S4      | 106             | 14,955        | 88.64%          |

## Scenario 3: 5-Minute Travel Time

- Results suggest that with all 10 RFD fire stations, 88.64% of the incidents could be responded to within 5 minutes or less travel time.
- This is approximately a 7% improvement over the current configuration, but 4% less than the configuration of Station 8 and the relocation of Station 5.





| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S5N     | 1,397           | 13,325        | 78.98%          |
| 6    | S7      | 967             | 14,292        | 84.71%          |
| 7    | S1      | 944             | 15,236        | 90.31%          |
| 8    | S9      | 274             | 15,510        | 91.93%          |
| 9    | S4      | 106             | 15,616        | 92.56%          |
| 10   | S10     | 25              | 15,641        | 92.71%          |

## Scenario 4: 5-Minute Travel Time

- Results suggest that with all 10 RFD fire stations, 92.71% of the incidents could be responded to within 5 minutes or less travel time.
- This is approximately a 11% improvement over the current configuration.

| Performance<br>(Minutes) | Current<br>Config. | Scenario<br>1 | Scenario<br>2 | Scenario<br>3 | Scenario<br>4 |
|--------------------------|--------------------|---------------|---------------|---------------|---------------|
| 4                        | 64.87%             | 70.20%        | 74.04%        | 71.26%        | 74.86%        |
| 5                        | 80.71%             | 87.85%        | 92.56%        | 88.64%        | 92.71%        |
| 6                        | 87.57%             | 95.09%        | 97.09%        | 95.64%        | 97.09%        |
| 7                        | 95.44%             | 98.75%        | 98.98%        | 98.77%        | 98.99%        |
| 8                        | 97.88%             | 99.05%        | 99.24%        | 99.05%        | 99.24%        |

## Summary of Alternative Station Configurations

- The analyses of the several alternatives reveal that Scenario 2 (Station 8 and Relocate Station 5) has the greatest return on investment.
- With very little variability, it requires only one additional station and the relocation of one station rather than two additional stations.

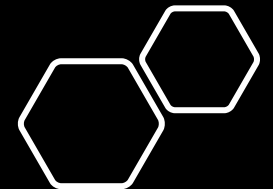
# Effective Response Force Evaluations

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| Travel Time Objective | Current |
|-----------------------|---------|
| 8-Minute              | 21.88%  |
| 10-Minute             | 49.03%  |
| 13-Minute             | 74.81%  |
| 17-Minute             | 86.72%  |

## Effective Response Force Calculations

- NFPA 1710 recommends an 8-minute travel time and the department could meet this at less than 22%
- Approximately 75% coverage within 13-minutes
- It is not uncommon for agencies to be challenged to meet the more restrictive ERF thresholds
- However, the department has excellent first due response time and the addition of future stations may assist in improving the overall experience.



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# Alternative Staffing and Scheduling Models for Consideration

# Current Deployment Minimum Staffing

| Unit                         | ID  | UNIT TYPE | BC                       | Captain | Engineer | FF Medic | FF or FF Medic | TOTAL |
|------------------------------|-----|-----------|--------------------------|---------|----------|----------|----------------|-------|
| Battalion 1                  | B1  |           | 1                        |         |          |          |                | 1     |
| Engine 1                     | E1  | I         |                          | 1       | 1        | 1        |                | 3     |
| Truck 1                      | T1  |           |                          | 1       | 1        | 1        | 1              | 4     |
| Hazmat 1                     | HM1 | II        | Cross Staffed by E1 / T1 |         |          |          |                |       |
| Engine 2                     | E2  | I         |                          | 1       | 1        | 1        |                | 3     |
| Grass 2                      | G2  | VI        | Cross Staffed by E2      |         |          |          |                |       |
| Engine 3                     | E3  | I         |                          | 1       | 1        | 1        |                | 3     |
| Engine 4                     | E4  | I         |                          | 1       | 1        | 1        |                | 3     |
| Grass 4                      | G4  | VI        | Cross Staffed by E4      |         |          |          |                |       |
| Engine 5                     | E5  | I         |                          | 1       | 1        | 1        |                | 3     |
| Brush 5                      | BR5 | III       | Cross Staffed by E5      |         |          |          |                |       |
| Engine 6                     | E6  | I         |                          | 1       | 1        | 1        |                | 3     |
| Brush 6                      | BR6 | III       | Cross Staffed by E6      |         |          |          |                |       |
| Engine 7                     | E7  | I         |                          | 1       | 1        | 1        |                | 3     |
| Truck 7                      | T7  |           |                          | 1       | 1        | 1        | 1              | 4     |
| Rescue 7                     | R7  | MED       | Cross Staffed by E7 / T7 |         |          |          |                |       |
| Engine 9                     | E9  | I         |                          | 1       | 1        | 1        |                | 3     |
| Brush 9                      | BR9 | III       | Cross Staffed by E9      |         |          |          |                |       |
| Total Daily Minimum Staffing |     |           |                          |         |          |          |                | 33    |

- Department allows 7 personnel to be off per day which drops the minimum staffing down to 26 causing an increased frequency of overtime usage for daily minimum staffing
- Consider the fiscal and operational value of a continuous staffing approach

# Staffing Considerations

## **Constant Staffing**

- 33 Minimum Daily Staffing
- Total of 97 shift assigned personnel
- 2019 – constant staffing related overtime is approximately \$2.7 million

## **Continuous Staffing**

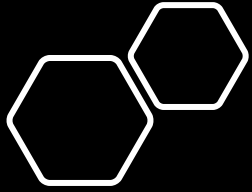
- 33 Minimum Daily Staffing
- Total of 122 shift assigned personnel
  - Relief staffing multiplier of 3.71
  - 25 additional personnel
- Estimated additional expenditures of \$2.7 million
- 2019 – overtime would be significantly reduced, but will never eliminate overtime liability
  - Estimated at approximately \$348k per year in scheduled overtime
  - \$71k if only considering the 25 FTEs

# Considerations for Continuous Staffing Model

- Pros
  - Additional personnel for greater concentration of staffing when less than average leave
  - Reduces political sensitivity to high overtime utilization
  - Provides greater depth of residual personnel during wildfire season
  - Provides greater depth of personnel during major events
  - Reduces overtime expenditures
  - Reduces opportunity to work extended work periods
- Cons
  - Maintains benefit and pension rates for the additional personnel
  - Reduction in overtime earnings of personnel

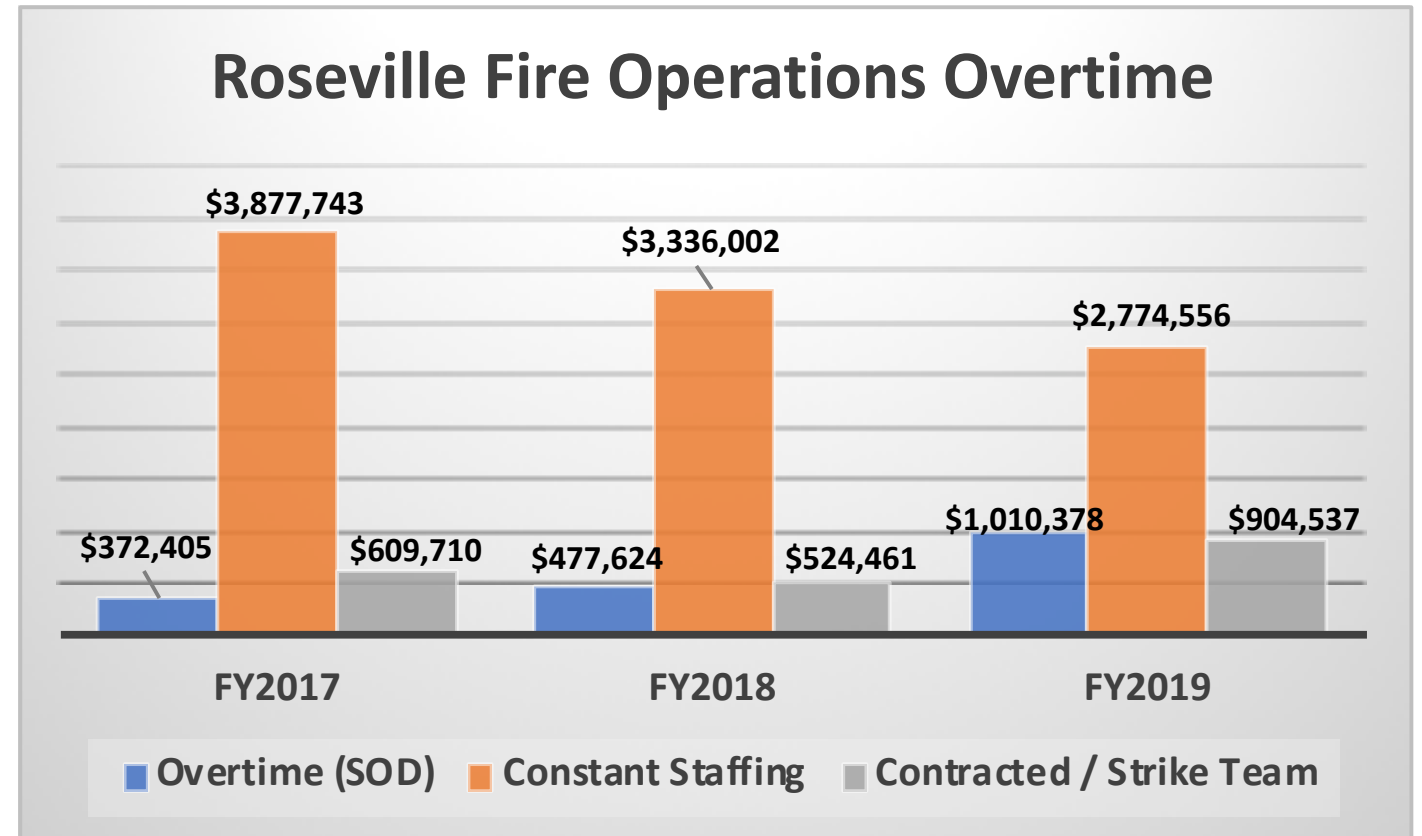






# Roseville FD Overtime

- 2019 constant staffing overtime of \$2.77 million





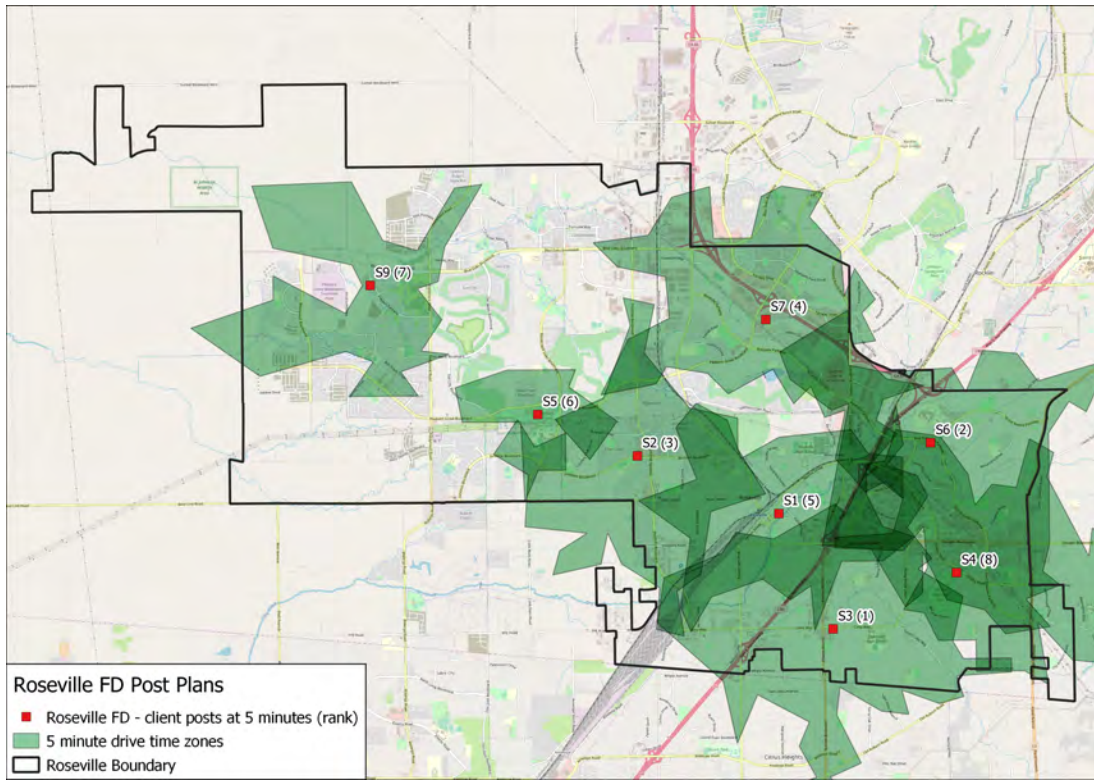
# Alternatives for Consideration



# Alternative 1

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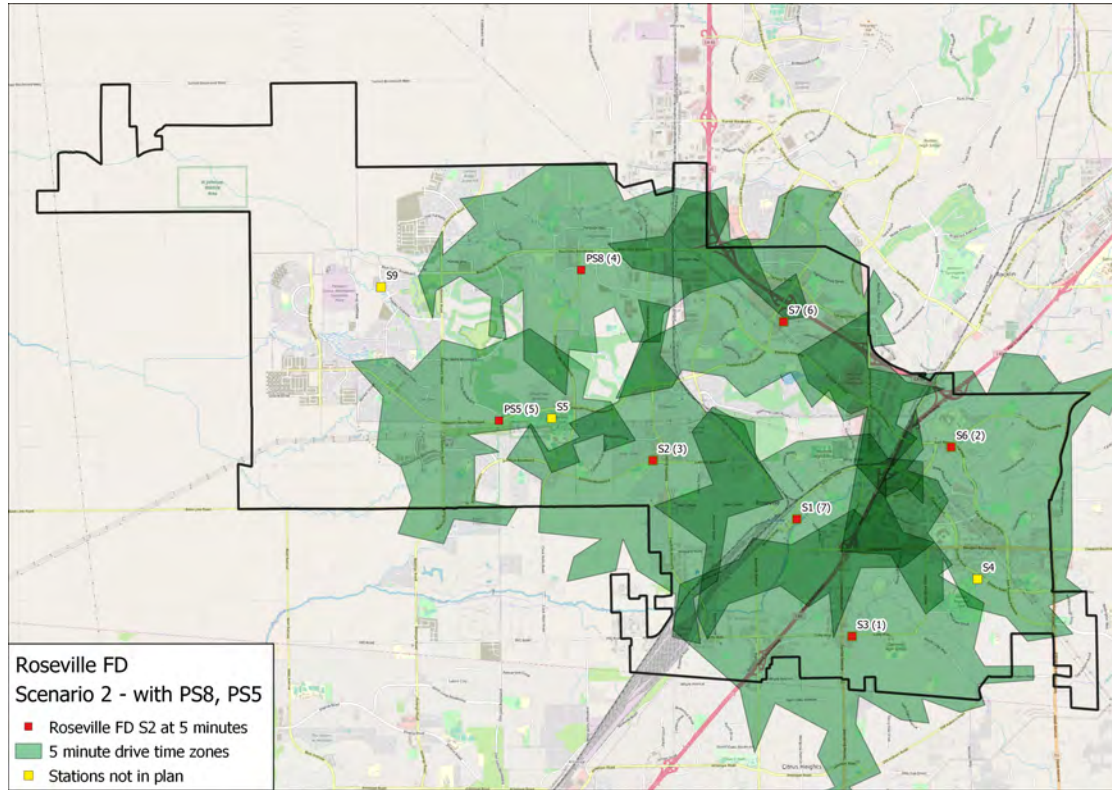
Consider Recommended Move-up Policy



| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S7      | 1,354           | 11,641        | 69.00%          |
| 5    | S1      | 944             | 12,585        | 74.60%          |
| 6    | S5      | 488             | 13,073        | 77.49%          |
| 7    | S9      | 438             | 13,511        | 80.08%          |
| 8    | S4      | 106             | 13,617        | 80.71%          |

## 5-Minute Travel Time

- Current configuration can meet approximately 81% of the incidents within 5-minutes travel time or less
- Utilize the marginal utility analysis as a template for a move-up policy as units are drawn-down.
- For example, if only four units are left available in the city, placing those four units at Stations 7, 2, 6, and 3 and would capture nearly 61% of the calls within the desired performance



| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S5N     | 1,397           | 13,325        | 78.98%          |
| 6    | S7      | 967             | 14,292        | 84.71%          |
| 7    | S1      | 944             | 15,236        | 90.31%          |
| 8    | S9      | 274             | 15,510        | 91.93%          |
| 9    | S4      | 106             | 15,616        | 92.56%          |

## Scenario 2: 5-Minute Travel Time

- Results suggest that with all nine RFD fire stations, 92.56% of the incidents could be responded to within 5 minutes or less travel time.
- Utilize the marginal utility analysis as a template for a move-up policy as units are drawn-down.
- For example, if only four units are left available in the city, placing those four units at Stations 7, 2, 6, and 3 and would capture nearly 61% of the calls within the desired performance



# Alternative 2

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Additional Resource Allocation based on Risk Profile

| Station Demand<br>Zone | Community<br>Demand | Call<br>Concurrency | High/Moderate<br>Risk Occupancies | Total risk Score | Risk Rating |
|------------------------|---------------------|---------------------|-----------------------------------|------------------|-------------|
| 1                      | 6                   | 3                   | 5                                 | 26.92            | Moderate    |
| 2                      | 4                   | 2                   | 1                                 | 6.48             | Low         |
| 3                      | 5                   | 4                   | 4                                 | 22.98            | Moderate    |
| 4                      | 4                   | 3                   | 2                                 | 11.05            | Low         |
| 5                      | 4                   | 3                   | 1                                 | 9.19             | Low         |
| 6                      | 4                   | 2                   | 4                                 | 13.86            | Low         |
| 7                      | 5                   | 3                   | 4                                 | 19.61            | Moderate    |
| 9                      | 4                   | 2                   | 1                                 | 6.48             | Low         |

## Risk-based Deployment

- There were three moderate risk station profiles based on the risk matrices developed and utilized in the Standards of Cover
- Stations 1 and 7 are multi-company stations, but Station 3 is a single resource
- Recommend the department consider placing an additional staffed apparatus at Station 3 to have a commensurate risk-based approach to resource allocation



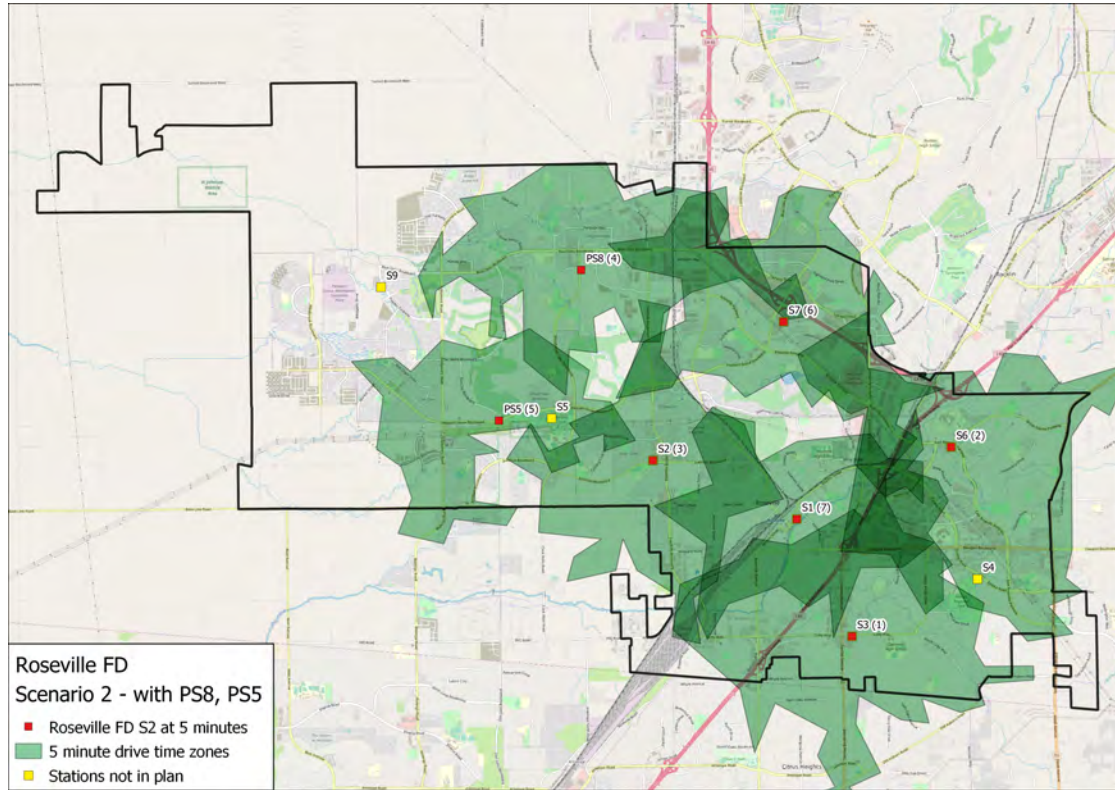


# Alternative 3

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Re-Allocate the Investment for Staffing Station 10 to an Additional Unit at Station 3





| Rank | Station | Station Capture | Total Capture | Percent Capture |
|------|---------|-----------------|---------------|-----------------|
| 1    | S3      | 5,054           | 5,054         | 29.96%          |
| 2    | S6      | 2,952           | 8,006         | 47.45%          |
| 3    | S2      | 2,281           | 10,287        | 60.97%          |
| 4    | S8      | 1,641           | 11,928        | 70.70%          |
| 5    | S5N     | 1,397           | 13,325        | 78.98%          |
| 6    | S7      | 967             | 14,292        | 84.71%          |
| 7    | S1      | 944             | 15,236        | 90.31%          |
| 8    | S9      | 274             | 15,510        | 91.93%          |
| 9    | S4      | 106             | 15,616        | 92.56%          |

## Scenario 2: 5-Minute Travel Time

- Results suggest that with all nine RFD fire stations, 92.56% of the incidents could be responded to within 5 minutes or less travel time.
- This is approximately an 11% improvement over the current configuration prior to the addition of Station 8 or relocation of Station 5.

| Performance<br>(Minutes) | Current<br>Config. | Scenario<br>1 | Scenario<br>2 | Scenario<br>3 | Scenario<br>4 |
|--------------------------|--------------------|---------------|---------------|---------------|---------------|
| 4                        | 64.87%             | 70.20%        | 74.04%        | 71.26%        | 74.86%        |
| 5                        | 80.71%             | 87.85%        | 92.56%        | 88.64%        | 92.71%        |
| 6                        | 87.57%             | 95.09%        | 97.09%        | 95.64%        | 97.09%        |
| 7                        | 95.44%             | 98.75%        | 98.98%        | 98.77%        | 98.99%        |
| 8                        | 97.88%             | 99.05%        | 99.24%        | 99.05%        | 99.24%        |

## Summary of Alternative Station Configurations

- The analyses of the several alternatives reveal that Scenario 2 (Station 8 and Relocate Station 5) has the greatest return on investment.
- With very little variability, it requires only one additional station and the relocation of one station rather than two additional stations.
- In all four Scenarios, Station 10 provided less than 1% improvement
- Recommend, reallocating the projected investment to create a multi-company Station 3.



# Summary of Fiscal Performance Audit



# Findings

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- Excellent and well-established administrative controls are in place to monitor expenditures, and specifically overtime
- Purchasing practices is well-established and internal controls are followed
- Budget is monitored monthly at the department level
- No-evidence of abuse of overtime was observed
- Overtime experience is primarily driven by constant staffing strategies



# Summary of Recommendations and Observations

# Summary of Observations and Recommendations

Department is performing well and is in a very small group of departments that are international accredited

Excellent response times

Capacity within the system to absorb more work prior to investment to control workload.

Overall, relatively low workload, low call-concurrency, and good reliability

Recommend moving Station 5 and moving forward with the construction and staffing of Station 8

Following a risk-based deployment approach, it is recommended to re-allocate Station 10 staffing to create multi-company Station 3

If the City is desirous of a continuous staffing model, is recommended that the Department hire an additional 25 FTEs to optimally staff without an expanded reliance on overtime.

It is recommended that the department consider the move-up policy developed during this process

Excellent tracking of personnel expenditures and overtime

Steven Knight, PhD

Questions?





[www.fitchassoc.com](http://www.fitchassoc.com)





## COUNCIL COMMUNICATION

CC #: 0975

File #: 0103 & 0103-09-02

**Title:** Public Utilities Commission - Unscheduled Vacancy Appointment

**Contact:** Katrina Six 916-774-5267 kmsix@roseville.ca.us

Meeting Date: 9/16/2020

Item #: 10.1.

### RECOMMENDATION TO COUNCIL

Recommend Council appoint one (1) individual to the Public Utilities Commission to a term expiring June 30, 2023 from the applications received from: John DeLacy, Dawn Eggert, Amanda Hart, and Michael Tronnes.

### BACKGROUND

The resignation of Debra Sedwick created an unscheduled vacancy on the Public Utilities Commission with a term ending June 30, 2023.

### FISCAL IMPACT

There is no fiscal impact.

### ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378. The appointment of members to boards or commissions does not include the potential for a significant environmental effect, and therefore is not subject to CEQA.

Respectfully Submitted,

Katrina Six, Deputy City Clerk

Sonia Orozco, City Clerk

A handwritten signature in blue ink, consisting of several overlapping loops and a final horizontal stroke.

---

Dominick Casey, City Manager



## COUNCIL COMMUNICATION

**Title:** Electric Department Update

**Contact:** Michelle Bertolino 916-774-5636 [mbertolino@roseville.ca.us](mailto:mbertolino@roseville.ca.us)

**Meeting Date:** 9/16/2020

**Item #:** 11.1.



## COUNCIL COMMUNICATION

**CC #: 0982**  
**File #: 0709-01**

**Title:** Community Development Block Grant 2019 Consolidated Annual Performance and Evaluation Report  
**Contact:** Kristine Faelz 916-774-5451 kpfaelz@roseville.ca.us

**Meeting Date: 9/16/2020**  
**Item #: 12.1.**

### RECOMMENDATION TO COUNCIL

Staff recommends that the City Council:

1. Hold a Public Hearing and receive public comment regarding the City's 2019 Consolidated Annual Performance and Evaluation Report (CAPER); and
2. Adopt a resolution to approve the City's 2019 Program Year CAPER and authorize it for submittal to the U.S. Department of Housing and Urban Development (HUD).

### BACKGROUND

As an entitlement jurisdiction for Community Development Block Grant (CDBG) funds, the City is required to annually review and report on the progress it has made in carrying out its Annual Action Plan and progress toward the goals identified in the 2015–2020 Consolidated Plan/Five-Year Strategic Plan. Over the last year, the Housing Division has assisted 1,413 low income persons, and 6 low income households through the use of CDBG and other housing and community development funds. During fiscal year 2019-20, \$5,605,928 from federal, state, and local funding sources was spent for public services, housing rehabilitation, affordable housing, and homeless shelter and prevention services. In this same time period, the Housing Authority's Housing Choice Voucher Program (federal rental assistance program) assisted 628 households with \$5.2 million in rental subsidies.

During the 2019 program year, HUD-allocated CDBG funds have benefited lower income households in Roseville through housing rehabilitation, public services, and homeless shelter and prevention services. These funds also provide funding for Housing Division administrative expenses to manage these programs. The Consolidated Annual Performance and Evaluation Report (CAPER) is a requirement of CDBG funding and must be submitted to HUD within 90 days after completion of the CDBG program year, which is September 30, 2020. The table below lists the individual activities funded by CDBG exclusively, including the amount expended and number of households assisted during Program Year 2019 (Fiscal Year 2019-20).

| ACTIVITY                                                     | Fiscal Year Expenditures | Persons/<br>Households Assisted |
|--------------------------------------------------------------|--------------------------|---------------------------------|
| Housing Rehabilitation Program                               | 40,341.63                | 4                               |
| <b>Subtotal Housing</b>                                      | <b>40,341.63</b>         | <b>4</b>                        |
| Main Street Plaza Apts - Labor compliance monitoring consult | 29,635.00                | 0                               |
| AMIH - Solar project - Environmental testing fee             | 550.00                   | 0                               |
| <b>Subtotal Public Facilities</b>                            | <b>30,185.00</b>         | <b>0</b>                        |
| AMIH - Housing Supportive Services                           | 15,000.00                | 19                              |
| Kids First - Family Mental Wellness                          | 10,246.73                | 15                              |
| Seniors First - Meals on Wheels                              | 11,250.00                | 379                             |
| Saint Vincent de Paul Society - BAGS Program                 | 15,000.00                | 319                             |
| Stand Up Placer, Inc. - Roseville Victims Services Programs  | 15,000.00                | 279                             |
| The Gathering Inn - Emergency Overnight Homeless Shelter     | 15,000.00                | 340                             |
| The Gathering Inn - Mental Health Clinician                  | 15,000.00                | 62                              |
| <b>Subtotal Public Services (15% cap)</b>                    | <b>96,496.73</b>         | <b>1,413</b>                    |
| Program Administration                                       | 116,010.98               |                                 |
| <i>= 16.9% of annual award and program income</i>            |                          |                                 |
| <b>Subtotal Administration (20% cap)</b>                     | <b>116,010.98</b>        |                                 |
| <b>GRAND TOTAL</b>                                           | <b>\$ 283,034.34</b>     | <b>1,417</b>                    |
|                                                              | -                        | -                               |
| Balance of Prior Year Awards                                 | 160,848.00               |                                 |
| 2019-20 Annual Award                                         | 651,910.00               |                                 |
| 2019-20 Program Income Received                              | 216,944.00               |                                 |

The full CAPER document is provided with this report (Attachment 1), and includes the following:

- progress information towards completion of the City's Five-Year Strategic Plan goals;
- a description of the resources made available towards goals;
- information regarding the investment of available resources;
- an overview of the geographic distribution and location of investments;
- a tally of the number of households and persons assisted;
- a list of actions taken to Affirmatively Further Fair Housing;
- an evaluation of the City's progress in meeting affordable housing objectives;
- a description of the activities undertaken with CDBG funds; and
- a summary of progress on other actions indicated in the Five-Year Strategic Plan and Annual Action Plan.

The draft CAPER was available for public review during a 15-day public comment period that began on Friday, August 28, 2020, and ends at the conclusion of this public hearing on September 16, 2020. A public notice was published in the Roseville Press Tribune on Friday, August 28, 2020, included in both English and Spanish. Any public comments received will be included in the final report, including City responses, prior to its submittal to HUD for review. To date, no comments have been received.

## FISCAL IMPACT

The CDBG funding is provided as a federal grant to the City. These grants are used to offset potential costs to the General Fund and to serve the community. This item does not impact the

City's General Fund.

## ENVIRONMENTAL REVIEW

The California Environmental Quality Act (CEQA) does not apply to activities that will not result in a direct or reasonably foreseeable indirect physical change in the environment, or is otherwise not considered a project as defined by CEQA Statute §21065 and CEQA State Guidelines §15060(c)(3) and §15378.

Approval of the 2019 CDBG CAPER meets the above criteria and is not subject to CEQA. No additional environmental review is required.

Respectfully Submitted,

Kristine Faelz, Housing Analyst

Laura Matteoli, Economic Development Director



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Dominick Casey, City Manager

## **ATTACHMENTS:**

### **Description**

Resolution 20-362

2019 CAPER draft

RESOLUTION NO. 20-362

APPROVING THE 2019 CONSOLIDATED ANNUAL PERFORMANCE AND  
EVALUATION REPORT (CAPER) AND AUTHORIZING THE  
ECONOMIC DEVELOPMENT DIRECTOR TO SUBMIT THE  
COMMUNITY DEVELOPMENT BLOCK GRANT (CDBG) 2019 CAPER TO THE  
U.S. DEPARTMENT OF HOUSING & URBAN DEVELOPMENT (HUD)

WHEREAS, the 2019 Consolidated Annual Performance and Evaluation Report (CAPER) has been prepared; and

WHEREAS, a 15 day review and comment period was provided; and

WHEREAS, a public hearing was held September 16, 2020 at which time the City Council received further public comment on the City's progress in carrying out its strategic plan and action plan;

NOW THEREFORE, BE IT RESOLVED by the Council of the City of Roseville that the 2019 Consolidated Annual Performance and Evaluation Report is hereby approved;

BE IT FURTHER RESOLVED that the Economic Development Director is authorized to submit the Community Development Block Grant 2019 Consolidated Annual Performance and Evaluation Report to the U.S. Department of Housing & Urban Development.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_\_ day of \_\_\_\_\_ 2020, by the following vote on roll call:

AYES: COUNCIL MEMBERS:

NOES: COUNCIL MEMBERS:

ABSENT: COUNCIL MEMBERS:

ATTEST:

\_\_\_\_\_  
MAYOR

\_\_\_\_\_  
CITY CLERK

## **DRAFT 2019 CAPER**

### **CR-05 - Goals and Outcomes**

#### **Progress the jurisdiction has made in carrying out its strategic plan and its action plan. 91.520(a)**

This could be an overview that includes major initiatives and highlights that were proposed and executed throughout the program year.

The 2019 Consolidated Annual Performance and Evaluation Report (CAPER) constitutes the reporting period from July 1, 2019 to June 30, 2020, the fifth year of the five-year 2015-2019 Consolidated Planning period. The City of Roseville received an entitlement allocation of \$651,910 in Community Development Block Grant (CDBG) funds for the 2019 Program Year (PY). The City also received \$216,944 in program income and carried over \$160,848 in prior year CDBG funds for a total program budget of \$1,029,702. The City expended \$283,034 leaving a balance of \$746,668.

The City also received an allocation of \$417,412 in CDBG-CV CARES Act funding to prevent, prepare for, and respond to COVID-19. Activities to be addressed with these funds include Small Business Assistance, Micro-enterprise assistance, funding towards a shelter-in-place program for homeless persons, and program administration costs. The CDBG-CV activities and funds will be carried over to the 2020 PY.

Over the last year, the Housing Division has assisted 1,413 low income persons, and 6 low income households through the use of CDBG and other housing and community development funds. During fiscal year 2019-2020, \$5,605,928 from federal, state, and local funding sources was spent for housing rehabilitation, public services, affordable housing, and homeless shelter and prevention services.

Also in the last year, the Housing Authority's Housing Choice Voucher Program (federal rental assistance program) assisted 628 households with \$5.2 million in rental subsidies. This includes regular, NED, VASH, and Mainstream vouchers.

CDBG has benefitted lower income households in Roseville through blight removal, housing rehabilitation, public facilities, parks, public services, and homeless shelter and prevention services. These funds also provide funding for Housing Division administrative expenses to manage these programs.

The City uses other Federal, State and local resources (when available), including Housing Choice Voucher Rental Assistance Contracts, State-administered HOME funds, and local developer contributions to address housing and community development priority needs identified in the



Consolidated Plan.

The CAPER identifies the programs and activities the City undertook during the 2019 PY to meet underserved needs identified in the Consolidated Plan. In addition, the CAPER discusses the actions the City took to address: lead-based paint hazards; barriers to affordable housing; the needs of households at or below the poverty level; and access to fair housing information.

**Comparison of the proposed versus actual outcomes for each outcome measure submitted with the consolidated plan and explain, if applicable, why progress was not made toward meeting goals and objectives. 91.520(g)**

Categories, priority levels, funding sources and amounts, outcomes/objectives, goal outcome indicators, units of measure, targets, actual outcomes/outputs, and percentage completed for each of the grantee's program year goals.

| Goal                           | Category                            | Source / Amount    | Indicator                                 | Unit of Measure        | Expected – Strategic Plan | Actual – Strategic Plan | Percent Complete | Expected – Program Year | Actual – Program Year | Percent Complete |
|--------------------------------|-------------------------------------|--------------------|-------------------------------------------|------------------------|---------------------------|-------------------------|------------------|-------------------------|-----------------------|------------------|
| Affordable Purchase Assistance | Affordable Housing                  | CDBG: \$           | Direct Financial Assistance to Homebuyers | Households Assisted    | 25                        | 3                       | 12.00%           |                         |                       |                  |
| CoC Homeless Assistance        | Homeless Non-Homeless Special Needs | CDBG: \$           | Homelessness Prevention                   | Persons Assisted       | 500                       | 0                       |                  |                         |                       |                  |
| Economic Development           | Non-Housing Community Development   | CDBG-CV: \$273,930 | Other                                     | Other                  | 0                         | 0                       |                  |                         |                       |                  |
| Exterior Paint                 | Affordable Housing                  | CDBG: \$           | Other                                     | Other                  | 25                        | 30                      | 120.00%          |                         |                       |                  |
| Handyperson Program            | Affordable Housing                  | CDBG: \$           | Homeowner Housing Rehabilitated           | Household Housing Unit | 100                       | 233                     | 233.00%          |                         |                       |                  |

|                                                   |                                                                                          |                   |                                                                          |                     |      |       |           |      |       |           |
|---------------------------------------------------|------------------------------------------------------------------------------------------|-------------------|--------------------------------------------------------------------------|---------------------|------|-------|-----------|------|-------|-----------|
| Homeless Assistance                               | Homeless Non-Homeless Special Needs                                                      | CDBG: \$          | Homelessness Prevention                                                  | Persons Assisted    | 500  | 6,475 | 1,295.00% | 0    | 6,100 | 6,100.00% |
| Housing and Services to Special Needs Populations | Affordable Housing Homeless Non-Homeless Special Needs Non-Housing Community Development | CDBG: \$96,496.73 | Public service activities other than Low/Moderate Income Housing Benefit | Persons Assisted    | 7170 | 1398  | 19.50%    | 0    | 1413  | 1,413.00% |
| Housing and Services to Special Needs Populations | Affordable Housing Homeless Non-Homeless Special Needs Non-Housing Community Development | CDBG: \$          | Public service activities for Low/Moderate Income Housing Benefit        | Households Assisted | 0    | 0     |           | 1046 | 0     | 0.00%     |
| Housing and Services to Special Needs Populations | Affordable Housing Homeless Non-Homeless Special Needs Non-Housing Community Development | CDBG: \$          | Homeless Person Overnight Shelter                                        | Persons Assisted    | 500  | 1065  | 213.00%   | 0    | 41    |           |
| Lead-Based Paint                                  | Affordable Housing                                                                       | CDBG: \$500       | Other                                                                    | Other               | 25   | 6     | 24.00%    | 5    | 2     | 40.00%    |

|                                           |                                                                 |                                         |                                                                                             |                        |       |    |         |     |   |         |
|-------------------------------------------|-----------------------------------------------------------------|-----------------------------------------|---------------------------------------------------------------------------------------------|------------------------|-------|----|---------|-----|---|---------|
| Planning & Administration                 | Planning & Administration                                       | CDBG: \$116,010.98<br>CDBG-CV: \$83,482 | Other                                                                                       | Other                  | 3     | 0  | 0.00%   |     |   |         |
| Preservation of Affordable Housing        | Affordable Housing<br>Homeless<br>Non-Homeless<br>Special Needs | CDBG: \$40,341.63<br>HOME: \$119,939    | Homeowner Housing Rehabilitated                                                             | Household Housing Unit | 75    | 46 | 61.00%  | 5   | 6 | 120.00% |
| Production of Affordable Purchase Housing | Affordable Housing                                              | CDBG: \$                                | Homeowner Housing Added                                                                     | Household Housing Unit | 5     | 9  | 180.00% |     |   |         |
| Production of Affordable Rental Housing   | Affordable Housing<br>Homeless<br>Non-Homeless<br>Special Needs | CDBG: \$                                | Rental units constructed                                                                    | Household Housing Unit | 40    | 0  | 0.00%   | 19  | 0 | 0.00%   |
| Public Facilities and Improvements        | Non-Housing Community Development                               | CDBG: \$                                | Public Facility or Infrastructure Activities other than Low/Moderate Income Housing Benefit | Persons Assisted       | 16205 | 0  | 0.00%   | 366 | 0 | 0.00%   |

|                                    |                                               |                                   |                                                                          |                     |      |    |       |     |     |        |
|------------------------------------|-----------------------------------------------|-----------------------------------|--------------------------------------------------------------------------|---------------------|------|----|-------|-----|-----|--------|
| Public Facilities and Improvements | Non-Housing Community Development             | CDBG: \$                          | Public service activities other than Low/Moderate Income Housing Benefit | Persons Assisted    | 0    | 15 |       | 0   | 15  |        |
| Rental Assistance                  | Affordable Housing Non-Homeless Special Needs | CDBG: \$ / Section 8: \$4,920,000 | Public service activities for Low/Moderate Income Housing Benefit        | Households Assisted | 3235 | 0  | 0.00% | 600 | 628 | 104.7% |

**Table 1 - Accomplishments – Program Year & Strategic Plan to Date**

**Assess how the jurisdiction’s use of funds, particularly CDBG, addresses the priorities and specific objectives identified in the plan, giving special attention to the highest priority activities identified.**

The City was able to address its highest priority needs in 2019-2020.

The City improved four housing units using CDBG, addressing moderate to substantial rehabilitation needs. These housing units, occupied by low-income, elderly and disabled persons, will be safer and have the useful life of the major systems extended.

Public services and affordable housing activities were provided to 1,413 individuals. These services meet the basic needs of low-income households, including basic nutrition, and serve to both address and prevent chronic homelessness.

The City complied with all Federal Overlay requirements for all projects and activities undertaken during the 2019 Program Year.

During the 2019 PY the City:

- Continued to strengthen its relationships with private for-profit developers and non-profit housing providers to expand the availability of affordable housing and increase program efficiencies and outcomes.
- Continued to participate in the Governance Committee of the “Homeless Resource Council of the Sierras” (HRCS) for the Nevada-Placer Joint

Applicant and led efforts for the Placer County Continuum of Care (CoC) in its planning process on ending homelessness and efforts to improve systems through its Built for Zero policy consortium membership. HRCS and the CoC are collaborative associations of service providers and governmental agencies who work together to strengthen the delivery system by integrating and coordinating housing, homeless assistance, and supportive services.

- Participated in the Point in Time Count for South Placer, including the City of Roseville. This was in coordination with the overall HRCS effort, to gain comprehensive information about Placer County homeless individuals and families.
- Continued construction of the City's new 65 units of affordable rental housing, Main Street Plaza Apartments, in Historic Old Town Roseville.
- Provided essential services to high need populations including homeless, seniors, disabled persons, youth, and victims of human trafficking and domestic violence.

## CR-10 - Racial and Ethnic composition of families assisted

Describe the families assisted (including the racial and ethnic status of families assisted).

91.520(a)

|                                           | CDBG         |
|-------------------------------------------|--------------|
| White                                     | 1,214        |
| Black or African American                 | 90           |
| Asian                                     | 56           |
| American Indian or American Native        | 20           |
| Native Hawaiian or Other Pacific Islander | 16           |
| American Indian/Alaskan Native and White  | 22           |
| American Indian/Alaskan Native and Black  | 1            |
| <b>Total</b>                              | <b>1,419</b> |
| Hispanic                                  | 181          |
| Not Hispanic                              | 1,238        |

**Table 2 – Table of assistance to racial and ethnic populations by source of funds**

### Narrative

The City allocated resources on a citywide basis. Resources targeted to the new construction of affordable housing were allocated on a citywide basis in accordance with the City's 10% Affordable Housing Goal and provide for disbursement of affordable housing throughout the City, rather than concentrated within low-income areas of the City.

Resources targeted to special needs populations were also allocated on a Citywide basis, where needs were identified and/or where resources could be coordinated with existing facilities and services. Activities such as infrastructure improvements are targeted to low-income neighborhoods with older infrastructure most in need of assistance.

The City assigned the priority for each category of priority needs based on the overall relative need, resources received, and policies established by the City. The City will continue to pursue all available Federal, State and local resources and look to all segments of the community to assist with meeting homeless, affordable housing and community development needs. The City's greatest obstacle to meeting underserved needs within the community continues to be lack of resources given budget reductions at the Federal, State and local levels.

## CR-15 - Resources and Investments 91.520(a)

### Identify the resources made available

| Source of Funds    | Source                                                | Resources Made Available | Amount Expended During Program Year |
|--------------------|-------------------------------------------------------|--------------------------|-------------------------------------|
| CDBG               | CDBG                                                  | 1,029,702                | 283,034                             |
| CDBG-CV            | CDBG                                                  | 417,412                  | 0                                   |
| HUD-VASH           | HUD-VASH                                              | 32,831                   | 32,831                              |
| Section 8 - HCV    | HUD                                                   | 4,920,124                | 4,920,124                           |
| HOME               | State Department of Housing and Community Development | 905,753                  | 119,939                             |
| Low Mod            | City as Housing Successor                             | 1,055,849                | 250,000                             |
| BEGIN              | State Department of Housing and Community Development | 59,635                   | 0                                   |
| CALHOME            | State Department of Housing and Community Development | 403,587                  | 0                                   |
| AFFORDABLE HOUSING | Resales and In Lieu Fees                              | 560,041                  | 0                                   |
| HOUSING TRUST      | Developer Subsidy Payoffs                             | 1,596,468                | 0                                   |

Table 3 - Resources Made Available

### Narrative

The City was allocated CDBG-CV funds to prevent, prepare for and respond to COVID-19. These funds will be reported on in the 2020 CAPER as they were added after the end of the fiscal year.

Roseville is an “exception grantee” under the CDBG rules that relate to the use of CDBG funds to benefit low-income areas. Rather than a residential area needing to be comprised of 51% or more low-income households to be considered low-income, areas that are within the upper quartile of low-income households are low-income areas for the purposes of CDBG funding.

### Identify the geographic distribution and location of investments

| Target Area | Planned Percentage of Allocation | Actual Percentage of Allocation | Narrative Description |
|-------------|----------------------------------|---------------------------------|-----------------------|
|             |                                  |                                 |                       |

Table 4 – Identify the geographic distribution and location of investments

### Narrative

Based on the 2006-2010 American Community Survey (ACS) data collected by HUD, the City’s “upper

quartile” for 2019 was 35.40%. This is unchanged from FY 2018.



## **Leveraging**

**Explain how federal funds leveraged additional resources (private, state and local funds), including a description of how matching requirements were satisfied, as well as how any publicly owned land or property located within the jurisdiction that were used to address the needs identified in the plan.**

The City has actively sought funding sources in addition to CDBG to leverage its resources. In addition to CDBG, these were some of the funds that were available for use during the Program Year: CalHome, HOME, Housing Choice Voucher Section 8 Rental Assistance, Redevelopment Low-Moderate Income Housing Funds, Local Housing Trust Funds and Affordable Housing Funds, Low-income Housing Tax Credits, Tax Exempt Bond financing, Sutter Health Getting to Zero grant funds, State Housing-Related Parks Program Funds, and local developer contributions.

The City does not receive an entitlement allocation of HOME funds. The City must compete annually in order to receive State-administered HOME funds. The City was awarded \$1M in 2014 from State HOME funds. This grant was completed in 2017 and the City only continues to administer program income.

The City of Roseville owns land at 304 Washington Boulevard that is currently undergoing the construction of 65 affordable rental units known as Main Street Plaza Apartments. Main Street Plaza will provide one to three bedroom apartments with rent affordability from extremely low to low incomes and is planned with supportive services and funding sources to house families, veterans, and individuals with mental illness. The Roseville Housing Authority committed 30 Project Based Vouchers (PBV) - 19 PBV VASH vouchers to house homeless veterans at this project and 11 regular PBV. The use of this land for affordable housing that meets a range of special needs works to address local needs and supports the removal of blight and underutilized property within the City's Historic Old Town.

Additionally, the City of Roseville owns land at 120 Pacific Street that is proposed to be developed as an 80 unit affordable rental project known as Junction Crossing Apartments. Junction Crossing will provide studio and one bedroom apartments with rent affordable to low income households. The development is one of the City of Roseville's pre-design projects and will address the City's community development priorities as outlined in the Downtown Specific Plan, as well as local need for affordable housing that serves small 1-2 person households.

In the 2019 program year, the City provided \$615,000 towards Homeless Prevention and Rapid Rehousing (HPRR) services. Of the \$615,000 made available, \$250,000 was former Redevelopment Low-Moderate Housing funds, while the remaining \$365,000 came from the Citizen's Benefit Fund. These resources were awarded to three local collaborative non-profit grant applications and are providing funding to prevent homelessness (utility bills, healthcare costs, car repair, eviction prevention, etc.) or to help re-house a household (deposit, application, fees, etc.). HPRR funds also provide job search assistance and food assistance.

## CR-20 - Affordable Housing 91.520(b)

Evaluation of the jurisdiction's progress in providing affordable housing, including the number and types of families served, the number of extremely low-income, low-income, moderate-income, and middle-income persons served.

|                                                                            | One-Year Goal | Actual       |
|----------------------------------------------------------------------------|---------------|--------------|
| Number of Homeless households to be provided affordable housing units      | 14            | 7            |
| Number of Non-Homeless households to be provided affordable housing units  | 726           | 621          |
| Number of Special-Needs households to be provided affordable housing units | 0             | 440          |
| <b>Total</b>                                                               | <b>740</b>    | <b>1,068</b> |

Table 5 – Number of Households

|                                                                      | One-Year Goal | Actual     |
|----------------------------------------------------------------------|---------------|------------|
| Number of households supported through Rental Assistance             | 630           | 628        |
| Number of households supported through The Production of New Units   | 110           | 7          |
| Number of households supported through Rehab of Existing Units       | 5             | 6          |
| Number of households supported through Acquisition of Existing Units | 0             | 0          |
| <b>Total</b>                                                         | <b>745</b>    | <b>641</b> |

Table 6 – Number of Households Supported

**Discuss the difference between goals and outcomes and problems encountered in meeting these goals.**

The City exceeded its goals for the production of affordable housing.

**Discuss how these outcomes will impact future annual action plans.**

The City does not expect outcomes for the Owner-Occupied Housing Rehabilitation Program to be impacted for future action plans. Goals are set based upon past funding history in order to meet the goals identified in the Five Year Consolidated Plan and Annual Action Plans.

**Include the number of extremely low-income, low-income, and moderate-income persons served by each activity where information on income by family size is required to determine the eligibility of the activity.**

| Number of Households Served | CDBG Actual | HOME Actual |
|-----------------------------|-------------|-------------|
| Extremely Low-income        | 0           | 1           |
| Low-income                  | 2           | 1           |
| Moderate-income             | 2           | 0           |
| <b>Total</b>                | <b>4</b>    | <b>2</b>    |

**Table 7 – Number of Households Served**

## **Narrative Information**

The City of Roseville continued implementation of the City's 10% Affordable Housing Goal to increase the number of rental and purchase units affordable to very low, low and moderate-income households, and supported private development of affordable housing using Low-Income Housing Tax Credits, Tax Exempt Bond proceeds, Local Housing Trust Funds, and funds from the former Redevelopment Agency.

The housing market is still recovering from the slowdown in housing production during the recent recession. Housing vacancy is between 2-3 percent in Roseville, decreasing the supply of affordable housing and increasing rents.

Affordable housing developers have been affected by reductions or eliminations of a variety of funding sources. The City is challenged to develop new affordable housing units given the reduction of resources to subsidize affordable housing production. This reality is further compounded by the impacts of a shrunk housing construction labor force, which leads to competition for labor with the Bay Area and higher overall building costs.

Extremely low income and low income renter households are served through local homeless prevention programs to prevent loss of housing. Housing Choice Vouchers and local affordable housing opportunities are also provided to extremely low income and low income renter households, through local inclusionary requirements and tax credit projects.

Extremely low income and low income owner households are served through local homeless prevention programs as well. Energy efficiency programs are available through Project GO and Roseville Electric,

and maintenance/habitability programming is available through the Roseville Owner Occupied Rehabilitation Program.

Moderate income renters are served through affordable housing opportunities under local inclusionary requirements and tax credit projects.

Moderate income owners are served through the City's first-time homebuyer assistance that was offered under HOME funding. They are also served through the Roseville Owner Occupied Rehabilitation Program and local inclusionary requirements that produce affordable ownership opportunities and local secondary mortgage loans.

Middle income renters are served through the local rental housing market.

Middle income owners are served through the local inclusionary requirements that produce affordable ownership opportunities and local secondary mortgage loans.

Persons with Disabilities are served through reasonable accommodations in all of the city's programs. Additionally, persons with disabilities receive a preference under the City's Housing Choice Voucher program, and are assisted by the Roseville Owner Occupied Rehabilitation Program and local agencies, including: Project GO, Seniors First, Placer Independent Resource Services (PIRS), and Advocates for Mentally Ill Housing (AMIH).

Low Income Renters Overpaying (more than 50% of income towards rent) are served through the Housing Choice Voucher program, particularly through the Small Area Fair Market Rents that Roseville adopted in February 2018; this was adopted to update local payment standards to better align with rents by zip code. These households are also served by local homeless prevention funding from the City and Salvation Army to reduce potential risk of homelessness. The continued development of new affordable rental units and rental housing opportunities overall are also aimed at the goal of reducing incidents of overpayment within Roseville.

Homeless individuals are served through coordinated efforts of the Roseville Homeless Response Team within the Placer County Continuum of Care. In addition to homeless prevention and rapid rehousing funding that is provided by the City and Salvation Army locally, Roseville Housing Authority recently received an additional 8 Mainstream Vouchers, now totaling 33, to address the needs of homeless individuals with disabilities. They partner with Roseville Home Start in providing a preference for homeless households within the Housing Choice Voucher program. Additional services and coordination are provided through the Coordinated Entry System and local collaboration on the By Name List.

## **CR-25 - Homeless and Other Special Needs 91.220(d, e); 91.320(d, e); 91.520(c)**

**Evaluate the jurisdiction's progress in meeting its specific objectives for reducing and ending homelessness through:**

### **Reaching out to homeless persons (especially unsheltered persons) and assessing their individual needs**

The City of Roseville has the following outreach programs to individuals and families who are homeless: Drop-In Centers with Services: The Auburn Welcome Center and the Cirby Clubhouse in Roseville are mainly staffed by mental health clinicians and clients that provide homeless individuals and families a place to use computers to search for jobs, housing, and services. This Center also houses the The Gathering Inn Mid Placer Shelter in Auburn. The Gathering Inn South Placer has a Wednesday and Saturday health clinic, and daily provides a clothing closet and laundry facilities in addition to a nightly emergency shelter through the rotation of local churches.

Social Services Unit of the Police Department: In 2016, the police department created the Social Services Unit (SSU). The SSU completes regular outreach and interaction with the local unsheltered population. Through this unit, local County Housing Coordinators, and Roseville Housing staff, individuals who are homeless or at-risk of homelessness are being referred to appropriate services and housing options within the Continuum of Care. These efforts are further augmented through a City-County outreach partnership that utilizes a homeless outreach worker position for South Placer and City efforts towards its own outreach worker.

Point in Time Count: The City of Roseville Social Services Unit and Housing staff actively participated in the 2019 Point in Time Count and achieved great success in the utilization of an electronic survey and data collection app, scheduling events for data collection and conducting outreach to individuals otherwise unreachable for the Point In Time Count. Roseville led the overall coordination of all of South Placer County.

### **Addressing the emergency shelter and transitional housing needs of homeless persons**

Emergency shelter is provided locally through a rotating shelter at local churches, coordinated by The Gathering Inn. This shelter serves an average of 60-90 individuals each evening. Local transitional housing programs through Roseville HomeStart and Advocates for Mentally Ill Housing (AMIH) address much-needed transitional housing needs for families and individuals with mental illness. Lastly, Stand Up Placer provides emergency and transitional housing for domestic violence and human trafficking victims countywide.

Due to COVID-19, The Gathering Inn began a new Shelter-In-Place program to provide homeless individuals shelter off-site at St. John's Church. Approximately 41 homeless individuals were served during the two month period. This program allowed for The Gathering Inn to provide enhanced social

distancing measures as well as adherence to CDC protocols due to COVID-19. This program was addressed with CDBG-CV funding.

**Helping low-income individuals and families avoid becoming homeless, especially extremely low-income individuals and families and those who are: likely to become homeless after being discharged from publicly funded institutions and systems of care (such as health care facilities, mental health facilities, foster care and other youth facilities, and corrections programs and institutions); and, receiving assistance from public or private agencies that address housing, health, social services, employment, education, or youth needs**

Homeless priorities have been established within the framework of the Homeless Resource Council of the Sierras (HRCS) and CA 515 – the Placer County Continuum of Care; the priorities have been set as: emergency shelter, transitional housing, permanent supportive housing, and rapid re-housing. Most housing options for homeless individuals and families are in permanent supportive housing programs; with only temporary openings because of a change in status of a resident. In comparison, except for victims of domestic violence, there are few beds available in emergency shelter situations. Of the 139 emergency beds, 38 are solely for survivors of domestic violence, 6 are set aside for the Interim Care Program (adults only), and 5 are for the T3 Foothills Emergency Housing of WellSpace Health, (adults only). The 90 remaining beds are at The Gathering Inn; of these beds, an average of 10-25 beds can be expended if there are more families or lessened for households without children, this number fluctuates depending on the need. Additionally, the Roseville Housing Division recently assisted Volunteers of America in the conversion of 28 under-utilized housing units on Riverside Avenue from transitional housing to permanent housing. The conversion includes 5 Emergency Units that are reserved for families with minor children. The units are leased through referrals from The Gathering Inn in an effort to keep minor children out of the shelter environment.

Motel vouchers are available during certain times of the year for short-term and extreme circumstances; funding is typically expended before the end of the calendar year. Transitional housing programs may not operate at full capacity due to budget constraints.

Emergency shelter is identified as a high-priority, while Transitional housing and Supportive housing are identified as a medium-priority. The need for emergency shelter, mental health services, substance abuse treatment, and emergency food and clothing exists, especially for some subpopulations, such as those with severe mental illness or individuals who are chronically homeless (who have had regular or continued periods of homelessness). Emergency shelter may be used as engagement housing in order to build trust until such time as the client is ready to move into a permanent supportive housing situation.

The City of Roseville Housing Division has been participating in “Stepping Up” discussions with the Placer County jail and probation staff on better discharge and services planning for existing inmates, including a specific focus on inmates with mental illness. Placer County’s Continuum of Care has implemented a Coordinated Entry System through a central phoneline, (833) 3PLACER, and is working to increase its use by inmates scheduled to leave jail soon as a means for planning their housing options more proactively.

Services staff at the jail are actively working on increased use of the phonenumber as part of and prior to discharge planning.

**Helping homeless persons (especially chronically homeless individuals and families, families with children, veterans and their families, and unaccompanied youth) make the transition to permanent housing and independent living, including shortening the period of time that individuals and families experience homelessness, facilitating access for homeless individuals and families to affordable housing units, and preventing individuals and families who were recently homeless from becoming homeless again**

Outreach: Family Resource Centers (FRCs) are located close to where people need services, are welcoming, have bilingual staff, and provide numerous services to low-income families, including families who are homeless. The CoC works with the Food Closet Collaborative to make sure that all Food Closets are informed about services. There are some families who live in the forests or along the rivers; and as a result, outreach is typically provided through the Food Closets. The CoC will continue to work closely with the school Homeless Liaisons.

Rapid Rehousing: Local service providers are applying for and have received Rapid Rehousing and Homeless Prevention funds to assist homeless families and individuals. The City also partners with Salvation Army to provide motel vouchers, security deposits, and rental assistance to assist with rapid rehousing and homelessness prevention.

Housing: In planning the housing needs of these populations the CoC considers the housing needs for both families and individuals. The scattered site housing programs serve both populations. The local housing authorities have also secured and are leasing up Mainstream Vouchers to serve individuals and families with a member who has a disability, exiting homelessness. These vouchers have been successful in getting families and chronically homeless individuals housed. Both housing authorities are seeking additional Mainstream Vouchers and Veterans Administration Supportive Housing (VASH) vouchers to serve individuals and families who are homeless.

Coordinated Services: Domestic violence, substance abuse, mental and physical disabilities can all contribute to individuals and family homelessness. There are collaborative community efforts to provide coordinated services to those in need of assistance. The updated designation of chronic family homelessness is very helpful in focusing services on the most vulnerable populations first.

### **CR-30 - Public Housing 91.220(h); 91.320(j)**

#### **Actions taken to address the needs of public housing**

The City does not have public housing. The Roseville Housing Authority operates the Housing Choice Voucher (HCV) Section 8 Rental Assistance Program which serves both the cities of Roseville and Rocklin.

#### **Actions taken to encourage public housing residents to become more involved in management and participate in homeownership**

Not applicable; the City does not have public housing.

#### **Actions taken to provide assistance to troubled PHAs**

Not applicable. The Roseville Housing Authority (RHA) received a rating of High Performer for the fifteenth consecutive year.



## **CR-35 - Other Actions 91.220(j)-(k); 91.320(i)-(j)**

**Actions taken to remove or ameliorate the negative effects of public policies that serve as barriers to affordable housing such as land use controls, tax policies affecting land, zoning ordinances, building codes, fees and charges, growth limitations, and policies affecting the return on residential investment. 91.220 (j); 91.320 (i)**

Two new communities will be leasing up in 2020, with over 100 units. In the first four years of the five-year plan, the City developed approximately 150 affordable housing units. Additionally, there are currently approximately 250 affordable units in production. Due to the rate of production in the City, HCD has not required the City to reduce or address perceived constraints to housing development. The City continues to support opportunities for the redevelopment of underutilized parcels downtown, particularly for high density and affordable housing development. The City also works to increase opportunities for higher density and the use of density bonuses throughout the city.

### **Actions taken to address obstacles to meeting underserved needs. 91.220(k); 91.320(j)**

Consistent with priority needs identified in the Consolidated Plan, during the 2019 Program Year the City provided funding for the following activities that addressed priority special needs populations:

- Advocates for Mentally Ill Housing (AMIH) provided case management, vouchers and other support services to individuals with mental illness.
- Stand Up Placer assisted those in abusive situations and victims of human trafficking to recover and re-enter society.
- KidsFirst offered intensive social services and individual therapy to children and families with young children.
- Seniors First Meals on Wheels and Saint Vincent de Paul Society's BAGS program offered nutrition for seniors and disabled persons.
- The Gathering Inn provided emergency homeless shelter services and mental health clinician services for homeless individuals and families.

Other Federal, State and local resources, including funds from charitable organizations and private donations, were made available to service providers to assist special needs populations. Service providers received these funds directly.

### **Actions taken to reduce lead-based paint hazards. 91.220(k); 91.320(j)**

The City has taken the following actions toward awareness and elimination of lead-based paint hazards: The City continued to provide information regarding lead-based paint hazards to Roseville residents and employees.

The City includes, as part of its inspection process for the Owner-Occupied Housing Rehabilitation and Housing Choice Voucher Section 8 Rental Assistance Programs, an inspection of painted surfaces for the discovery of the potential presence of lead-based paint. If the inspection conducted identifies that a potential hazard exists, the City requires the rehabilitation contractor or homeowner to follow HUD guidelines for mitigation or removal of the lead-based paint hazard.

Grants are available for initial inspection, mitigation, and clearance costs for all of these programs through the City's Lead-Based Paint Hazard Reduction Program (LBPHRP). Community Development Block Grant (CDBG) and HOME funds are set aside to offer these grants; under the Housing Rehabilitation Program, grants are provided for all actual costs of lead-based paint evaluation and reduction activities.

The City also requires that rental property owners properly maintain their dwelling units. Deteriorated surfaces containing lead-based paint posing a hazard to occupants is reportable to the Placer County Environmental Health Department and represents a potential County Health Code violation subject to appropriate mitigation by the rental property owner.

The City continues to fund the Lead-Based Paint Hazard Reduction Program to comply with the 1992 Housing and Community Development Act (Title X) in addressing potential lead-based paint hazards.

#### **Actions taken to reduce the number of poverty-level families. 91.220(k); 91.320(j)**

During the 2019 Program Year the City took the following actions to reduce the incidence of poverty within the City's jurisdiction:

The City continued to promote the Family Self Sufficiency Program for Housing Choice Voucher (HCV) participants and actively recruited new households to participate.

The City continued its policy of promoting a jobs/housing balance to ensure a variety of jobs with varying levels of skill and training and development of affordable housing to all income groups.

The Senior Nutrition Program and the BAGS program supported the nutritional needs of persons in poverty.

#### **Actions taken to develop institutional structure. 91.220(k); 91.320(j)**

With regard to the distribution of affordable housing, it has been the goal of the City's 10% affordable housing program to distribute new, affordable housing throughout the City by requiring that each specific plan provide 10% of their total housing units as affordable to low and middle-income households.

The City has continued to rely on the Housing Division to administer its housing programs and

implement housing policies. The Housing Division administers rental assistance, first-time homebuyer programs, housing rehabilitation, and new construction projects. The Housing Division also provides resource information and referral to residents, including referrals to homeless assistance, fair housing, legal services, etc.

The programs administered by the Housing Division are funded through a variety of public and private sources, including Federal, State, City and private developer funding under local affordable housing requirements.

The City continues to work toward a regional approach to serving the needs of residents through the Continuum of Care on a countywide basis.

**Actions taken to enhance coordination between public and private housing and social service agencies. 91.220(k); 91.320(j)**

The Housing Division acts as a liaison between other public and private agencies to maximize service to Roseville residents and prevent duplication of services.

**Identify actions taken to overcome the effects of any impediments identified in the jurisdictions analysis of impediments to fair housing choice. 91.520(a)**

The City displays its Fair Housing Banner in a prominent location within the Housing Division Offices, as well as at functions throughout the year where the City is represented. The banner reads, “Fair Housing is Everyone’s Right” in both English and Spanish and also includes the Equal Housing Opportunity logo. Fair Housing pamphlets and literature are also made available to the public. Housing Division Supervisory staff continues to work with other staff members to further their knowledge of fair housing laws and issues, including making pamphlets and news articles available to staff. Staff regularly receives Fair Housing and diversity training. The City also hosted two Tenant and Landlord Rights and Responsibilities Trainings in June and August 2019, with over 100 attendees between the two events.

Housing Division staff continues to record all housing complaints, including those regarding discrimination and works cooperatively with the local Legal Services branch. In the case of alleged discrimination, residents are provided with information regarding fair housing law, a HUD discrimination complaint form, and referrals to legal services, the State Department of Fair Housing and Employment, and other appropriate agencies.

The City’s Housing Authority continues to request and receive VASH, Mainstream and Project-based vouchers. During the 2019 program year, the Housing Authority was awarded an additional 11 Mainstream vouchers and an additional 5 VASH vouchers which serve those who are homeless or at risk of homelessness.

To address the lack of sufficient affordable housing supply, the City continues to provide assistance to preserve existing affordable housing through the Owner Occupied Housing Rehabilitation Program (OOR). The OOR program serves qualified low-income homeowners with health and safety repairs to their homes. Through the program, the City is able to help preserve existing housing in the community, help homeowners to stay in their homes, and also help revitalize neighborhoods.

The City of Roseville participated with 15 other jurisdictions and housing authorities to develop the Sacramento Valley Analysis of Impediments to Fair Housing Choice (AI). The AI is the result of a planning process developed to identify meaningful actions to overcome historic patterns of segregation, promote fair housing choice, and foster inclusive communities that are free from discrimination.

## **CR-40 - Monitoring 91.220 and 91.230**

**Describe the standards and procedures used to monitor activities carried out in furtherance of the plan and used to ensure long-term compliance with requirements of the programs involved, including minority business outreach and the comprehensive planning requirements**

Each year, the City conducts a risk assessment of subrecipients to determine the need for monitoring. All subrecipients are subject to a minimum of desk monitoring. If the risk assessment reveals the need, on-site monitoring is also conducted. Staff will monitor 2019-2020 subrecipients in the fall and winter of 2020.

## **Citizen Participation Plan 91.105(d); 91.115(d)**

**Describe the efforts to provide citizens with reasonable notice and an opportunity to comment on performance reports.**

The City published a notice in the Roseville Press Tribune on August 28, 2020 announcing the availability of the CAPER for public review, the public comment period, to whom comment should be submitted, and the scheduled public hearing. The notice was published in English and in Spanish. Notice was also published on the City's website.

The public will be invited to comment during a minimum 15-day period, August 28, 2020 through September 16, 2020.

The Roseville City Council reviews, conducts the public hearing, and approves the CAPER prior to submission to the Department of Housing and Urban Development.

The City notified public service agencies directly via an email to local non-profit collaborations regarding the availability of the 2019 CAPER. Additionally, the Latino Leadership Council, a local nonprofit that provides services to underserved Spanish-speaking populations, was notified of the availability of the CAPER.

A public hearing will be held before the City Council on September 16, 2020 to review the City's progress in meeting its Housing and Community Development needs. The public hearing also provides additional opportunity for the public to comment on the 2019 CAPER.

## **CR-45 - CDBG 91.520(c)**

**Specify the nature of, and reasons for, any changes in the jurisdiction's program objectives and indications of how the jurisdiction would change its programs as a result of its experiences.**

The City made no change in program objectives over the course of the program year and would not make any changes as the result of its experiences.

**Does this Jurisdiction have any open Brownfields Economic Development Initiative (BEDI) grants?**

No

**[BEDI grantees] Describe accomplishments and program outcomes during the last year.**

**CR-45 - CDBG 91.520(c)**

**Specify the nature of, and reasons for, any changes in the jurisdiction's program objectives and indications of how the jurisdiction would change its programs as a result of its experiences.**

The City made no change in program objectives over the course of the program year and would not make any changes as the result of its experiences.

**Does this Jurisdiction have any open Brownfields Economic Development Initiative (BEDI) grants?**

No

**[BEDI grantees] Describe accomplishments and program outcomes during the last year.**



## COUNCIL COMMUNICATION

CC #: 0999

File #: 0400-03 & 0400-04-09-1

**Title:** Westpark Federico - Development Agreement Amendment

**Contact:** Shelby Vockel 916-746-1347 svockel@roseville.ca.us

Meeting Date: 9/16/2020

Item #: 12.2.

### RECOMMENDATION TO COUNCIL

At the August 27, 2020 public hearing, the Planning Commission recommended that the City Council take the following action:

Consider the five (5) findings of fact and introduce for first reading an ordinance approving the Third Amendment to the Federico Development Agreement relative to the Sierra Vista Specific Plan.

### BACKGROUND

#### Summary of Planning Commission

The proposed project was considered by the Planning Commission at their August 27, 2020 meeting. The Commission took unanimous action to recommend approval of the project to City Council. No discussion of the project occurred during the meeting.

#### Summary of Project

The project area is located within the Sierra Vista Specific Plan (SVSP). The SVSP is the guiding document for development of the plan area and established the land use designations for parcels within the SVSP. The SVSP was adopted in 2010 and amended in 2012 to include the Westbrook land use amendments. The proposed project includes an amendment to the Westpark Federico Development Agreement (DA), which is one of nine DAs governing development in the SVSP plan area. The Westpark Federico DA was originally entered into by the City of Roseville, and the Federico-Tyler Family (original landowners), Westpark-Federico, LLC (Westpark Communities) and Mourier Investments, LLC (JMC Homes). Westpark and JMC were to each develop different portions of the property covered by the DA.

The proposed project is the third amendment to the Westpark Federico DA. The first amendment to the Westpark Federico DA was approved by the City Council on December 20, 2017 as part of the SVSP Federico project (File #PL17-0024), which included a General Plan Amendment, Specific Plan Amendment, Rezone, and Tentative Subdivision Map in addition to the Development Agreement Amendment (DAA). The DAA included amendments to reflect the land use changes requested by that project, as well as to eliminate the landowner's ability to defer



development fees, with the exception of 50-percent of the SPRTA Tier II Traffic fee. This amendment allowed the Westpark Federico DA to be consistent with other DAA requests in recent years regarding fee deferrals. The second amendment of the Westpark Federico DA was approved by City Council on February 19, 2020 as part of the SVSP Parcel JM-1, JM-20, JM-21, FD-6, FD-7, FD-24 – JMC Tentative Map 2 Project (File #17-0204). Similar to the first amendment, the project removed fee deferrals, with the exception of the SPRTA Tier II Traffic Fee and the City-wide Park Fee for the affected parcels.

The currently proposed third DAA will alter the fee deferrals outlined in the current Agreement if approved. City-wide park fee deferrals will be reinstituted for Parcels 2, 4, 5, 6, 7, 10, 14 (as identified in the Sierra Vista Large Lot Final Map, included as Attachment 1 of the Planning Commission staff report). Deferrals for the Public Facilities Fee and Public Benefit Fee will be removed from Parcels 1, 12, 17, and 27, which were not modified by previous amendments (File #PL17-0024 and File #PL17-0204). This DAA will result in equitable fees and fee deferrals on all of the large lot parcels within the Federico portion of the SVSP.

As proposed, the DAA would modify Section 3.17.1.2 (i) of the DA to allow fee deferrals, eligible to be paid with bond proceeds from future bond sales, for 50-percent of the SPRTA Tier II Traffic Fee, as well as 100-percent of the City-wide Park Fee that would otherwise be paid at the issuance of building permits for low, medium, and high density residential units. Additionally, the DAA adds language to Section 3.17.1.2 (i) of the DA to state that the deferral of payment until bond issuance is not applicable to the properties of the third DAA. In effect, this requires the Public Facilities and Public Benefit Fees be paid for each residential unit at the time of building permit issuance for all units within the parcels subject to this DAA.

A total of 953 residential units are impacted by the City-wide Park Fee deferral, including 583 low density lots (368 of which already have the deferral, as a part of a previous DAA), 198 medium density lots, and 172 high density lots. The deferrals for the Public Facilities Fee and Public Benefit Fee will be removed for an additional 368 lots beyond what was approved by the previous DAAs. The proposed modification will allow the fee programs for the affected parcels in the Westpark Federico DA to be consistent with other DAs in the SVSP.

City staff has found the proposed DA to be consistent with the City's General Plan and the Zoning Ordinance. The DAA is in conformance with the needs of public health, safety, and welfare, and will not adversely affect the orderly development of the properties or the preservation of property values.

## FISCAL IMPACT

The proposed DAA will result in equitable fees and fee deferrals on all of the large lot parcels within the Federico portion of the SVSP. The modification will be consistent with the provisions in similar DAs such as the JMC DA in the SVSP.

## ENVIRONMENTAL REVIEW

The proposed project would modify text in an existing Development Agreement and amend fee sections to be consistent with previous agreements in the Specific Plan area. Therefore, the activity does not have the potential to cause a significant effect on the environment, and is not

subject to the California Environmental Quality Act (CEQA) per Section 15061 (b)(3) of the CEQA Guidelines.

Respectfully Submitted,

Shelby Vockel, Associate Planner

Mike Isom, Development Services Director



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Dominick Casey, City Manager

**ATTACHMENTS:**

**Description**

CC ATTACHMENT 1 - Planning Commission Staff Report and Attachments, August 27, 2020

Ordinance

Westpark Sierra Vista DAA



***Planning Division Staff Report  
Planning Commission Meeting***

***August 27, 2020***

Prepared by: Shelby Vockel, Associate Planner

**ITEM 5.2:      **Development Agreement Amendment – 1701 Westbrook Bl. – Third Amendment to the Westpark Federico Development Agreement – PL20-0105****

**REQUEST**

The applicant requests approval of the Third Amendment to the Westpark Federico Development Agreement for the Sierra Vista Specific Plan area to revise sections relating to development fees.

Applicant – John Tallman, Westpark Sierra Vista, LLC

Owner – Westpark Sierra Vista, LLC, as an assignee of Westpark Federico, LLC; Solaire Community Builders, LLC; Taylor Morrison of California, LLC; Tri Pointe Homes, Inc., Solaire – Roseville, L.P.

**SUMMARY RECOMMENDATION**

The Planning Division recommends that the Planning Commission take the following actions:

- A. Recommend the City Council approve the Development Agreement Amendment.

**SUMMARY OF OUTSTANDING ISSUES**

There are no outstanding issues associated with this request.

**BACKGROUND**

The project area is located within the Sierra Vista Specific Plan (SVSP). The SVSP is the guiding document for development of the plan area and established the land use designations for parcels within the SVSP. The SVSP was adopted in 2010 and amended in 2012 to include the Westbrook land use amendments. The proposed project includes an amendment to the Westpark Federico Development Agreement (DA), which is one of nine DAs governing development in the SVSP plan area. The Westpark Federico DA was originally entered into by the City of Roseville, and the Federico-Tyler Family (original landowners), Westpark-Federico, LLC (Westpark Communities) and Mourier Investments, LLC (JMC Homes). Westpark and JMC were to each develop different portions of the property covered by the DA.

The proposed project is the third amendment to the Westpark Federico DA. The first amendment to the Westpark Federico DA was approved by the City Council on December 20, 2017 as part of the SVSP Federico project (File #PL17-0024), which included a General Plan Amendment, Specific Plan Amendment, Rezone, and Tentative Subdivision Map in addition to the Development Agreement Amendment (DAA). The DAA included amendments to reflect the land use changes requested by that project, as well as to eliminate the landowner's ability to defer development fees, with the exception of 50-percent of the SPRTA Tier II Traffic fee. This amendment allowed the Westpark Federico DA to be consistent with other DAA requests in recent years regarding fee deferrals. The second amendment of the Westpark Federico DA was approved by City Council on February 19, 2020 as part of the SVSP Parcel JM-1, JM-20, JM-21, FD-6, FD-7, FD-24 – JMC Tentative Map 2 Project (File #17-0204). Similar to the first amendment, the project removed fee deferrals, with the exception of the SPRTA Tier II Traffic Fee and the City-wide Park Fee for the affected parcels.

The current request is a DAA affecting Lots, 1, 2, 4, 5, 6, 7, 10, 12, 14, 17 and 27 of the Sierra Vista Specific Plan area (Attachment 1). The following table identifies the lot numbers and their corresponding large lot parcel numbers as identified by the Specific Plan. Additionally, the table indicates the proposed modification to each lot as part of the proposed DAA. The intent of the DAA is to reinstate the landowner's ability to defer City-wide Park Fees, as well as remove the deferral for the Public Facilities Fee and Public

Benefit Fee for all affected parcels. This DAA will result in equitable fees and fee deferrals on all of the large lot parcels within the Federico portion of the SVSP.

**Table 1 – Third Amendment Parcels and Proposed Modifications**

| <b>Final Map Lot Number</b> | <b>SVSP Parcel Number</b> | <b>Proposed Modification (Third DAA)</b>                      |
|-----------------------------|---------------------------|---------------------------------------------------------------|
| Lot 1                       | FD-1                      | Remove Public Facilities Fee and Public Benefit Fee deferral. |
| Lot 2                       | FD-20, FD-20B             | Reinstate City-wide Park Fee deferral.                        |
| Lot 4                       | FD-20, FD-20A             | Reinstate City-wide Park Fee deferral.                        |
| Lot 5                       | FD-22, FD-22A             | Reinstate City-wide Park Fee deferral.                        |
| Lot 6                       | FD-22, FD-22B             | Reinstate City-wide Park Fee deferral..                       |
| Lot 7                       | FD-3                      | Reinstate City-wide Park Fee deferral.                        |
| Lot 10                      | FD-4                      | Reinstate City-wide Park Fee deferral.                        |
| Lot 12                      | FD-5                      | Remove Public Facilities Fee and Public Benefit Fee deferral. |
| Lot 14                      | FD-60, FD-34              | Reinstate City-wide Park Fee deferral.                        |
| Lot 17                      | FD-2                      | Remove Public Facilities Fee and Public Benefit Fee deferral. |
| Lot 27                      | FD-9                      | Remove Public Facilities Fee and Public Benefit Fee deferral. |

## **EVALUATION**

Zoning Ordinance Section 19.84.040 specifies that the recommendations for approval or denial of a Development Agreement Amendment (DAA) shall include consideration of the following:

- 1. Consistency with the objectives, policies, programs, and land use designations of the City of Roseville General Plan.***
- 2. Consistency with the City of Roseville Zoning Ordinance.***
- 3. Conformity with the needs of public health, safety, and welfare.***
- 4. The effect on the orderly development of property or the preservation of property values.***
- 5. Whether the provisions of the Agreement shall provide sufficient benefit to the City to justify entering into the agreement.***

Development Agreements (DA) are binding contracts that set the terms, rules, conditions, regulations, entitlements, responsibilities, and other provisions relating to the development of the covered properties. If approved, the DAA alter the fee deferrals outlined in the current Agreement. City-wide park fee deferrals will be reinstituted for Parcels 2, 4, 5, 6, 7, 10, 14 (as identified in the Sierra Vista Large Lot Final Map, Attachment 1). Deferrals for the Public Facilities Fee and Public Benefit Fee will be removed from Parcels 1, 12, 17, and 27, which were not modified by previous amendments (File #PL17-0024 and File #PL17-0204).

As proposed, the DAA would modify Section 3.17.1.2 (i) of the DA to allow fee deferrals, eligible to be paid with bond proceeds from future bond sales, for 50-percent of the SPRTA Tier II Traffic Fee, as well as 100-percent of the City-wide Park Fee that would otherwise be paid at the issuance of building permits for low, medium, and high density residential units. Additionally, the DAA adds language to Section 3.17.1.2 (i) of the DA to state that the deferral of payment until bond issuance is not applicable to the properties of the third DAA. In effect, this requires the Public Facilities and Public Benefit Fees be paid for each residential unit at the time of building permit issuance for all units within the parcels subject to this DAA.

A total of 953 residential units are impacted by the City-wide Park Fee deferral, including 583 low density lots (368 of which already have the deferral, as a part of a previous DAA), 198 medium density lots, and 172 high density lots. The deferrals for the Public Facilities Fee and Public Benefit Fee will be removed for an additional 368 units beyond what was approved by the previous DAAs. The proposed modification will allow the fee programs for the affected parcels in the Westpark Federico DA to be consistent with other DAs in the SVSP.

City staff has found the proposed DA to be consistent with the City's General Plan and the Zoning Ordinance. The DAA is in conformance with the needs of public health, safety, and welfare, and will not adversely affect the orderly development of the properties or the preservation of property values. Therefore, the proposed DAA is consistent with items 1-5 above.

### **PUBLIC OUTREACH**

The proposed project was distributed to the various agencies and departments which have requested notice of City applications, and all comments were considered and incorporated into the Conditions of Approval, as appropriate. Notice of the application was also distributed to the Roseville Coalition of Neighborhood Associations. No comments were received. A public notice of the Planning Commission hearing was published on July 10, 2020, and was distributed to all property owners within 300 feet of the project site. At the August 13, 2020 Planning Commission hearing, the project was continued to the August 27, 2020 meeting. To date, no comments have been received.

### **ENVIRONMENTAL DETERMINATION**

The proposed project would modify text in an existing Development Agreement and amend fee sections to be consistent with previous agreements in the Specific Plan area. Therefore, the activity does not have the potential for causing a significant effect on the environment, and is not subject to the California Environmental Quality Act (CEQA) per Section 15061 (b)(3) of the CEQA Guidelines.

### **RECOMMENDATION**

The Planning Division recommends the Planning Commission take the following actions:

- A. Recommend the City Council approve the Development Agreement.

**Attachments**

1. Final Map for Sierra Vista Specific Plan

**Exhibits**

- A. Third Amendment to Westpark Federico Development Agreement

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b><u>Note to Applicant and/or Developer:</u></b> Please contact the Planning Division staff at (916) 774-5276 prior to the Commission meeting if you have any questions on any of the recommended conditions for your project. If you challenge the decision of the Commission in court, you may be limited to raising only those issues which you or someone else raised at the public hearing held for this project, or in written correspondence delivered to the Planning Manager at, or prior to, the public hearing.</p> |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|



**THIRD AMENDMENT OF DEVELOPMENT AGREEMENT  
BY AND BETWEEN  
THE CITY OF ROSEVILLE AND WESTPARK SIERRA VISTA, LLC, AS  
ASSIGNEE OF WESTPARK FEDERICO, LLC, MOURIER INVESTMENTS,  
LLC, AND FEDERICO-TYLER FAMILY LIMITED PARTNERSHIP  
RELATIVE TO THE SIERRA VISTA SPECIFIC PLAN**

This Third Amendment of Development Agreement is entered into this \_\_\_\_ day of \_\_\_\_\_, 2020, by and between the CITY OF ROSEVILLE, a municipal corporation ("City") and WESTPARK SIERRA VISTA, LLC, a California limited liability company ("Westpark Sierra Vista"), as Assignee of WESTPARK FEDERICO, LLC, a California limited liability company ("Westpark Federico"), SOLAIRE COMMUNITY BUILDERS, LLC, a California limited liability company ("Solaire"), TAYLOR MORRISON OF CALIFORNIA, LLC, a California limited liability company ("Taylor Morrison"), TRI POINTE HOMES, INC., a Delaware corporation ("TRI Pointe"), and SOLAIRE - ROSEVILLE, L.P., a Delaware limited partnership ("Solaire - Roseville") (collectively, "Landowner"), pursuant to Sections 65864 through 65869.5 of the Government Code of California.

**RECITALS**

A. Westpark Sierra Vista's predecessor in interest, Westpark Federico, along with Mourier Investments, LLC ("Mourier"), and the Federico-Tyler Family Limited Partnership ("Federico"), and City, entered into a Development Agreement (the "Original Development Agreement") which was approved by the City Council of City on May 19, 2010, and recorded on June 18, 2010, in the Official Records of Placer County as Document No. 2010-0045943-00. Westpark Federico assigned its interest in the Development Agreement to Westpark Sierra Vista pursuant to that certain Assignment and Assumption Agreement Relative to the Sierra Vista Specific Plan Development Agreement dated as of January 5, 2011, and recorded January 12, 2011, as Document No. 2011-0003089-00, in the Official Records of Placer County, California. Except as otherwise defined herein, all capitalized terms used herein shall have the meanings ascribed thereto in the Original Development Agreement.

B. Westpark Sierra Vista's predecessor in interest, Westpark Federico, along with Mourier, Federico, and City entered into the Original Development Agreement relative to development within a portion of the Sierra Vista Specific Plan Area ("Specific Plan", "SVSP" or "Plan Area"), as such is more precisely defined in Exhibits "A" and "B" of the Original Development Agreement (the "Property").



C. Westpark Sierra Vista, Mourier, Federico, and City entered into a First Amendment to the Original Development Agreement (the “First Amendment”) which was approved by the City Council of City on December 20, 2017, and recorded on February 21, 2018, in the Official Records of Placer County as Document No. 2018-0010796-00.

D. Westpark Sierra Vista, Mourier, Federico, and City entered into the First Amendment relative to development within certain portion of the Property, as such is more precisely defined in Exhibits “A” and “B” of the First Amendment.

E. Mourier and Federico assigned their interest in a portion of the Property to Westpark Sierra Vista in that certain Assignment and Assumption Agreement Relative to the Sierra Vista Development Agreement dated as of May 16, 2019, and recorded May 16, 2019, as Document No. 2019-0032322-00, in the Official Records of Placer County. The portion of the Property so assigned by Mourier and Federico to Westpark Sierra Vista was described in Exhibit A to that Assignment and Assumption Agreement Relative to the Sierra Vista Development Agreement.

F. Westpark Sierra Vista assigned its interest in the Development Agreement for a portion of the Property to Solaire pursuant to that certain Assignment and Assumption Agreement Relative to the Sierra Vista Specific Plan Development Agreement dated as of June 3, 2019, and recorded June 4, 2019, as Document No. 2019-0037499-00, in the Official Records of Placer County.

G. Solaire assigned its interest in the Development Agreement for a portion of the Property to Taylor Morrison pursuant to that certain Assignment and Assumption Agreement Relative to the Sierra Vista Specific Plan Development Agreement dated November 20, 2019, and recorded November 20, 2019, as Document No. 2019-0094029-00, in the Official Records of Placer County.

H. Solaire assigned its interest in the Development Agreement for a portion of the Property to TRI Pointe Homes, Inc. pursuant to that certain Assignment and Assumption Agreement Relative to the Sierra Vista Specific Plan Development Agreement dated July 1, 2020, and recorded July 2, 2020, as Document No. 2020-0066287-00, in the Official Records of Placer County.

I. Solaire assigned its interest in the Development Agreement for a portion of the Property to Solaire – Roseville, pursuant to that certain Assignment and Assumption Agreement Relative to the Sierra Vista Specific

Plan Development Agreement dated August 6, 2020, and recorded August 6, 2020, as Document No. 2020-0082425-00, in the Official Records of Placer County.

J. On March 4, 2020, City approved the Second Amendment to the Development Agreement (the "Second Amendment") for a portion of the Property owned by Mourier. The Second Amendment was recorded on April 13, 2020, as Document No. 2020-0032961-00, in the Official Records of Placer County. The Original Development Agreement, the First Amendment, and the Second Amendment are hereinafter collectively referred to as the "Development Agreement."

K. This Third Amendment to the Development Agreement (the "Third Amendment") affects certain portions of the Property (the "Third Amendment Property"), as described in Exhibit "A" and shown in Exhibit "B" attached to this Third Amendment, and shall run with the land described in Exhibits "A" and "B" hereto. This Third Amendment does not affect or apply in any manner with respect to the remainder of the Property described in the Development Agreement.

L. City and Landowner wish to enter into this Third Amendment in order to amend a provision of the Development Agreement for the Third Amendment Property.

M. The Third Amendment is authorized by Section 1.4 of the Development Agreement.

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. AMENDMENT OF DEVELOPMENT AGREEMENT. The following section of the Development Agreement is hereby amended as it pertains the Third Amendment Property only, which incorporates the First Amendment Property:

a. REVISED SECTION 3.17.1.2. Section 3.17.1.2 of the Development Agreement is revised in its entirety for the Third Amendment Property, including adding a new final paragraph which is only applicable to the Third Amendment Property, to read as follows:

"3.17.1.2 If Landowner, by itself or in conjunction with Participating Owners, desires to pursue a Community Facilities District, City and Landowner (and Participating Owners, if applicable), agree that, with the consent of Landowner (and Participating Owners, if applicable), and to the extent permitted by law, City and Landowner (and Participating Owners, if

applicable), shall use their best efforts to cause bonds to be issued and in amounts sufficient to affect the purposes of this section. City and Landowner (and Participating Owners, if applicable), further agree that, with the consent of Landowner (and Participating Owners, if applicable), or their successor(s) in interest, and to the extent permitted by law, the City agrees to the following:

- (a) Maximum Annual Taxes for residential units, when aggregated with all other existing or expected taxes and assessments (excluding homeowners association assessments), shall not exceed 2.00% of the assessed valuation, net of the homeowner's exemption (2% Test).
- (b) The Special Tax shall be levied for as long as needed to service the principal and interest on bond debt, and to pay for any additional authorized facilities not reimbursed with bond proceeds as defined in the Funding, Construction, and Acquisition Agreement. However, the Special Tax shall be levied for a period that allows for at least two non-overlapping bond sales to cover deferred fees as set forth in (i) below. The Special Tax levied may exceed 50 years.
- (c) City shall not unreasonably deny the Maximum Annual Tax escalating at 2% per year.
- (d) Authorized facilities shall include, among other items, development impact fees for public improvements.
- (e) Annual Costs shall provide that special taxes not used for debt service and City administration be paid to Participating Owners, including Landowner, for any authorized facilities not reimbursed with bond proceeds (pay-as-you-go). City shall reasonably consider a reasonable interest component for any authorized facilities reimbursed with pay-as-you-go provided for in the Funding, Construction and Acquisition Agreement defined below.
- (f) Landowner and Participating Owners, if applicable, may utilize the Statewide Community Infrastructure Program ("SCIP") program and/or the Bond Opportunities for Land Development ("BOLD")

program for any eligible impact fees.

- (g) Landowner, and Participating Owners, if applicable, may utilize a phased bond sale or sales.
- (h) Landowner, and Participating Owners, if applicable, may utilize private placement of bonds.
- (i) Bond proceeds from bond sales commencing in the year 31 timeframe shall include an amount no greater than \$5,600 per residential unit, adjusted as the SPRTA Tier II Traffic Fee may be subsequently adjusted, consisting of a portion or all of the following fees set forth in this Agreement or otherwise provided in the Roseville Municipal Code that would normally be paid at the time of issuance of building permits for low, medium or high density residential dwelling units:

(1) City-Wide Park Fee (Section 3.12.4)

(2) City Public Facilities Fee (Roseville Municipal Code Chapter 4.52)(Not applicable to the Third Amendment Property);

(3) Public Benefit Fee (Section 3.14.3)(Not applicable to the Third Amendment Property).

City reserves the discretion to determine which portions (amount) of each of the fees described in above subsections (1), (2), and (3) may be deferred to the bond sale. Notwithstanding any provision in this Agreement to the contrary, any amount exceeding \$5,600, adjusted as the SPRTA Tier II Traffic Fee may be subsequently adjusted (or exceeding such actual lesser amount for MDR or HDR units determined by City), per residential unit shall be due and payable to City upon issuance of a building permit commencing with the first applicable building permit for the SVSP. Notwithstanding any other provision in this Agreement to the contrary, if any of the fees described in above subsections (1), (2), and (3) are required by City for non-residential development then such fees

shall be collected upon issuance of building permit commencing with the first applicable building permit.

Should SPRTA approve any portion or all of the Tier II Traffic Fee for portions of the Property being likewise deferred to payment from bond sale proceeds commencing in the year 31 timeframe, then such amount per residential unit deferred for the Tier II Traffic Fee shall reduce dollar-for-dollar the above-referenced per residential unit fees otherwise deferred to future bond sale proceeds as provided for in this Section 3.17.1.2 (i). If SPRTA Tier II traffic fees cannot be so deferred to payment from bond sale proceeds commencing in the year 31 timeframe, City shall within the rate and method for Project CFD(s) provided for in Section 3.17 accommodate total additional pay-as-you-go revenue up to \$500 per residential unit for City-Wide park improvements from the pay-as-you-go financing over a period starting in year 10 of the Project CFD(s), up to \$100 per residential unit per year for 5 years, provided, however, that City constructs City-Wide park improvements in either the SVSP or WRSP within twenty-four (24) months of commencement of collection of such additional pay-as-you-go revenues. In the event that City does collect such additional pay-as-you-go revenues, and proceeds forward to construct such improvements, the City Public Facilities Fee (not for the Third Amendment Property, for which the reduction provided in this paragraph shall be in the City-Wide Park Fee) referenced herein to be deferred to payment from bond sale proceeds commencing in the year 31 timeframe shall be reduced by \$500 per unit to account for the additional pay-as-you-go revenues required by City.

Each Participating Owner shall only be responsible for its pro-rata share of special taxes as set forth in the rate and method for the Project CFD(s).

For the Third Amendment Property, the previous fee deferral provisions of this subsection are hereby deemed null and void and the only fee deferral eligible to be paid with bond proceeds from future bond sales commencing in the year 31 timeframe shall be fifty percent (50%) of the SPRTA Tier II Traffic Fee pursuant to the terms and conditions of the Tier II Development Fee Deferral Program and one hundred percent (100%) of the City-Wide Park Fee that would otherwise be paid at the time of issuance of building permits for low, medium, and high density residential dwelling units. The amount of the SPRTA Tier II Traffic Fee deferral provided by this Section 3.17 shall be adjusted as the SPRTA Tier II Traffic Fee may be subsequently adjusted. The amount of the City-Wide Park Fee deferral provided by this Section 3.17 shall be adjusted as the City-Wide Park Fee may be subsequently adjusted pursuant to Section 3.12.4 of the Development Agreement.

Should the Project CFD(s) including the Property not be formed at the time that any particular building permit is issued within a large lot map parcel on the Property, or any property owner in the SVSP desires to pay such fees in this Section 3.17.1.1 (i) rather than defer payment to such future CFD bond proceeds, the fees set forth in this Section 3.17.1.2 (i) for such building permit(s) shall not be eligible to be paid in such CFD bond proceeds but, notwithstanding any provision in this Agreement to the contrary, shall be paid at the time of issuance of such building permit(s). Upon formation of the Project CFD(s) including the Property, the fees set forth in this Section 3.17.1.2 (i) for unbuilt residential units shall be paid from bond proceeds in such bond sales commencing in the year 31 timeframe, unless an SVSP property owner desires to pay such fees at the time of issuance of building permit(s).

b. EXHIBITS. The exhibits attached to this Third Amendment are for this Third Amendment only, as follows:

Exhibit A – Legal Description of Third Amendment Property

Exhibit B -- Plat of Third Amendment Property

2. CONSISTENCY WITH GENERAL PLAN. The City Council has found and determined that this Third Amendment of the Development Agreement is consistent with the General Plan and the Sierra Vista Specific Plan.

3. AMENDMENT. This Third Amendment amends, but does not replace or supersede, the Development Agreement, except as specified herein, and is limited and applies only to development of the Third Amendment Property, and does not affect or apply in any manner with respect to the development of any other property within the Sierra Vista Specific Plan Area, including, without limitation, any other portion of the Property. As amended hereby, the Development Agreement remains in full force and effect.

4. FORM OF AMENDMENT. This Third Amendment is executed in two duplicate originals, each of which is deemed to be an original.

**IN WITNESS WHEREOF**, the City of Roseville, a municipal corporation, has authorized the execution of this Third Amendment in duplicate by its City Manager and attested to by its City Clerk under the authority of Ordinance No. \_\_\_\_\_, adopted by the Council of the City of Roseville on the \_\_\_\_ day of \_\_\_\_\_, 2020.

CITY OF ROSEVILLE,  
a municipal corporation

By: \_\_\_\_\_  
Dominick Casey  
City Manager

ATTEST:

By: \_\_\_\_\_  
Sonia Orozco  
City Clerk

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Robert R. Schmitt  
City Attorney

APPROVED AS TO SUBSTANCE:

By: \_\_\_\_\_

LANDOWNER:

WESTPARK SIERRA VISTA, LLC,  
a California limited liability company

By: \_\_\_\_\_  
Jeff Jones  
Its: Manager

SOLAIRE COMMUNITY BUILDERS,  
LLC, a California limited liability  
company

By: \_\_\_\_\_  
Jeff Jones  
Its: Manager

TAYLOR MORRISON OF  
CALIFORNIA, LLC,  
a California limited liability company

Mike Isom  
Development Services Director

By: \_\_\_\_\_  
Jay Pawlek  
Its: Vice President

By: \_\_\_\_\_  
Aren Bazzocco  
Its: Vice President

TRI POINTE HOMES, INC.,  
a Delaware corporation

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its: \_\_\_\_\_

SOLAIRE - ROSEVILLE, L.P.,  
a Delaware limited partnership

By: OCS-HS LOJV GP, LLC,  
a Delaware limited liability  
company  
General Partner

By: OCS-HS Lot Option Joint  
Venture, LLC, a Delaware  
limited liability company  
Sole Member

By: Hearthstone  
Professionals – PI, L.P., a  
Delaware limited  
partnership  
Manager

By: \_\_\_\_\_  
Steven C. Porath  
Authorized Person





ORDINANCE NO.

ORDINANCE OF THE COUNCIL OF THE CITY OF ROSEVILLE  
ADOPTING A THIRD DEVELOPMENT AGREEMENT AMENDMENT BY AND BETWEEN  
THE CITY OF ROSEVILLE AND WESTPARK SIERRA VISTA, LLC, AS ASSIGNEE OF  
WESTPARK FEDERICO, LLC, MOURIER INVESTMENTS, LLC, AND FEDERICO-TYLER  
FAMILY LIMITED PARTNERSHIP RELATIVE TO THE SIERRA VISTA SPECIFIC PLAN

THE CITY OF ROSEVILLE ORDAINS:

SECTION 1. In accordance with Chapter 19.84 of Title 19 of the Roseville Municipal Code (the Zoning Ordinance) of the City of Roseville, the City Council has received the recommendation of the Planning Commission that the City of Roseville enter into a Third Amendment to the Development Agreement by and between the City of Roseville and Westpark Sierra Vista, LLC, as Assignee of Westpark Federico, LLC, Mourier Investments, LLC, and Federico-Tyler Family Limited Partnership relative to the Sierra Vista Specific Plan area.

SECTION 2. The Third Amendment to the Development Agreement amends text regarding fee sections within an existing Development Agreement, and does not have the potential to cause a significant effect on the environment; therefore, it is not subject to the California Environmental Quality Act (CEQA) per Section 15061 (b)(3) of the CEQA Guidelines.

SECTION 3. The Council of the City of Roseville has reviewed the findings of the Planning Commission recommending approval of the Third Amendment to the Development Agreement, and makes the following findings:

1. The Third Amendment to the Development Agreement is consistent with the objectives, policies, programs and land use designations of the City of Roseville General Plan and the Sierra Vista Specific Plan;

2. The Third Amendment to the Development Agreement is consistent with the City of Roseville Zoning Ordinance;

3. The Third Amendment to the Development Agreement is in conformance with the public health, safety and welfare;

4. The Third Amendment to the Development Agreement will not adversely affect the orderly development of the property or the preservation of property values; and

5. The provisions of the Third Amendment to the Development Agreement will provide sufficient benefit to the City to justify entering into said Amendment;

SECTION 4. The Third Amendment to the Development Agreement, by and between the City of Roseville and Westpark Sierra Vista LLC, as Assignee of Westpark Federico, LLC, Mourier Investments, LLC, and Federico-Tyler Family Limited Partnership relative to the Sierra Vista Specific Plan, a copy of which is on file in the City Clerk's Department and incorporated herein by reference, is hereby approved and the City Manager is authorized to execute it on behalf of the City of Roseville.

SECTION 5. The City Clerk is directed to record the executed Development Agreement Amendment within ten (10) days of the execution of the agreement by the City Manager with the County Recorder's Office of the County of Placer.

SECTION 6. This ordinance shall be effective at the expiration of thirty (30) days from the date of its adoption.

SECTION 7. The City Clerk is hereby directed to cause this ordinance to be published in full at least once within fourteen (14) days after it is adopted in a newspaper of general circulation in the City, or shall within fourteen (14) days after its adoption cause this ordinance to be posted in full in at least three (3) public places in the City and enter in the Ordinance Book a certificate stating the time and place of said publication by posting.

PASSED AND ADOPTED by the Council of the City of Roseville this \_\_\_\_\_ day of \_\_\_\_\_, 2020, by the following vote on roll call:

AYES            COUNCILMEMBERS:

NOES           COUNCILMEMBERS:

ABSENT        COUNCILMEMBERS:

\_\_\_\_\_  
MAYOR

ATTEST:

\_\_\_\_\_  
City Clerk

**THIRD AMENDMENT OF DEVELOPMENT AGREEMENT  
BY AND BETWEEN  
THE CITY OF ROSEVILLE AND WESTPARK SIERRA VISTA, LLC, AS  
ASSIGNEE OF WESTPARK FEDERICO, LLC, MOURIER INVESTMENTS,  
LLC, AND FEDERICO-TYLER FAMILY LIMITED PARTNERSHIP  
RELATIVE TO THE SIERRA VISTA SPECIFIC PLAN**

This Third Amendment of Development Agreement is entered into this \_\_\_\_ day of \_\_\_\_\_, 2020, by and between the CITY OF ROSEVILLE, a municipal corporation ("City") and WESTPARK SIERRA VISTA, LLC, a California limited liability company ("Westpark Sierra Vista"), as Assignee of WESTPARK FEDERICO, LLC, a California limited liability company ("Westpark Federico"), SOLAIRE COMMUNITY BUILDERS, LLC, a California limited liability company ("Solaire"), TAYLOR MORRISON OF CALIFORNIA, LLC, a California limited liability company ("Taylor Morrison"), TRI POINTE HOMES, INC., a Delaware corporation ("TRI Pointe"), and SOLAIRE - ROSEVILLE, L.P., a Delaware limited partnership ("Solaire - Roseville") (collectively, "Landowner"), pursuant to Sections 65864 through 65869.5 of the Government Code of California.

**RECITALS**

A. Westpark Sierra Vista's predecessor in interest, Westpark Federico, along with Mourier Investments, LLC ("Mourier"), and the Federico-Tyler Family Limited Partnership ("Federico"), and City, entered into a Development Agreement (the "Original Development Agreement") which was approved by the City Council of City on May 19, 2010, and recorded on June 18, 2010, in the Official Records of Placer County as Document No. 2010-0045943-00. Westpark Federico assigned its interest in the Development Agreement to Westpark Sierra Vista pursuant to that certain Assignment and Assumption Agreement Relative to the Sierra Vista Specific Plan Development Agreement dated as of January 5, 2011, and recorded January 12, 2011, as Document No. 2011-0003089-00, in the Official Records of Placer County, California. Except as otherwise defined herein, all capitalized terms used herein shall have the meanings ascribed thereto in the Original Development Agreement.

B. Westpark Sierra Vista's predecessor in interest, Westpark Federico, along with Mourier, Federico, and City entered into the Original Development Agreement relative to development within a portion of the Sierra Vista Specific Plan Area ("Specific Plan", "SVSP" or "Plan Area"), as such is more precisely defined in Exhibits "A" and "B" of the Original Development Agreement (the "Property").

C. Westpark Sierra Vista, Mourier, Federico, and City entered into a First Amendment to the Original Development Agreement (the "First Amendment") which was approved by the City Council of City on December 20, 2017, and recorded on February 21, 2018, in the Official Records of Placer County as Document No. 2018-0010796-00.

D. Westpark Sierra Vista, Mourier, Federico, and City entered into the First Amendment relative to development within certain portion of the Property, as is more precisely defined in Exhibits "A" and "B" of the First Amendment.

E. Mourier and Federico assigned their interest in a portion of the Property to Westpark Sierra Vista in that certain Assignment and Assumption Agreement Relative to the Sierra Vista Development Agreement dated as of May 16, 2019, and recorded May 16, 2019, as Document No. 2019-0032322-00, in the Official Records of Placer County. The portion of the Property so assigned by Mourier and Federico to Westpark Sierra Vista was described in Exhibit A to that Assignment and Assumption Agreement Relative to the Sierra Vista Development Agreement.

F. Westpark Sierra Vista assigned its interest in the Development Agreement for a portion of the Property to Solaire pursuant to that certain Assignment and Assumption Agreement Relative to the Sierra Vista Specific Plan Development Agreement dated as of June 3, 2019, and recorded June 4, 2019, as Document No. 2019-0037499-00, in the Official Records of Placer County.

G. Solaire assigned its interest in the Development Agreement for a portion of the Property to Taylor Morrison pursuant to that certain Assignment and Assumption Agreement Relative to the Sierra Vista Specific Plan Development Agreement dated November 20, 2019, and recorded November 20, 2019, as Document No. 2019-0094029-00, in the Official Records of Placer County.

H. Solaire assigned its interest in the Development Agreement for a portion of the Property to TRI Pointe Homes, Inc. pursuant to that certain Assignment and Assumption Agreement Relative to the Sierra Vista Specific Plan Development Agreement dated July 1, 2020, and recorded July 2, 2020, as Document No. 2020-0066287-00, in the Official Records of Placer County.

I. Solaire assigned its interest in the Development Agreement for a portion of the Property to Solaire – Roseville, pursuant to that certain Assignment and Assumption Agreement Relative to the Sierra Vista Specific Plan Development Agreement dated August 6, 2020, and recorded August 6, 2020, as Document No. 2020-0082425-00, in the Official Records of Placer County.

J. On March 4, 2020, City approved the Second Amendment to the Development Agreement (the "Second Amendment") for a portion of the Property owned by Mourier. The Second Amendment was recorded on April 13, 2020, as Document No. 2020-0032961-00, in the Official Records of Placer County. The Original Development Agreement, the First Amendment, and the Second Amendment are hereinafter collectively referred to as the "Development Agreement."

K. This Third Amendment to the Development Agreement (the "Third Amendment") affects certain portions of the Property (the "Third Amendment Property"), as described in Exhibit "A" and shown in Exhibit "B" attached to this Third Amendment, and shall run with the land described in Exhibits "A" and "B" hereto. This Third Amendment does not affect or apply in any manner with respect to the remainder of the Property described in the Development Agreement.

L. City and Landowner wish to enter into this Third Amendment in order to amend a provision of the Development Agreement for the Third Amendment Property.

M. The Third Amendment is authorized by Section 1.4 of the Development Agreement.

NOW THEREFORE, THE PARTIES MUTUALLY AGREE AS FOLLOWS:

1. AMENDMENT OF DEVELOPMENT AGREEMENT. The following section of the Development Agreement is hereby amended as it pertains the Third Amendment Property only, which incorporates the First Amendment Property:

a. REVISED SECTION 3.17.1.2. Section 3.17.1.2 of the Development Agreement is revised in its entirety for the Third Amendment Property, including adding a new final paragraph which is only applicable to the Third Amendment Property, to read as follows:

"3.17.1.2 If Landowner, by itself or in conjunction with Participating Owners, desires to pursue a Community Facilities District, City and Landowner (and Participating Owners, if applicable), agree that, with the consent of Landowner (and Participating Owners, if applicable), and to the extent permitted by law, City and Landowner (and Participating Owners, if applicable), shall use their best efforts to cause bonds to be issued and in amounts sufficient to affect the purposes of this section. City and Landowner

(and Participating Owners, if applicable), further agree that, with the consent of Landowner (and Participating Owners, if applicable), or their successor(s) in interest, and to the extent permitted by law, the City agrees to the following:

- (a) Maximum Annual Taxes for residential units, when aggregated with all other existing or expected taxes and assessments (excluding homeowners association assessments), shall not exceed 2.00% of the assessed valuation, net of the homeowner's exemption (2% Test).
- (b) The Special Tax shall be levied for as long as needed to service the principal and interest on bond debt, and to pay for any additional authorized facilities not reimbursed with bond proceeds as defined in the Funding, Construction, and Acquisition Agreement. However, the Special Tax shall be levied for a period that allows for at least two non-overlapping bond sales to cover deferred fees as set forth in (i) below. The Special Tax levied may exceed 50 years.
- (c) City shall not unreasonably deny the Maximum Annual Tax escalating at 2% per year.
- (d) Authorized facilities shall include, among other items, development impact fees for public improvements.
- (e) Annual Costs shall provide that special taxes not used for debt service and City administration be paid to Participating Owners, including Landowner, for any authorized facilities not reimbursed with bond proceeds (pay-as-you-go). City shall reasonably consider a reasonable interest component for any authorized facilities reimbursed with pay-as-you-go provided for in the Funding, Construction and Acquisition Agreement defined below.
- (f) Landowner and Participating Owners, if applicable, may utilize the Statewide Community Infrastructure Program ("SCIP") program and/or the Bond Opportunities for Land Development ("BOLD") program for any eligible impact fees.

- (g) Landowner, and Participating Owners, if applicable, may utilize a phased bond sale or sales.
- (h) Landowner, and Participating Owners, if applicable, may utilize private placement of bonds.
- (i) Bond proceeds from bond sales commencing in the year 31 timeframe shall include an amount no greater than \$5,600 per residential unit, adjusted as the SPRTA Tier II Traffic Fee may be subsequently adjusted, consisting of a portion or all of the following fees set forth in this Agreement or otherwise provided in the Roseville Municipal Code that would normally be paid at the time of issuance of building permits for low, medium or high density residential dwelling units:

(1) City-Wide Park Fee (Section 3.12.4)

(2) City Public Facilities Fee (Roseville Municipal Code Chapter 4.52)(Not applicable to the Third Amendment Property);

(3) Public Benefit Fee (Section 3.14.3)(Not applicable to the Third Amendment Property).

City reserves the discretion to determine which portions (amount) of each of the fees described in above subsections (1), (2), and (3) may be deferred to the bond sale. Notwithstanding any provision in this Agreement to the contrary, any amount exceeding \$5,600, adjusted as the SPRTA Tier II Traffic Fee may be subsequently adjusted (or exceeding such actual lesser amount for MDR or HDR units determined by City), per residential unit shall be due and payable to City upon issuance of a building permit commencing with the first applicable building permit for the SVSP. Notwithstanding any other provision in this Agreement to the contrary, if any of the fees described in above subsections (1), (2), and (3) are required by City for non-residential development then such fees shall be collected upon issuance of building permit commencing with the first applicable building permit.



Should SPRTA approve any portion or all of the Tier II Traffic Fee for portions of the Property being likewise deferred to payment from bond sale proceeds commencing in the year 31 timeframe, then such amount per residential unit deferred for the Tier II Traffic Fee shall reduce dollar-for-dollar the above-referenced per residential unit fees otherwise deferred to future bond sale proceeds as provided for in this Section 3.17.1.2 (i). If SPRTA Tier II traffic fees cannot be so deferred to payment from bond sale proceeds commencing in the year 31 timeframe, City shall within the rate and method for Project CFD(s) provided for in Section 3.17 accommodate total additional pay-as-you-go revenue up to \$500 per residential unit for City-Wide park improvements from the pay-as-you-go financing over a period starting in year 10 of the Project CFD(s), up to \$100 per residential unit per year for 5 years, provided, however, that City constructs City-Wide park improvements in either the SVSP or WRSP within twenty-four (24) months of commencement of collection of such additional pay-as-you-go revenues. In the event that City does collect such additional pay-as-you-go revenues, and proceeds forward to construct such improvements, the City Public Facilities Fee (not for the Third Amendment Property, for which the reduction provided in this paragraph shall be in the City-Wide Park Fee) referenced herein to be deferred to payment from bond sale proceeds commencing in the year 31 timeframe shall be reduced by \$500 per unit to account for the additional pay-as-you-go revenues required by City.

Each Participating Owner shall only be responsible for its pro-rata share of special taxes as set forth in the rate and method for the Project CFD(s).

For the Third Amendment Property, the previous fee deferral provisions of this subsection are hereby deemed null and void and the only fee deferral eligible to be paid with bond proceeds from future bond sales commencing in the year 31 timeframe shall

be fifty percent (50%) of the SPRTA Tier II Traffic Fee pursuant to the terms and conditions of the Tier II Development Fee Deferral Program and one hundred percent (100%) of the City-Wide Park Fee that would otherwise be paid at the time of issuance of building permits for low, medium, and high density residential dwelling units. The amount of the SPRTA Tier II Traffic Fee deferral provided by this Section 3.17 shall be adjusted as the SPRTA Tier II Traffic Fee may be subsequently adjusted. The amount of the City-Wide Park Fee deferral provided by this Section 3.17 shall be adjusted as the City-Wide Park Fee may be subsequently adjusted pursuant to Section 3.12.4 of the Development Agreement.

Should the Project CFD(s) including the Property not be formed at the time that any particular building permit is issued within a large lot map parcel on the Property , or any property owner in the SVSP desires to pay such fees in this Section 3.17.1.1 (i) rather than defer payment to such future CFD bond proceeds, the fees set forth in this Section 3.17.1.2 (i) for such building permit(s) shall not be eligible to be paid in such CFD bond proceeds but, notwithstanding any provision in this Agreement to the contrary, shall be paid at the time of issuance of such building permit(s). Upon formation of the Project CFD(s) including the Property , the fees set forth in this Section 3.17.1.2 (i) for unbuilt residential units shall be paid from bond proceeds in such bond sales commencing in the year 31 timeframe, unless an SVSP property owner desires to pay such fees at the time of issuance of building permit(s)."

b. EXHIBITS. The exhibits attached to this Third Amendment are for this Third Amendment only, as follows:

Exhibit A – Legal Description of Third Amendment Property

Exhibit B -- Plat of Third Amendment Property

2. CONSISTENCY WITH GENERAL PLAN. The City Council has found and determined that this Third Amendment of the Development Agreement is consistent with the General Plan and the Sierra Vista Specific Plan.

3. AMENDMENT. This Third Amendment amends, but does not replace or supersede, the Development Agreement, except as specified herein, and is limited and applies only to development of the Third Amendment Property, and does not affect or apply in any manner with respect to the development of any other property within the Sierra Vista Specific Plan Area,

including, without limitation, any other portion of the Property. As amended hereby, the Development Agreement remains in full force and effect.

4. FORM OF AMENDMENT. This Third Amendment is executed in two duplicate originals, each of which is deemed to be an original.

IN WITNESS WHEREOF, the City of Roseville, a municipal corporation, has authorized the execution of this Third Amendment in duplicate by its City Manager and attested to by its City Clerk under the authority of Ordinance No. \_\_\_\_\_, adopted by the Council of the City of Roseville on the \_\_\_\_ day of \_\_\_\_\_, 2020.

CITY OF ROSEVILLE,  
a municipal corporation

By: \_\_\_\_\_  
Dominick Casey  
City Manager

ATTEST:

By: \_\_\_\_\_  
Sonia Orozco  
City Clerk

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Robert R. Schmitt  
City Attorney

APPROVED AS TO SUBSTANCE:

By: \_\_\_\_\_  
Mike Isom  
Development Services Director

LANDOWNER:

WESTPARK SIERRA VISTA, LLC,  
a California limited liability company

By: \_\_\_\_\_  
Jeff Jones  
Its: Manager

SOLAIRE COMMUNITY BUILDERS,  
LLC, a California limited liability  
company

By: \_\_\_\_\_  
Jeff Jones  
Its: Manager

TAYLOR MORRISON OF  
CALIFORNIA, LLC,  
a California limited liability company

By: \_\_\_\_\_  
Jay Pawlek  
Its: Vice President

including, without limitation, any other portion of the Property. As amended hereby, the Development Agreement remains in full force and effect.

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CITY OF ROSEVILLE,  
a municipal corporation

By: \_\_\_\_\_  
Dominick Casey  
City Manager

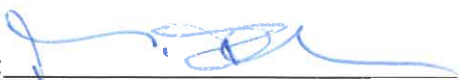
ATTEST:

By: \_\_\_\_\_  
Sonia Orozco  
City Clerk

APPROVED AS TO FORM:

By: \_\_\_\_\_  
Robert R. Schmitt  
City Attorney

APPROVED AS TO SUBSTANCE:

By:  \_\_\_\_\_  
Mike Isom  
Development Services Director

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Its: Manager

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Jeff Jones  
Its: Manager

TAYLOR MORRISON OF  
CALIFORNIA, LLC,  
a California limited liability company

By:  \_\_\_\_\_  
Jay Pawlek  
Its: Vice President

By:   
Aren Bazzocco ~~SCOTT CAREY~~  
Its: Vice President

TRI POINTE HOMES, INC.,  
a Delaware corporation

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its: \_\_\_\_\_

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Its: \_\_\_\_\_

SOLAIRE - ROSEVILLE, L.P.,  
a Delaware limited partnership

By: OCS-HS LOJV GP, LLC,  
a Delaware limited liability  
company  
General Partner

By: OCS-HS Lot Option Joint  
Venture, LLC, a Delaware  
limited liability company  
Sole Member

By: Hearthstone  
Professionals – PI, L.P., a  
Delaware limited  
partnership  
Manager

By: \_\_\_\_\_  
Steven C. Porath  
Authorized Person

By: \_\_\_\_\_  
Aren Bazzocco  
Its: Vice President

TRI POINTE HOMES, INC.,  
a Delaware corporation

By:   
Name: Philip S. Bodum  
Its: Division President

By:   
Name: Sean Herra  
Its: Director of Land Acquisition

SOLAIRE - ROSEVILLE, L.P.,  
a Delaware limited partnership

By: OCS-HS LOJV GP, LLC,  
a Delaware limited liability  
company  
General Partner

By: OCS-HS Lot Option Joint  
Venture, LLC, a Delaware  
limited liability company  
Sole Member

By: Hearthstone  
Professionals – PI, L.P., a  
Delaware limited  
partnership  
Manager

By: \_\_\_\_\_  
Steven C. Porath  
Authorized Person

By: \_\_\_\_\_

Aren Bazzocco

Its: Vice President

TRI POINTE HOMES, INC.,  
a Delaware corporation

By: \_\_\_\_\_

Name: \_\_\_\_\_

Its: \_\_\_\_\_

By: \_\_\_\_\_

Name: \_\_\_\_\_

Its: \_\_\_\_\_

SOLAIRE - ROSEVILLE, L.P.,  
a Delaware limited partnership

By: OCS-HS LOJV GP, LLC,  
a Delaware limited liability  
company  
General Partner

By: OCS-HS Lot Option Joint  
Venture, LLC, a Delaware  
limited liability company  
Sole Member

By: Hearthstone  
Professionals – PI, L.P., a  
Delaware limited  
partnership  
Manager

By:  \_\_\_\_\_

Steven C. Porath  
Authorized Person

## ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California  
County of Placer )

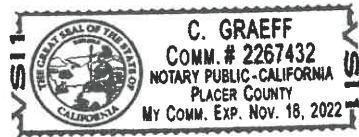
On August 27, 2020 before me, C. Graeff, Notary Public,  
(insert name and title of the officer)

personally appeared Jeff Jones,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are  
subscribed to the within instrument and acknowledged to me that he/she/they executed the same in  
his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the  
person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing  
paragraph is true and correct.

WITNESS my hand and official seal.

Signature C Graeff (Seal)





## **CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT**

**A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.**

STATE OF California )SS  
COUNTY OF Sacramento )

On August 28, 2020 before me, Candace Rene James, Notary Public, personally appeared Jay Pawlek, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

Candace Rene James



My Commission Expires: December 15, 2022

*This area for official notarial seal*

Notary Name: Candace Rene James

Notary Phone: 916-355-8900

Notary Registration Number: 2271071

County of Principal Place of Business: Sacramento

## **CALIFORNIA ALL PURPOSE ACKNOWLEDGMENT**

**A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document, to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.**

STATE OF California )SS  
COUNTY OF Sacramento )

On August 28, 2020, before me, Candace Rene James, Notary Public, personally appeared Scott Carey, who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

Candace Rene James



My Commission Expires: December 15, 2022

*This area for official notarial seal*

Notary Name: Candace Rene James

Notary Phone: 916-355-8900

Notary Registration Number: 2271071

County of Principal Place of Business: Sacramento

# CALIFORNIA ALL- PURPOSE CERTIFICATE OF ACKNOWLEDGMENT

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California }

County of Placer }

On August 31, 2020 before me, K. Curcio,  
(Here insert name and title of the officer)

personally appeared Philip S. Bodem and Sean Herra,  
who proved to me on the basis of satisfactory evidence to be the person(s) whose  
name(s) ~~is/are~~ subscribed to the within instrument and acknowledged to me that  
~~he/she/they~~ executed the same in ~~his/her~~ their authorized capacity(ies), and that by  
~~his/her~~ their signature(s) on the instrument the person(s), or the entity upon behalf of  
which the person(s) acted, executed the instrument.

I certify under PENALTY OF PERJURY under the laws of the State of California that  
the foregoing paragraph is true and correct.

WITNESS my hand and official seal.



K. Curcio  
Notary Public Signature (Notary Public Seal)

## ADDITIONAL OPTIONAL INFORMATION

### DESCRIPTION OF THE ATTACHED DOCUMENT

Third Amendment of Development Agreement

(Title or description of attached document)

Solaire - Roseville

(Title or description of attached document continued)

Number of Pages Document Date

### CAPACITY CLAIMED BY THE SIGNER

- ☒ Individual (s)  
☐ Corporate Officer

(Title)

- ☐ Partner(s)  
☐ Attorney-in-Fact  
☐ Trustee(s)  
☐ Other \_\_\_\_\_

## INSTRUCTIONS FOR COMPLETING THIS FORM

*This form complies with current California statutes regarding notary wording and, if needed, should be completed and attached to the document. Acknowledgments from other states may be completed for documents being sent to that state so long as the wording does not require the California notary to violate California notary law.*

- State and County information must be the State and County where the document signer(s) personally appeared before the notary public for acknowledgment.
- Date of notarization must be the date that the signer(s) personally appeared which must also be the same date the acknowledgment is completed.
- The notary public must print his or her name as it appears within his or her commission followed by a comma and then your title (notary public).
- Print the name(s) of document signer(s) who personally appear at the time of notarization.
- Indicate the correct singular or plural forms by crossing off incorrect forms (i.e. ~~he/she/they~~, is /are ) or circling the correct forms. Failure to correctly indicate this information may lead to rejection of document recording.
- The notary seal impression must be clear and photographically reproducible. Impression must not cover text or lines. If seal impression smudges, re-seal if a sufficient area permits, otherwise complete a different acknowledgment form.
- Signature of the notary public must match the signature on file with the office of the county clerk.
  - ❖ Additional information is not required but could help to ensure this acknowledgment is not misused or attached to a different document.
  - ❖ Indicate title or type of attached document, number of pages and date.
  - ❖ Indicate the capacity claimed by the signer. If the claimed capacity is a corporate officer, indicate the title (i.e. CEO, CFO, Secretary).
- Securely attach this document to the signed document with a staple.

**CALIFORNIA ALL-PURPOSE ACKNOWLEDGMENT**

CIVIL CODE § 1189

A notary public or other officer completing this certificate verifies only the identity of the individual who signed the document to which this certificate is attached, and not the truthfulness, accuracy, or validity of that document.

State of California

County of Los AngelesOn Aug. 27, 2020

Date

before me,

Karen Hornback, Notary Public

Here Insert Name and Title of the Officer

personally appeared

Steven C. Porath

Name(s) of Signer(s)

who proved to me on the basis of satisfactory evidence to be the person(s) whose name(s) is/are subscribed to the within instrument and acknowledged to me that he/she/they executed the same in his/her/their authorized capacity(ies), and that by his/her/their signature(s) on the instrument the person(s), or the entity upon behalf of which the person(s) acted, executed the instrument.



I certify under PENALTY OF PERJURY under the laws of the State of California that the foregoing paragraph is true and correct.

WITNESS my hand and official seal.

Signature

Karen Hornback

Signature of Notary Public

Place Notary Seal and/or Stamp Above

**OPTIONAL**

Completing this information can deter alteration of the document or fraudulent reattachment of this form to an unintended document.

**Description of Attached Document**

Title or Type of Document: \_\_\_\_\_

Document Date: \_\_\_\_\_ Number of Pages: \_\_\_\_\_

Signer(s) Other Than Named Above: \_\_\_\_\_

**Capacity(ies) Claimed by Signer(s)**

Signer's Name: \_\_\_\_\_

☐ Corporate Officer – Title(s): \_\_\_\_\_☐ Partner – ☐ Limited ☐ General☐ Individual ☐ Attorney in Fact☐ Trustee ☐ Guardian of Conservator☐ Other: \_\_\_\_\_

Signer is Representing: \_\_\_\_\_

Signer's Name: \_\_\_\_\_

☐ Corporate Officer – Title(s): \_\_\_\_\_☐ Partner – ☐ Limited ☐ General☐ Individual ☐ Attorney in Fact☐ Trustee ☐ Guardian of Conservator☐ Other: \_\_\_\_\_

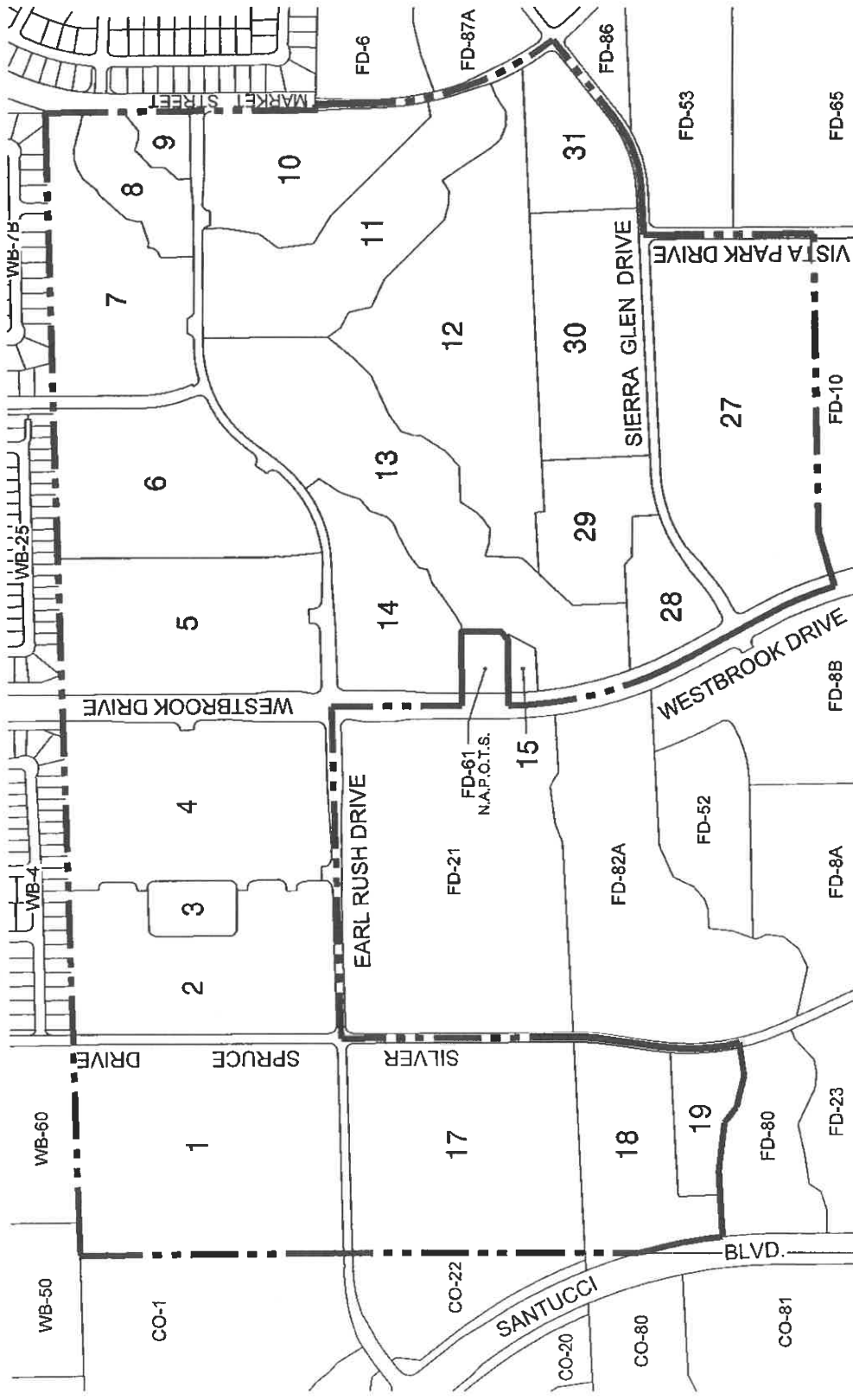
Signer is Representing: \_\_\_\_\_

## **EXHIBIT A**

### **Legal Description of the Third Amendment Property**

That certain real property located in the City of Roseville, State of California, more particularly described as Lots 1 thru 15 inclusive, 17 thru 19 inclusive, and 27 thru 31, inclusive, of that certain Final Map of Sierra Vista – Federico, Large Lot Subdivision, Subdivision No. PL15-0192, recorded February 16, 2018 in Book EE of Maps at Page 6, Office of the Placer County Recorder.

# EXHIBIT "B" PLAT MAP 3rd AMENDMENT PROPERTY



## LEGEND

15 Final Map Lot Number (EE B.M. 6)