



AGENDA
February 7, 2019
VIDEO

SPECIAL MEETING NOTICE
PLANNING COMMISSION
7:00 p.m.
Council Chambers
311 Vernon Street
Roseville, California
www.roseville.ca.us

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.

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. **PUBLIC COMMENTS**
5. **CONSENT CALENDAR**

5.1. Minutes of January 24, 2019

5.2. Major Project Permit Stage 1 Modification and Lot Line Adjustment – 200 Gibson Drive – NCRSP PCL 40 - Highland Village – File # PL18-0258

REQUEST

The applicant requests approval of a Major Project Permit Modification to the Highland Village site plan to eliminate Building 5, increase the size of restaurant Buildings 3 and 4, and add 46 parking spaces to the project site. The request includes changing Building 2 from an office use to medical use. A Lot Line Adjustment is also requested to reconfigure parcels consistent with the revised site plan.

Applicant: David Crawford, RMW Architecture & Interiors
Owner: Timothy Gagnier, 990 Reserve Drive, LLC

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the two (2) findings of fact and approve the Major Project Permit Stage 1 Modification subject to six (6) conditions of approval.
- B. Approve the Lot Line Adjustment subject to eleven (11) conditions of approval.

6. REQUESTS/PRESENTATIONS

6.1. Design Review Permit, Parking Reduction, and Voluntary Merger – 1017 Douglas Boulevard – Infill Pcl 187 – Drive-Thru Coffee Kiosk – File # PL18-0006

REQUEST

The applicant requests approval of a Design Review Permit to construct an 800 square-foot drive thru coffee kiosk and associated improvements, an Administrative Permit for a one (1) space parking reduction, and a Voluntary Merger to merge two (2) existing lots into one (1) lot for development.

Applicant: Tiffany Wilson, RSC Engineering, Inc
Owner: Chase Burke, Ethan Conrad Properties

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Conclude that Finding 2 of the required four (4) findings of fact cannot be made to approve the Design Review Permit, and accordingly deny the Design Review Permit.
- B. Decline to take action on the Administrative Permit for a Parking Reduction, as the denial of the Design Review Permit invalidates the request for an Administrative Permit.
- C. Direct staff to process the Voluntary Merger administratively.

7. BOARD MEMBER / COMMISSIONER / STAFF REPORT

8. ADJOURNMENT



PLANNING COMMISSION COMMUNICATION

Title: Minutes of January 24, 2019
Contact: Lupe Nelson, lnelson@roseville.ca.us, (916) 774-5281

Meeting Date: 2/7/2019
Item #: 5.1.

ATTACHMENTS:

Description

Minutes of January 24, 2019



MINUTES

January 24, 2019

PLANNING COMMISSION MEETING

7:00 p.m.

Council Chambers
311 Vernon Street
Roseville, California
www.roseville.ca.us

1. CALL TO ORDER

Chair Krafka called the meeting to order at 7:00 p.m.

2. ROLL CALL

Present: Brashears, Caporusso, Dohner, Houdesheldt, Jensen, Krafka, Mendonsa
Absent: None

3. PLEDGE OF ALLEGIANCE

Commissioner Caporusso led those in attendance in the Pledge of Allegiance.

4. PUBLIC COMMENTS

Chair Krafka opened the Public Comment period. Hearing none, Chair Krafka closed the Public Comment period.

5. CONSENT CALENDAR

Motion by Robert Jensen, seconded by Tracy Mendonsa, to approve Consent Calendar. The Motion Passed.

Roll call vote: Ayes: Brashears, Caporusso, Dohner, Jensen, Krafka, Mendonsa

Abstain: Houdesheldt

5.1. Minutes of January 10, 2019

6. REQUESTS/PRESENTATIONS

Commissioner Houdesheldt stated that pursuant to Government Code Section 84308, he would recuse himself from item 6.1. because he had received a campaign contribution more than \$250 from the owner, Westpark SV 400, LLC within the past 12 months, and from item 6.2. because he had received a campaign contribution more than \$250 from an agent (Law Offices of Gregory Thatch) for the applicant, HWA Architects, and owner, Sheba Development, LLC within the past 12 months.

Commissioner Houdesheldt left the dais for items 6.1. and 6.2. and returned for the remainder of the meeting.

6.1. Tentative Subdivision Map, Lot Line Adjustment, and Administrative Permit – 4280 Santucci Blvd– SVSP PCL WB-20, WB-21, WB-22 & WB-23 – Westbrook Phase 3 Small Lot Map – File # PL18-0266

REQUEST

The applicant requests approval of a Tentative Subdivision Map to create 250 single-family residential lots, a Lot Line Adjustment to reconfigure large lot parcel lines, and an Administrative Permit to transfer units within parcels WB-20, WB-21, WB-22, WB-23, and WB-31 in the Westbrook area of the Sierra Vista Specific Plan.

Applicant: Vance Jones, MacKay & Somps

Owner: Westpark S V 400, LLC, Attn: Ryan O'Keefe

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the three (3) findings of fact and approve the Tentative Subdivision Map subject to sixty-nine (69) conditions of approval.
- B. Adopt the four (4) findings of fact and approve the Lot Line Adjustment subject to six (6) conditions of approval.
- C. Adopt the three (3) findings of fact and approve the Administrative Permit subject to one (1) condition of approval.

Associate Planner, Shelby Vockel, presented the Staff Report.

Chair Krafka opened the public hearing and invited comments from the applicant and/or audience.

Owner, Ryan O'Keefe, stated he had received a copy of the staff report and was in agreement with staff's recommendation.

Commissioner Discussion:

- Narrow alley ways will only impact 4 houses.

Chair Krafka closed the public hearing.

Motion by Robert Jensen, seconded by Justin Caporusso, to approve Motion.

The Motion Passed.

Roll call vote: Ayes: Brashears, Caporusso, Dohner, Jensen, Krafka, Mendonsa

Absent: Houdesheldt

6.2. Design Review Permit Modification and Lot Line Adjustment – 9277 Sierra College – SERSP PCL 40 - Granite Bay Pavilions Offices – File # PL17-0131

REQUEST

The applicant requests approval of a Design Review Permit Modification to allow two (2) new medical office buildings and two (2) new professional office buildings, totaling 16,434 square feet, and parking and landscape improvements within the Granite Bay Pavilions center. A Lot Line Adjustment is also requested to reconfigure the existing pad building parcels.

Applicant: Hilton L. Williams, HWA Architects

Owner: Ismak Alshatti, Sheba Development, LLC

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the two (2) findings of fact and approve the Design Review Permit Modification subject to twenty-four (24) conditions of approval.
- B. Adopt the four (4) findings of fact and approve the Lot Line Adjustment subject to nine (9) conditions of approval.

Associate Planner, Shelby Vockel, presented the Staff Report.

Chair Krafka opened the public hearing and invited comments from the applicant and/or audience.

Representative, Gregory Thatch, stated they had received a copy of the staff report and were in agreement with staff's recommendation.

Commissioner Discussion:

- Buildings were reduced in area to accommodate more intense use of parking and so that parking standards could be met.
- Thank you to applicant for reaching out to tenants.
- Appreciate the parking concern clarification.

Chair Krafka closed the public hearing.

Motion by Justin Caporusso, seconded by Tracy Mendonsa, to approve Motion.
The Motion Passed.

Roll call vote: Ayes: Brashears, Caporusso, Dohner, Jensen, Krafka, Mendonsa

Absent: Houdesheldt

6.3. General Plan Amendment, Specific Plan Amendment, Rezone, Design Review

Permit, and Tentative Parcel Map – NRSP PCL WW-71 – Play Care Commercial – 4050 Baseline Road – File # PL18-0024

REQUEST

The applicant requests a Tentative Parcel Map to subdivide the existing 2.98-acre parcel into three (3) separate parcels (Lots A, B, and C), and a General Plan Amendment, Specific Plan Amendment, and Rezone to change the land use and zoning designations of Lots B and C from Public/Quasi-Public (P/QP) to Community Commercial (CC). The project also includes a Design Review Permit to construct two (2) commercial buildings totaling 8,018 square feet in size with associated parking and landscaping.

Applicant: Michael Buschow, GRA Architecture
Owner: Brian Lee, Crown Pacific Holdings

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the Play Care Commercial Mitigated Negative Declaration and the Mitigation Monitoring and Reporting Program;
- B. Recommend the City Council approve the General Plan Amendment (Text and Land Use Map);
- C. Recommend the City Council approve the Specific Plan Amendment (Text and Land Use Map);
- D. Recommend the City Council adopt the two (2) findings of fact and approve the Rezone;
- E. Adopt the four (4) findings of fact and approve the Design Review Permit subject to eighty-eight (88) conditions of approval; and
- F. Adopt the three (3) findings of fact and approve the Tentative Parcel Map subject to fifty-three (53) conditions of approval.

Assistant Planner, Kinnie Shallow, presented the Staff Report.

Chair Krafka opened the public hearing and invited comments from the applicant and/or audience.

Owner, Brian Lee, stated he had received a copy of the staff report and was in agreement with staff's recommendation. He stated the uses for the proposed buildings would be geared toward children.

Commissioner Discussion:

- Parking discussion.
- Fiddymment Road and Baseline Road traffic improvement measures.
- Excited about the concept/project.
- Thank you for your investment into the community.

Chair Krafka closed the public hearing.

Motion by Bruce Houdesheldt, seconded by Erich Brashears, to

- A. Adopt the Play Care Commercial Mitigated Negative Declaration and the

- Mitigation Monitoring and Reporting Program;
- B. Recommend the City Council approve the General Plan Amendment (Text and Land Use Map);
 - C. Recommend the City Council approve the Specific Plan Amendment (Text and Land Use Map);
 - D. Recommend the City Council adopt the two (2) findings of fact and approve the Rezone;
 - E. Adopt the four (4) findings of fact and approve the Design Review Permit subject to eighty-eight (88) conditions of approval; and
 - F. Adopt the three (3) findings of fact and approve the Tentative Parcel Map subject to fifty-three (53) conditions of approval.

Roll call vote: Ayes: Brashears, Caporusso, Dohner, Houdesheldt, Jensen, Krafka, Mendonsa

6.4. General Plan Amendment, Rezone, Tentative Subdivision Map, Design Review Permit for Residential Subdivision, and Tree Permit – 1612-1618 Kit Carson Way – The Villages at Kit Carson – File # PL 18-0063

REQUEST

The applicant requests approval of a General Plan Amendment, Rezone, Tentative Subdivision Map, Design Review Permit For Residential Subdivision, And Tree Permit to create 21 single family parcels and three open space parcels for the construction of 10 attached residences each consisting of two single-family dwellings, for a total of 20 single-family units. Ten of the residences (five buildings) will front on to Kit Carson Way and the other ten residences (five buildings) will front toward the adjacent open space. All 20 dwellings will be accessed from a proposed cul-de-sac.

Applicant: Chris Coulter, 3eDevelopments LLC
Owner: J. William Roach 2012 Revocable Trust

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the Villages at Kit Carson Initial Study and Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program;
- B. Recommend that the City Council approve the General Plan Amendment (Text and Land Use Map);
- C. Recommend that the City Council adopt the two (2) findings of fact and approve the Rezone;
- D. Adopt the three (3) findings of fact and approve the Tentative Subdivision Map subject to 82 conditions of approval;
- E. Adopt the four (2) findings of fact and approve the Design Review Permit for Residential Subdivision subject to 29 conditions of approval; and,
- F. Adopt the two (2) findings of fact and approve the Tree Permit subject to 21 conditions of approval.

Associate Planner, Charity Gold, presented the Staff Report.

Chair Krafka opened the public hearing and invited comments from the applicant and/or audience.

Applicant, Chris Coulter, stated he had received a copy of the staff report and was in agreement with staff's recommendation.

Commissioner Discussion:

- On-street parking discussion.
- Thankful for community outreach.
- Satisfied with proposed parking solution.
- The CC&R stating that garages be kept open and free for the parking of vehicles will be enforced by the HOA as the City does not have the authority to do so.
- Proposed design is consistent with design of surrounding homes.
- Fun design of proposed subdivision.
- Classic mixed use neighborhood with businesses nearby.
- Walkable neighborhood.

Chair Krafka closed the public hearing.

Motion by Tracy Mendonsa, seconded by Kristine Dohner, to:

- A. Adopt the Villages at Kit Carson Initial Study and Mitigated Negative Declaration and Mitigation Monitoring and Reporting Program;
- B. Recommend that the City Council approve the General Plan Amendment (Text and Land Use Map);
- C. Recommend that the City Council adopt the two (2) findings of fact and approve the Rezone;
- D. Adopt the three (3) findings of fact and approve the Tentative Subdivision Map subject to 82 conditions of approval.
- E. Adopt the two (2) findings of fact and approve the Design Review Permit for Residential Subdivision subject to 29 conditions of approval.
- F. Adopt the two (2) findings of fact and approve the Tree Permit subject to 21 conditions of approval.

Roll call vote: Ayes: Brashears, Caporusso, Dohner, Houdesheldt, Jensen, Krafka, Mendonsa

7. BOARD MEMBER / COMMISSIONER / STAFF REPORT

Staff Reports

- A Special Planning Commission meeting will be held on February 7, 2019. One of the items to heard will be proposed Dutch Brothers project.
- A Planning Commission meeting will be held on February 14, 2019.

Commissioner Reports

- Discussion regarding the timing of light at Pleasant Grove and Highland Pointe Drive.

8. ADJOURNMENT

Motion by Robert Jensen, seconded by Tracy Mendonsa, to adjourn the meeting. The Motion Passed unanimously at 8:00 p.m. with a voice vote.



PLANNING COMMISSION COMMUNICATION

Title: Major Project Permit Stage 1 Modification and Lot Line Adjustment – 200 Gibson Drive – NCRSP PCL 40 - Highland Village – File # PL18-0258
Contact: Charity Gold, cgold@roseville.ca.us, (916) 774-5247

Meeting Date: 2/7/2019
Item #: 5.2.

ATTACHMENTS:

Description

Staff Report

Exhibit A Master Site Plan

Exhibit B Plaza

Exhibit C Pedestrian Connectivity

Exhibit D Lot Line Adjustment

ITEM 5.2: **Major Project Permit Stage 1 Modification and Lot Line Adjustment – 200 Gibson Drive
– NCRSP PCL 40 - Highland Village – PL18-0258**

REQUEST

The applicant requests approval of a Major Project Permit Modification to the Highland Village site plan to eliminate Building 5, increase the size of restaurant Buildings 3 and 4, and add 46 parking spaces to the project site. The request includes changing Building 2 from an office use to medical use. A Lot Line Adjustment is also requested to reconfigure parcels consistent with the revised site plan.

Applicant – David Crawford, RMW Architecture & Interiors
Owner – Timothy Gagnier, 990 Reserve Drive, LLC

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Adopt the two (2) findings of fact and approve the Major Project Permit Stage 1 Modification subject to six (6) conditions of approval.
- B. Approve the Lot Line Adjustment subject to eleven (11) conditions of approval.

SUMMARY OF OUTSTANDING ISSUES

There are no outstanding issues associated with this request. The applicant has reviewed and is in agreement with the recommended conditions of approval.

BACKGROUND

The project is within the Highland Village project area located on the southeast side of the intersection of Roseville Parkway and Gibson Drive, in the North Central Roseville Specific Plan (NCRSP) (Figure 1). The General Plan and NCRSP land use designation of the site is Business Professional/Community Commercial (BP/CC), and the zoning designation of the site is Community Commercial/Special Area-North Central Roseville Specific Plan (CC/SA-NC).

In January 2008 the Planning Commission approved a Major Project Permit (MPP) Stage 1, Tentative Subdivision Map, and Architectural Guidelines for the Highland Village project to allow a mix of office and commercial uses on nine developable lots and one common area lot. Much of the Highland Village project has been built out including all onsite parking, internal drive aisles, and frontage landscaping. Many of the building pads have been developed, with only Buildings 3, 4, and 5 undeveloped.

Figure 1: Project Location



The current proposal would change the use of Building 2 from general office to medical office, replace Building 5 with parking, and increase the size of Building 3 and Building 4. The request is in response to an increase in the market demand for medical office uses.

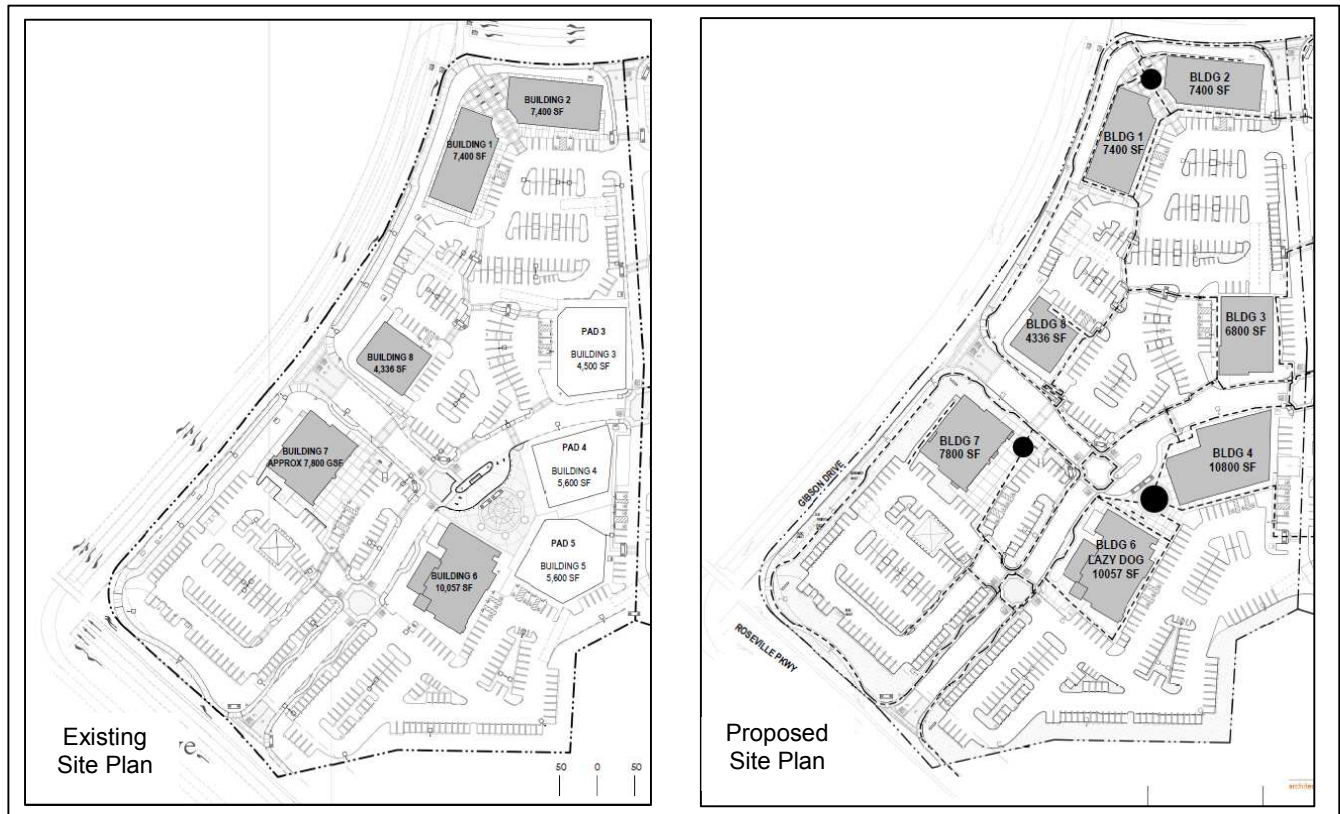
EVALUATION: MPP STAGE 1 MODIFICATION

Section 19.82.040 of the City of Roseville Zoning Ordinance describes the procedures for an amendment to a Major Project Permit. According to Section 19.82.040 C, all amendments that are not considered minor shall be reviewed in the same manner as the initial approval. The proposed request includes removal of one parcel and an increase in the overall square footage within the project area. This modification does not meet the minor modification criteria and; therefore, requires final action by the Planning Commission subject to the findings for a Major Project Permit Stage 1. The required findings are listed below in ***italicized, bold text*** and are followed by an evaluation.

- 1. The Preliminary Development Plan is consistent with the General Plan, applicable Specific Plan, and adopted City design guidelines; and.***
- 2. The design and installation of the Preliminary Development Plan shall not be detrimental to the public health and safety, or be materially detrimental to the public welfare.***

The proposed MPP Stage 1 Modification includes a request to change the use of Building 2 from professional office to medical office. The medical office use is consistent with the allowable uses within the Highland Village center; however, medical uses require more parking than professional office uses. In order to provide the additional 19 spaces needed for the proposed medical office use, the applicant proposes to eliminate Building 5 and its associated parcel and replace it with 26 additional parking spaces. The parcel elimination is evaluated in the Lot Line Adjustment section below. Additionally, five parking spaces will be added east of Building 4, and 15 spaces will be added north and east of Building 3 for a total of 46 new parking spaces. The proposed parking and site plan revisions for Highland Village, including elimination of Building 5, are shown on Figure 2.

Figure 2: Proposed Site Plan Changes



The Highland Village MPP Stage 1 identifies Building 5 as a 5,600 square foot restaurant building with a parking requirement of 56 spaces. Along with the removal of Building 5, the applicant proposes to increase the square footages of Buildings 3 and 4. This increase is also represented in the requested Lot Line Adjustment. The proposed changes to the building square footages are detailed in Table 1. The removal of Building 5, and the additional square footage added to Buildings 2 and 4, will result in an additional 1,900 square feet of restaurant use within Highland Village. These changes are reflected on the proposed Master Site Plan (Exhibit A).

Table 1: Building Square Footage Modification

Building	Existing (square feet)	Proposed (square feet)	Change (square feet)
Building 3	4,500	6,800	+2,300
Building 4	5,600	10,800	+5,200
Building 5	5,600	0	-5,600
Total			+1,900

The requested change in use and the increase in restaurant square footage creates a need for 38 additional parking spaces within Highland Village, for a total requirement of 479 spaces. Table 2 details the proposed parking and site plan changes and the resulting parking requirements. The changes are shown in ~~strike through~~ and **bold**. As discussed above and detailed in Table 2, the proposed modification includes an additional 46 new parking spaces, resulting in a parking surplus of eight spaces. Additionally, as illustrated in Figure 3, the parking is distributed throughout Highland Village providing sufficient parking proximate to each use.

The requested modification will result in a smaller plaza between Building 4 and Building 6 and will reconfigure the pedestrian plan. As modified, the plaza is consistent with the intent of the original MPP Stage 1 approval. The proposed plaza and pedestrian plan maintain pedestrian connectivity to adjacent uses, provide a safe off-street vehicular pick-up and drop-off area, and include the originally planned amenities such as a central fountain, decorative concrete, seating, and landscaping that will create a comfortable gathering place (Exhibits B and C).

With the elimination of Building 5, there is sufficient parking within the center to accommodate the change in use and the increase in restaurant square footage. The proposed modifications are consistent with the mix of uses and site design anticipated with the original approval of the Highland Village MPP Stage 1 and the project complies with the City's Zoning Ordinance, the General Plan, and the NCRSP.

Figure 3: Parking Distribution



Table 2: Proposed Highland Village Parking Table

Building	Use	Room Count	Parking Ratio	Required	Provided
Hyatt Place Hotel (Lot 1)	Hotel	151 Rooms	1 space/room	151	154
Falls Event Center (Lot 2)	Assembly	15,224	as required per MPP	157	157
Total Lot 1 & 2				308	311
Building	Use	Square Footage	Parking Ratio (#/square feet)	Required	Provided
Building 1	Medical	7,400	1 to 150	49	shared parking
Building 2	Office Medical Office	7,400	1 to 250 1 to 150	30 49	
Building 3	Restaurant	4,500 6,800	1 to 100	45 68	
Building 4	Restaurant	5,600 10,800	1 to 100	56 108	
Building 5	Restaurant	5,600	1 to 100	56 0	
Building 6 - Lazy Dog	Restaurant	10,057	1 to 100	101	
Building 7	Restaurant	7,800	1 to 100	78	
Building 8 - Revolutions	Medical	4,336	1 to 150	26	
Total Building Square Footages		52,693 54,593			
Total Parking for Buildings 1 - 8				441 479	445 491

EVALUATION: LOT LINE ADJUSTMENT

In accordance with the Subdivision Map Act and the City of Roseville Subdivision Ordinance Chapter 18.10, the evaluation of the request is based on compliance with the City's Zoning Ordinance and Building Code as follows:

1. The proposed Lot Line Adjustment complies with the Zoning Ordinance for the district in which the parcels are located.

The proposed Lot Line Adjustment would result in the elimination of one lot for Building 5 and an increase in the size of the lots for Building 3 and Building 4 (Exhibit D). These lots would be adjusted relative to the existing common area lot, increasing its size to 7.6 acres. The resulting lots are consistent with the zoning requirements for lots within the CC/SA-NC zone and no conflicts have been identified.

2. The proposed Lot Line Adjustment complies with the local building regulations, including the California Building Code.

The California Building Code (CBC) establishes building regulations based on the type of construction, the use of a building or structure, and a building's proximity to other buildings and property lines. The future construction and uses of the site have been and will continue to be reviewed for compliance with the NRCSP's and City's Design and Development Standards and the CBC through the building permit process. Therefore, approval of the Lot Line Adjustment will not create conflicts with local building regulations. In addition, the project has been reviewed by the City's Building Division and appropriate conditions of approval have been included with the project.

3. The proposed Lot Line Adjustment provides for any necessary relocation of existing infrastructure or easements.

The proposed lot line adjustment will adjust lines between existing buildable lots and an existing common area lot. The project has been reviewed by various departments and divisions within the City of Roseville, and conditions have been recommended to ensure that any relocations of easements or infrastructure are accommodated. No conflicts have been identified.

4. Compliance with General, NCRSP, and Subdivision Design Standards.

The subject parcels have a BP/CC (Business Professional and Community Commercial) land use designation in the General Plan and in the NCRSP. Medical uses are consistent with the commercial use type. The reconfiguration of the parcels will result in lots which can be used and built upon, and which are practical for improvement based on the existing topography. No conflicts with the General Plan, NCRSP, or Subdivision Design Standards have been identified.

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 January 25, 2019, and was distributed to all property owners within 300 feet of the project site. To date, no comments have been received.

ENVIRONMENTAL DETERMINATION

Pursuant to the requirements of the California Environmental Quality Act (CEQA), an Initial Study/Negative Declaration was prepared for the NCRSP Parcel 40C - Highland Village project, File #2007PL-123 and adopted by the Planning Commission on January 10, 2008. The proposed project is within the scope of the analysis prepared for that project; therefore, consistent with Section 15162 of the CEQA Guidelines, no further analysis is required.

RECOMMENDATION

The Planning Division recommends the Planning Commission take the following actions:

- A. Adopt the two (2) findings of fact listed in the Staff Report and approve the **Major Project Permit Stage 1 Modification – 200 Gibson Drive – NCRSP PCL 40 - Highland Village – PL18-0258** subject to six (6) conditions of approval.
- B. Approve the **Lot Line Adjustment - 200 Gibson Drive – NCRSP PCL 40 - Highland Village – PL18-0258** subject to eleven (11) conditions of approval.

CONDITIONS OF APPROVAL FOR MPP STAGE 1 MODIFICATION PL18-0258

- 1. The project is approved as shown in Exhibit A - D, and as conditioned or modified below. (Planning)
- 2. This Major Project Permit Modification approval shall be effectuated within a period of two (2) years from **February 7, 2019** and if not effectuated shall expire on **February 7, 2021**. Prior to said expiration date, the applicant may apply for an extension of time, provided this approval does not extend the expiration beyond **February 7, 2022**. (Planning)
- 3. This project is subject to the previously approved conditions of approval for File # PL17-0202 and File # MPP-000016, except as conditioned or modified below. (Planning)

4. Bike parking and clean air vehicle spaces shall be provided per the California Green Building Standards. Bike rack/locker design and location shall be approved by Alternative Transportation. Parking stall markings are to be marked as "Carpool/Clean Air/EV". Do not use "Vanpool". (Alternative Transportation, Building).
5. Due to the changes in the proposed project, a new Transportation System Management (TSM) Plan and Agreement will be required. (Alternative Transportation)
6. Due to the expansion/alteration of this application, the fire department access road shall be maintained in accordance with this department's policy of 20 feet wide unobstructed fire lanes and turning radii provisions of 30 and 50 respectively throughout the parcel adjacent to the structure. The designated fire lanes shall be for aisles fronting the premises excluding the public right of ways. (Fire)

DRAFT CONDITIONS OF APPROVAL FOR A LOT LINE ADJUSTMENT OR VOLUNTARY MERGER

1. The Voluntary Merger or Lot Line Adjustment is approved as shown in Exhibit A. (Planning, Engineering)
2. The following shall be submitted to Engineering prior to recordation of the Voluntary Merger or Lot Line Adjustment:
 - a. Two copies of property boundary description with exhibit map (8.5" x 11" sheet), and one copy of boundary closure calculations for resulting lots. These items shall be stamped and signed by a California Licensed Land Surveyor or Registered Civil Engineer authorized to practice land surveying.
 - b. One copy of the Conditions of Approval.
 - c. A completed Property Owner Consent Form.
 - d. Deed to convey interest in the property.
 - e. Preliminary title report no older than six months for all properties involved. (Engineering)
3. If surveying monuments are placed as a result of this Property Line Adjustment, it will be the responsibility of the Surveyor to record a Record of Survey with the County Recorder's Office. (Engineering)
4. All existing easements shall be maintained, unless otherwise provided for in these conditions. (Environmental Utilities, Electric, Engineering)
5. The applicant shall submit to the Engineering Division of Public Works a paper copy and an electronic copy of the recorded Voluntary Merger or Lot Line Adjustment per the "Digital Submittal of Cadastral Surveys." (Environmental Utilities)
6. Prior to recordation of the Lot Line Adjustment, the applicant shall pay the City's surveyor's processing and consulting fee of \$150. (Engineering)

OTHER CONDITIONS IF NEEDED TO RELOCATE FACILITIES AND EASEMENTS

7. Easement widths shall comply with the City's Design and Construction Standards. (Engineering, Environmental Utilities, Electric)

8. Separate document easements required by the City shall be prepared in accordance with the City's "Policy for Dedication of Easements to the City of Roseville". All legal descriptions shall be prepared by a licensed land Surveyor. (Environmental Utilities, Electric, Engineering)
9. Any relocation, rearrangement, or change to existing City facilities due to this Voluntary Merger or Lot Line Adjustment shall be paid for by the applicant. (Engineering, Environmental Utilities, Electric)
10. All existing buildings shall conform to Table 602 of the CBC for fire separation distance requirements. (Building)
11. Any structures crossing the adjusted parcel lines shall be removed prior to recordation of the Voluntary Merger or Lot Line Adjustment documents. (Engineering)

Exhibits

- A. Master Site Plan
- B. Plaza Design
- C. Pedestrian Connectivity Plan
- D. Lot Line Adjustment Exhibit

<u>Note to Applicant and/or Developer:</u> 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.
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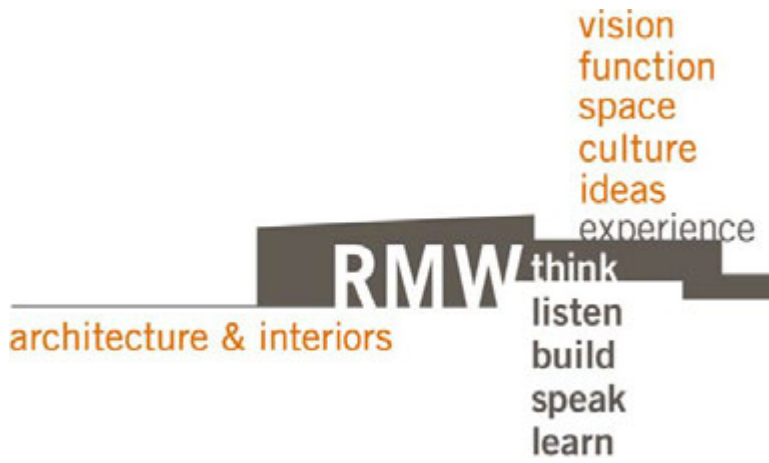
MASTER PARKING TABLE, EXISTING					
BUILDING	USE	AREA (SF)	PARKING RATIO (1 SPACE PER SF)	REQUIRED	PROVIDED
HYATT PLACE HOTEL		88,322 (151 ROOMS)	1 SPACE/ ROOM	151	154
FALLS EVENT CENTER		15,224	AS REQUIRED...	157	157
TOTAL				308	311
BUILDING 1	MEDICAL OFFICE	7,400	150	49	
BUILDING 2	OFFICE	7,400	250	30	
BUILDING 3	RESTAURANT	4,500	100	45	
BUILDING 4	RESTAURANT	5,600	100	56	
BUILDING 5	RESTAURANT	5,600	100	56	
BUILDING 6 - LAZY DOG	RESTAURANT	10,057	100	101	
BUILDING 7	RESTAURANT	7,800	100	78	
BUILDING 8 - REVOLUTIONS	MEDICAL SERVICES	4,336	~150	26	
TOTAL BUILDING 1 - 8		52,693		441	445
*** DENOTES ROWS THAT HAVE CHANGED					

MASTER PARKING TABLE, PROPOSED					
BUILDING	USE	AREA (SF)	PARKING RATIO (1 SPACE PER SF)	REQUIRED	PROVIDED
HYATT PLACE HOTEL		88,322 (151 ROOMS)	1 SPACE/ ROOM	151	154
FALLS EVENT CENTER		15,224	AS REQUIRED PER MPP	157	157
TOTAL				308	311
BUILDING 1	MEDICAL OFFICE	7,400	150	49	
BUILDING 2 ***	MEDICAL OFFICE	7,400	150	49	
BUILDING 3 ***	RESTAURANT	6,800	100	68	
BUILDING 4 ***	RESTAURANT	10,800	100	108	
BUILDING 5 ***	PAD DELETED	0	0	0	
BUILDING 6 - LAZY DOG	RESTAURANT	10,057	100	101	
BUILDING 7	RESTAURANT	7,800	100	78	
BUILDING 8 - REVOLUTIONS	MEDICAL SERVICES	4,336	~150	26	
TOTAL BUILDING 1 - 8		54,593		479	491
*** DENOTES ROWS THAT HAVE CHANGED					

- LEGEND
- MONUMENT SIGN
 - EXISTING TRELLIS
 - PROPOSED TRELLIS
 - LOT LINE

City of Roseville Approval

990 Reserve Drive, LLC





TYPICAL TRELLIS



NOTE: SHOWN FOR DESIGN INTENT ONLY, FOUNTAIN DESIGN TO BE DETERMINED UNDER FUTURE PERMIT.



BRUSSELS BENCH
CANTERBURY INTERNATIONAL

SILVER
POWDER COAT FINISH
6'W 1" X 2" SLATS

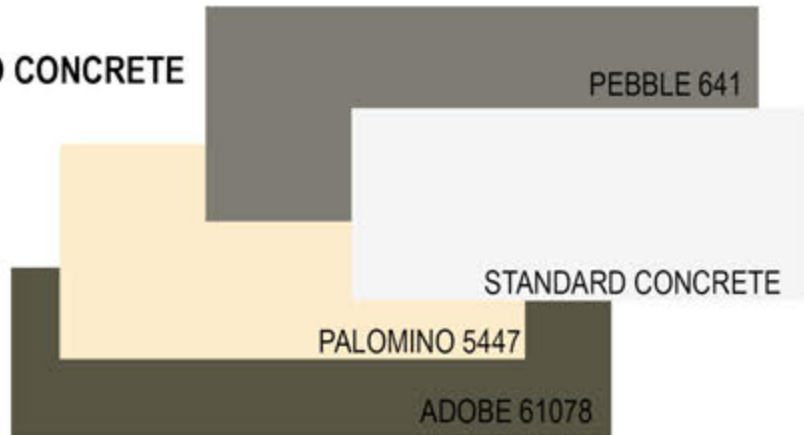
COLORED ASPHALT



KHAKI

ASHLAR SLATE MOCHA

COLORED CONCRETE

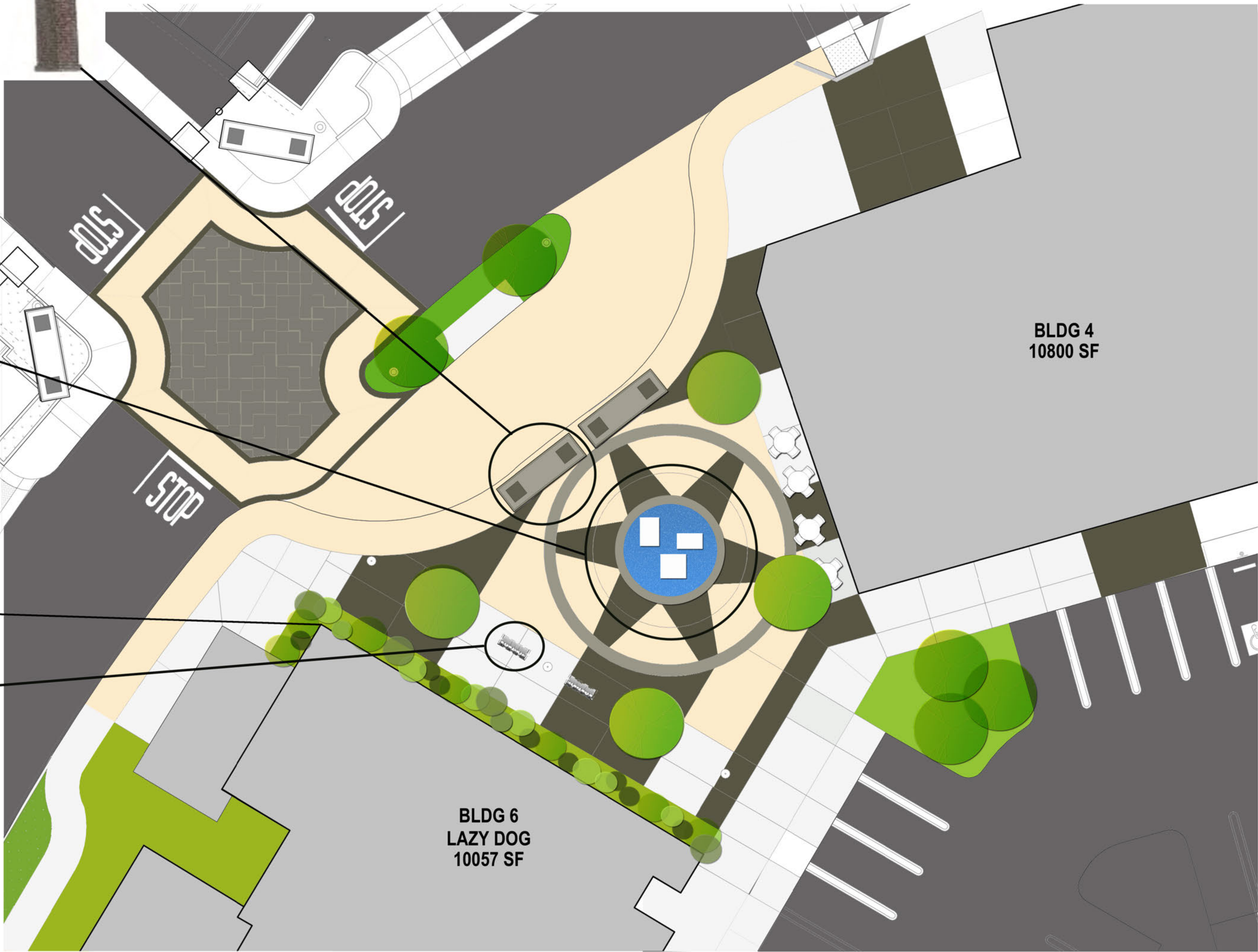


PEBBLE 641

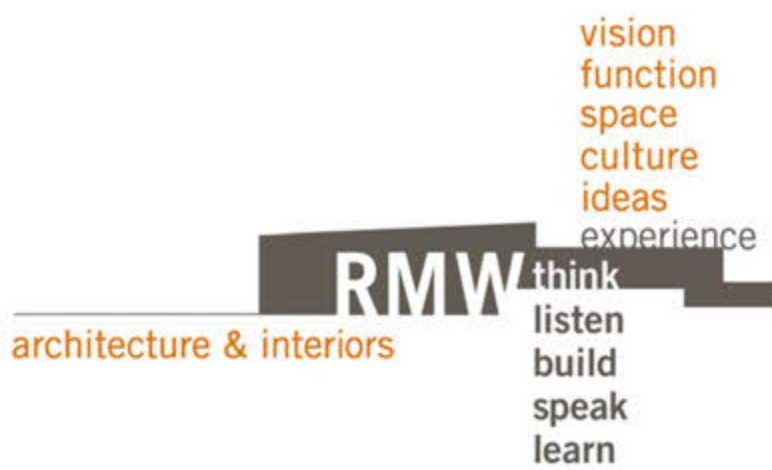
STANDARD CONCRETE

PALOMINO 5447

ADOBE 61078

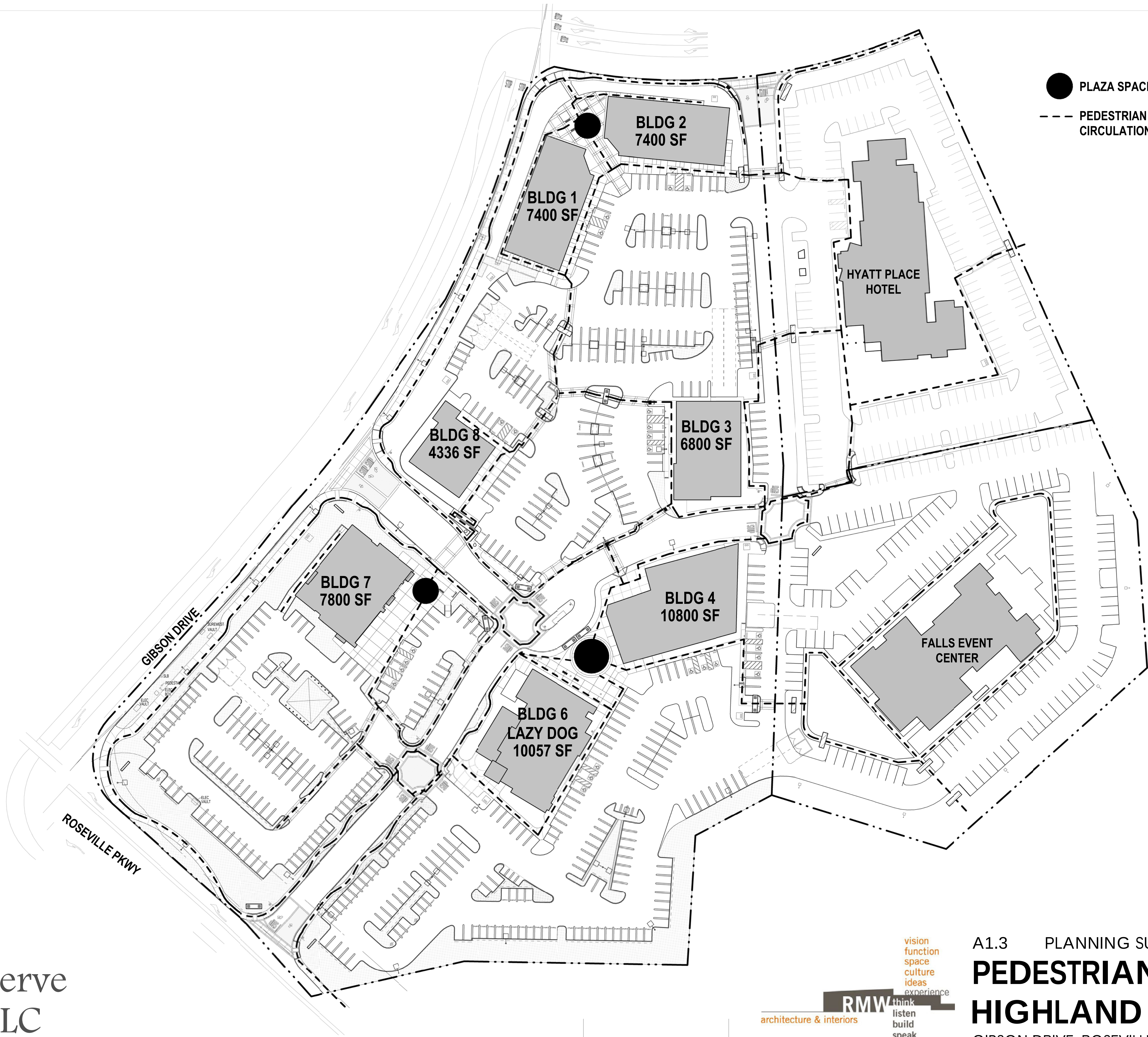


990 Reserve
Drive, LLC



A1.2 PLANNING SUBMITTAL
**ENLARGED PLAN, PLAZA
HIGHLAND VILLAGE**
GIBSON DRIVE, ROSEVILLE, CA 95678

City of Roseville Approval



990 Reserve
Drive, LLC



A1.3 PLANNING SUBMITTAL
**PEDESTRIAN CONNECTIVITY
HIGHLAND VILLAGE**
GIBSON DRIVE, ROSEVILLE, CA 95678

City of Roseville Approval

11.05.18

File: EX_02 - Highland Lot Line Exhibit Bldg 3, 4 and 5.dwg TABEX.001
Plotted: 1/30/19 at 2:49pm By: mpolschak
XREFs: 1800-210 xtb 1800-210 Preliminary xsv 1800-210 xst OVERALL SITE PLAN



LEGEND

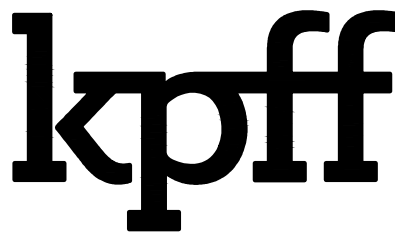
	EXISTING	PROPOSED
LOT LINE BOUNDARY	---	---
COMMON AREA BOUNDARY	---	---

LOT AREAS

	EXISTING	PROPOSED
PAD 1	13,381 SF (0.31 AC)	13,381 SF (0.31 AC)
PAD 2	12,365 SF (0.28 AC)	12,365 SF (0.28 AC)
PAD 3	14,578 SF (0.33 AC)	12,903 SF (0.30 AC)
PAD 4	14,487 SF (0.33 AC)	17,378 SF (0.40 AC)
PAD 5	15,138 SF (0.35 AC)	0 SF (0 AC)*SEE NOTE BELOW
PAD 6	14,578 SF (0.33 AC)	14,578 SF (0.33 AC)
PAD 7	14,487 SF (0.33 AC)	14,487 SF (0.33 AC)
PAD 8	15,138 SF (0.35 AC)	15,138 SF (0.35 AC)
TOTAL PAD AREA	114,152 SF (2.62AC)	100,230 SF (2.30 AC)
TOTAL AREA	433,480 SF (9.95 AC)	433,480 SF (9.95 AC)
COMMON AREA	319,328 SF (7.33 AC)	333,250 SF (7.65 AC)

NOTES

1. PAD 5 AREA MERGED WITH COMMON SPACE AREA.
2. THE COMMON SPACE AREA IS A NON-BUILDABLE AREA OWNED AND MAINTAINED BY 990 RESERVE DRIVE, LLC.



2250 Douglas Blvd, Suite 200
Roseville, CA 95661
O:916.772.7688
F:916.772.7699
www.kpff.com

Engineer's Stamp

PRELIMINARY
NOT FOR
CONSTRUCTION

Project

HIGHLAND VILLAGE MASTER PLAN
GIBSON DRIVE
ROSEVILLE, CA 95678

Sheet Title

LOT LINE
EXHIBIT

REVIEWS	NO.	Date	Description	Approved

DATE 01/30/2019

Designed MP

Drawn SL

Checked RC

JOB NO. 1800-210

Drawing No.

EX.001



PLANNING COMMISSION COMMUNICATION

Title: Design Review Permit, Parking Reduction, and Voluntary Merger – 1017 Douglas Boulevard – Infill Pcl 187 – Drive-Thru Coffee Kiosk – File # PL18-0006
Contact: Lauren Hocker, lhocker@roseville.ca.us, (916) 774-5272

Meeting Date: 2/7/2019
Item #: 6.1.

ATTACHMENTS:

Description

Staff Report

Attachment 1 Access and Stacking Analysis

Attachment 2 Traffic Study

Exhibit A Site Plan

Exhibit B Grading Plan

Exhibit C Utility Plan

Exhibit D Landscape Plan

Exhibit E Photometric Plan

Exhibit F Elevations

ITEM 6.1: **Design Review Permit, Parking Reduction, and Voluntary Merger – 1017 Douglas Boulevard – Infill Pcl 187 – Drive-Thru Coffee Kiosk – PL18-0006**

REQUEST

The applicant requests approval of a Design Review Permit to construct an 800 square-foot drive thru coffee kiosk and associated improvements, an Administrative Permit for a one (1) space parking reduction, and a Voluntary Merger to merge two (2) existing lots into one (1) lot for development.

Applicant – Tiffany Wilson, RSC Engineering, Inc

Owner – Chase Burke, Ethan Conrad Properties

SUMMARY RECOMMENDATION

The Planning Division recommends that the Planning Commission take the following actions:

- A. Conclude that Finding 2 of the required four (4) findings of fact cannot be made to approve the Design Review Permit, and accordingly deny the Design Review Permit.
- B. Decline to take action on the Administrative Permit for a Parking Reduction, as the denial of the Design Review Permit invalidates the request for an Administrative Permit.
- C. Direct staff to process the Voluntary Merger administratively.

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. Notice of the application was also distributed to the Roseville Coalition of Neighborhood Associations and on March 29, 2018 the project was brought to the Folsom Road Neighborhood Association (FRNA) meeting. Notice of this meeting was mailed to all residences within 300 feet of the site. Of those in attendance, a total of 36 individuals and households added contact information to the sign-in for the project. Attendees expressed many concerns, but overall were most focused on traffic, safety, and noise. The most repeated concerns were the impact to the neighborhood of cut-through traffic, particularly on Donner Avenue and Ben Ezra Avenue; whether the access into and out of the site was sufficient and safe; and the noise both from the kiosk itself and from people in the drive-through with their windows down and music on. Many attendees spoke about the existing character of the neighborhood, which includes narrow one-way streets, low traffic volumes, and a lot of pedestrian activity, and were concerned the project would negatively impact their enjoyment of and safety in the neighborhood.

In response to these concerns, and in an effort to provide more information for the hearing body, City staff directed Kimley-Horn to prepare a supplemental traffic study. While the first study focused on internal circulation and access, this supplemental study focused on overall circulation, turning movements, and traffic volumes. A second community meeting to receive feedback on the supplemental traffic study and the project was held on August 23, 2018 at the Lion's Club. This meeting was held by the applicants; it was not a Folsom Road Neighborhood Association (FRNA) meeting. Notice of this meeting was mailed to all residences within 300 feet and all interested people who had provided a physical address to the City, and was e-mailed to interested people who'd provided e-mail addresses. This meeting was also well-attended, with residents continuing to express concerns similar to those expressed at the first meeting.

The project was placed on the December 13, 2018 Planning Commission agenda and a public notice of the hearing was published on November 30, 2018, and was distributed to all residences within 300 feet of the project site and all people on the interested persons list. After the publishing of this notice, the

applicant requested a continuance to a future date. A public notice of the February 7, 2019 Planning Commission hearing was published on January 25th, 2019, and was distributed to all residences within 300 feet of the site and all people on the interested persons list.

BACKGROUND

The property owner and Dutch Bros originally contacted the City to discuss the project in the Spring of 2016. At the time, the prospective project included only one parcel at 1017 Douglas Boulevard, a 450-square-foot kiosk, and 200 feet of stacking distance for the drive-through. Based on the City's experience with other high volume drive-through coffee kiosks (Starbucks, Dutch Bros, etc.) in the City, both Planning and Engineering staff were concerned this stacking was insufficient, and needed additional evaluation before a Design Review Permit application should be made. City Engineering staff contracted with Kimley-Horn transportation consultants to evaluate access and circulation. The study, dated January 26, 2017, supported staff concerns and concluded that 350 feet of stacking would be needed to support the project. The existing parcel had insufficient area to provide this, so the property owner purchased an adjacent property. A new site plan was developed and a formal application for a Design Review Permit was made to the City on January 9, 2018.

The project site is located at 1017 Douglas Boulevard, on the corner of Donner Avenue (see Figure 1). In this location, Douglas Boulevard is a four lane facility with a center turning lane. Donner Avenue is a single-lane, one-way street; the direction of travel is northbound toward Sutter Avenue. As shown in Figure 2, property to the east is paved and improved with two commercial buildings (a taqueria and a donut shop), parking spaces and some frontage landscaping. Although there are no pavement markings or barriers, there is a 20-foot-wide City property in between the project site and the commercial properties to the east. This property was originally part of an alley which extended north to Ben Ezra Avenue. Although the entire alley remains, a barricade is located across the alley at the northern edge of the property, so there is no through-access (the blue line on Figure 2).

Figure 1: Project Location



Figure 2: Project Site



SITE INFORMATION

Location: 1017 Douglas Boulevard

Total Size: 0.5 acres

Topography and Setting: The existing project site includes one lot on Douglas Boulevard and an adjacent lot behind (to the north) which is developed with a single-family home and detached garage. Most of the property is gravel and dirt, but the northern of the two parcels includes a single-family home, garage, and landscaping, including landscape trees. The site is level due to past development and activities. Both properties have a zoning and land use designation of Community Commercial (CC). A drive-through restaurant is a permitted use in the CC zone.

The project plans are included as Exhibits A–F (Site Plan, Grading Plan, Utility Plan, Landscape Plan, Photometric Plan, and Elevations). The project includes frontage on Douglas Boulevard and Donner Avenue, and will also rely on a driveway on Folsom Road. These facilities are described below.

Douglas Boulevard — Douglas Boulevard is an arterial street, and current design standards require driveways to be a minimum of 250 feet apart. Examining both sides of the street, there are six existing driveways on this block of Douglas Boulevard, between Folsom Road and Donner Avenue. None of these existing driveways meet current standards, with the closest driveways approximately 65 feet apart, and the farthest driveways approximately 150 feet apart. In addition, while a protected turn pocket is provided for the left turn onto Folsom Road, the remainder of Douglas Boulevard has a shared center turning lane. As a result, there can be turning conflicts, as eastbound and westbound drivers may need to occupy the same space in the turning median in order to make left turns into the closely-spaced driveways.

Donner Avenue — Donner Avenue is a minor residential street, which is one-way (northbound). The lots along this roadway were originally created in 1921, so the street is not designed based on modern standards, and because many of the homes do not include a garage the travel lane on the street is narrowed by the presence of many cars parked on both sides of the street.

Folsom Road — Folsom Road is a collector street, and current design standards would require driveways on Folsom Road to be a minimum of 200 feet apart. There are seven existing driveways between Douglas Boulevard and Ben Ezra Avenue. None of these driveways meet existing standards, with the closest driveways approximately 55 feet apart and the farthest driveways approximately 120 feet apart. In addition, there is no turning lane on Folsom Road; turning vehicles must queue within the travel lane.

EVALUATION: DESIGN REVIEW

Section 19.78.060 of the City of Roseville Zoning Ordinance requires that four findings be made in order to approve or conditionally approve a Design Review Permit. In evaluating the project in light of the findings, staff analysis concluded that findings 1, 3, and 4 could be made in the affirmative, but finding 2 could not. Specifically, staff is concerned the vehicle, pedestrian, and bicycle circulation proposed will not result in “a safe, efficient, and harmonious development.” The staff report is organized to present the analysis of access and circulation first, with analyses of the other findings and other aspects of finding 2 at the end of the Design Review Evaluation. The four findings recommended for action are listed below in ***bold italics***

- 1. The Project as approved preserves and accentuates the natural features of the property, such as open space, topography, trees, wetlands and water courses, provides adequate drainage for the project, and allows beneficial use to be made of the site for development.***
- 2. The project site design as approved provides open space; access; vehicle parking; vehicle, pedestrian, and bicycle circulation; pedestrian walks and links to alternative modes of transportation; loading areas; landscaping and irrigation; and lighting, which results in a safe, efficient, and harmonious development and which is consistent with the applicable goals, policies, and objectives set forth in the General Plan, the Community Design Guidelines, and the applicable Specific Plan and/or applicable design guidelines.***
- 3. The building design, including the materials, colors, height, bulk, size, and relief, and the arrangement of the structures on the site, as approved, is harmonious with other development and buildings in the vicinity and which is consistent with the applicable goals, policies, and objectives set forth in the General Plan, the Community Design Guidelines, and the applicable Specific Plan and/or applicable design guidelines.***
- 4. The design of the public services, as approved, including but not limited to, trash enclosures and service equipment, are located so as not to detract from the appearance of the site, and are screened appropriately and effectively using construction materials, colors, and landscaping that are harmonious with the site and the building designs.***

Background

As discussed in the Background section of this staff report, City staff had concerns about the proposal before it was submitted and clearly communicated these concerns to the applicant in verbal and written form. Although the City’s Community Design Guidelines require a *minimum* stacking distance of 150 feet for drive-through uses, staff experience with other high-volume drive-through uses in the City (Dutch Bros, Starbucks, and In N Out, among others) indicated that the minimum standard would be insufficient to avoid operational conflicts with surrounding roadways. The City contracted with Kimley-Horn transportation consultants to prepare an on-site circulation study, to determine the appropriate stacking distance and internal circulation design. This study, included as Attachment 1, concluded that a total of 350 feet of stacking distance would be required. The single parcel was not large enough to provide this amount of stacking, so the owner purchased the property to the north, increasing the site to approximately

half an acre. This is still a small and constrained site, but was enough to provide exactly 350 feet of stacking distance. The applicant prepared a site plan with this stacking distance met, and made an application for a Design Review Permit to the City.

As the City began evaluating the proposal and began receiving feedback from the community, it became clear that another traffic study would be needed. The purpose of the new study was to examine off-site circulation and access, and how that would affect circulation into and out of the project site. The second traffic study was also prepared by Kimley-Horn transportation consultants, and is included as Attachment 2 of this staff report. For this study, trip generation was developed by examining actual trip counts from three sample locations: a Starbucks on Pleasant Grove Boulevard, a Dutch Bros on Baseline Road, and a Dutch Bros on Sunset Boulevard. The study included an analysis of the Douglas Boulevard and Folsom Road intersection, as well as the primary project access driveway on Douglas Boulevard. Kimley-Horn reached the following conclusions:

- The average maximum vehicle queue would be 14 cars, or 350 feet. Queues could sometimes be longer than this, so the City alley should be striped “keep clear” to encourage additional vehicles to queue in a line extending toward Folsom Road.
- Left-turn storage into the site from Douglas Boulevard would need to be 3 cars, or 75 feet.
- During the AM peak hour, the queue on Douglas Boulevard for the Douglas Boulevard/Folsom Road intersection will sometimes extend *past* the project driveway (City alley).
- The primary project driveway (City alley) would need to be restricted to ingress only, due to conflicts between left turns out of the site and left turns into the site.
- The Douglas Boulevard and Folsom Road intersection will operate at Level of Service B, which is acceptable according to City General Plan policy.
- The median on Folsom Road should be pulled back to allow left turns out of the driveway behind the donut shop, because otherwise northbound cars are likely to turn right on Douglas Boulevard and then right onto Donner Avenue, which is a residential, one-way street.
- A “no left turn” sign should be installed on the Folsom Road median facing the northbound travel lanes, to discourage left turns into the site.
- During the AM peak hour, the queue on Folsom Road will often extend past the driveway behind the donut shop, though the queue will fully empty each time the signal turns green. It is recommended that Folsom Road include “Keep Clear” striping to preserve left-turn egress when the queue backs up.

The study concludes that with the design changes recommended in the study, the project access and circulation could perform adequately. However, this conclusion is based on maximum average conditions and the assumption that most people will obey striping, signage, and general traffic laws. In other words, everything would have to operate perfectly 100% of the time. These assumptions are entirely appropriate and consistent with the standards for preparation of a traffic study, and the City is therefore confident that the traffic study is adequate for its purpose. In most cases, this would conclude staff analysis of access and circulation, because in the majority of cases it can be expected that while some drivers will make improper/unexpected vehicle movements, these will be uncommon, are not the result of project/roadway design, and will have transitory effects.

However, as City staff continued to examine the constraints on the site and vicinity, it became increasingly clear that there were many opportunities for improper vehicle movements, and that these movements would have a disproportionately large negative effect on operations, due to design constraints. These constraints could result in serious consequences for adjacent developments and the surrounding roadway system, particularly during peak conditions. These areas of potential impact are shown on Figure 3, and are described below.

Figure 3: Areas of Potential Impact



Analysis

Project Driveway/City Alley (Point 1)

One of the main concerns expressed by the community was that people who wanted to go north would turn right onto Douglas Boulevard, and then right again onto Donner Avenue, a one-way residential street. Residents opposed this potential increase in cut-through traffic. Therefore, the traffic study examined this driveway as ingress-only, to avoid turning movement conflicts between left turns in and left turns out, and also to funnel traffic toward Folsom Road. The design therefore includes a narrowing of the existing driveway so that cars cannot pass in both directions, and a curb flare at the drive-through outlet, to encourage drivers exiting the drive-through to turn left and head up to the Folsom Road exit. However, there are no designs available to *prevent* left or right turns out of the site. In less constrained areas of the City, a protected left-turn pocket could be provided on Douglas Boulevard, which would allow vehicles to queue for ingress movements but which would block exiting left turns. This design is not possible in this location, because the left-turn pocket would cut off access to other nearby driveways. Therefore, the proposed design must rely on drivers to make appropriate choices.

In addition, because the site is small, the only available site layout results in the drive-through exit being located right next to the project driveway. If a driver attempts to exit this driveway because it is a clearly shorter travel path back onto Douglas Boulevard, this will result in conflicts with people attempting to turn right or left into the site. Furthermore, if the driver finds they must wait before successfully making their improper turning movement, people queued in the drive-through lane and people queued to turn into the site will be unable to complete their movements until this vehicle moves on. Drivers could be stopped on Douglas Boulevard waiting to turn right, or could begin a left turn movement across Douglas Boulevard and have to come to a stop broadside to the travel lanes. Either circumstance will result in unsafe operating conditions.

City Alley (Point 2)

According to the traffic study, queues could sometimes spill out of the drive-through lane. If cars stacked in the City alley, it would block the exiting pathway for the drive-through. This would either push drivers to improperly exit through the project entry on Douglas or could shut down all ability for the drive-through to move forward. It would only take a handful of additional cars queuing in the alley to cause these conditions, because there is only approximately 50 feet of alley between the end of the drive-through and the beginning of the parking stalls adjacent to the taqueria. To avoid this condition, the traffic study recommends striping the City alley with Keep Clear pavement markings, so that the queue spillover will extend east from the end of the drive-through (toward Folsom Road) instead of in the alley.

These pavement markings may prevent improper queuing, but will require people entering the site from Douglas to drive around the back of the Taqueria and make a 180 degree turn to enter the line. Since this is less convenient, there will undoubtedly be drivers who do not obey the pavement markings. City staff have observed this type of behavior in other areas of the City with high-volume drive-through businesses. There have been several locations where Engineering staff performed observational studies and assessments, in order to remediate or document the conditions. In these case, people have been observed waiting within a right-turn lane on City streets or in areas which block internal drive-aisles. In these cases, the queuing is largely an inconvenience. In this case, if even a few cars ignore the pavement markings, all circulation through the drive-through could halt, or drivers could feel themselves forced to exit through an ingress-only driveway.

Planned Queue Location (Point 3)

On the occasions when queueing spills out of the drive-through, and assuming the pavement markings are obeyed, the overflow queue will extend easterly toward Folsom Road. However, there are parking stalls in this area. Any queue spillover would either block empty stalls from being used, or would block in parked cars.

Folsom Road Driveway (Point 4)

Folsom Road is a two-lane collector street and includes a median which extends from Douglas Boulevard past the existing driveway behind the donut shop. The purpose of this median is to prevent left turns into or out of the driveway. However, the study recommends pulling back the median on Folsom Road so that left turns out of the site are possible, otherwise cars would make a series of right turns to use Donner Avenue. Several other design changes are recommended as well, to help avoid circulation issues that could be caused by opening this area to left turns.

Left turns *into* the site from Folsom Road would not be safe and could cause circulation issues, because vehicles would have to queue within the travel lane (there is no turning median/lane), and the driveway is only approximately 100 feet from the Douglas Boulevard intersection. Vehicles could back up from Folsom Road onto Douglas, or vehicles turning right onto Folsom Road from Douglas Boulevard may not be able to see or expect a person stopped in the travel lane just after the turn. To address this, the traffic study recommends a sign in the median prohibiting left turns. However, there are no designs available which could prevent left turns; the design relies on drivers to make appropriate choices.

The traffic study found that queues on Folsom Road regularly extend past the driveway behind the donut shop, which would block the ability to turn left out of the site. The traffic study recommends “Keep Clear” pavement markings on Folsom Road in front of the driveway, to encourage people to leave a gap so that vehicles can still exit. Again, these markings can encourage good driver behavior, but cannot ensure that the area will remain clear for turning movements. If the area is blocked, queues could form within the commercial site, and drivers would be encouraged by this condition to attempt alternative travel paths (see Point 5).

Douglas Boulevard Driveway – Central (Point 5)

There is another existing driveway on Douglas Boulevard into the commercial center, located in between the donut shop and taqueria. A median on Douglas Boulevard prevents left turns into or out of this driveway, so it is a right-in, right-out only access point. Although the circulation plan for the project has been designed to route people in and out via the project driveway and the Folsom Road driveway, drivers could nonetheless use this central driveway to turn right out of the site and turn right again onto Donner Avenue. This outcome is much more likely if there is a queue waiting to use the Folsom Road driveway.

Vehicle Backing and Loading (Point 6)

On the occasions when the queue spills out of the drive-through, or backs up from the Folsom Road driveway, there are likely to be conflicts with other vehicles attempting to maneuver on the site. As previously noted, the queue from the drive-through will block parking spaces, but will also make it difficult for other vehicles to maneuver through the site or back out of parking spaces on the other side of the aisle. This is also true of queues extending from the Folsom Road driveway. In addition, this commercial corner has no dedicated loading area, so delivery vehicles must either stop across parking spaces or stop within a drive-aisle. This could further complicate on-site circulation and queueing.

Left-Turn Queue on Douglas (Point 7)

The traffic study concluded that 75 feet of stacking distance would be required for left turns into the project driveway on Douglas Boulevard. This stacking will prevent westbound vehicles from turning left into the commercial property across the street from the site (Hillcrest Center). Drivers would need to pass the site and find an area to turn around. The only legal way to do so would be to turn left on Keehner Avenue, travel down the roadway a short distance and then turn around, go back on Keehner Avenue to make a right on Douglas Boulevard, and then travel down Douglas Boulevard to make a right into Hillcrest Center. Given the inefficiency of this pathway, it is likely that drivers will make illegal u-turns on Douglas Boulevard, or attempt to squeeze past the back of the left-turn queue. Either of these driving choices would result in unsafe conditions.

Traffic, Circulation and Access Conclusion

The existing site constraints present significant challenges to any project, but particularly to a high-volume traffic use such as a drive-through restaurant. The existing uses within the commercial center—a taqueria and a donut shop—do not generate these conflicts because they do not generate large queues either on- or off-site and they generate low traffic volumes. Staff is concerned about the proposed project not because of any one particular circulation and traffic issue, but because of the potential cumulative effect of all seven conflict areas identified in the evaluation. In other areas of the City where high-volume drive-through uses have generated issues, they are on much larger commercial sites along roadways which meet current design standards, so the impacts are limited to one or two points of transitory nuisance conditions. On this site, there are many points of conflict affecting all aspects of on- and off-site circulation, and their potential impacts include health and safety issues on the City's roadways and for the surrounding neighborhood. The finding requires staff to confidently state that the project will result in a safe, efficient, and harmonious development, but staff has concluded that this finding cannot be made with any degree of certainty. The remainder of the evaluation focuses on other aspects of the Design Review Permit; staff has not identified any issues with the other portions of the evaluation.

Noise

The project includes a drive-through aisle near the northern property boundary, and cars in this queue will generate noise from idling engines, playing music, and people talking. Although the project does not include any amplified sound or order boards, there will also be people talking at the kiosk and, potentially, music playing within the kiosk. Property immediately to the north of this site is single-family residential property, and these noises will be audible across the property line. However, none of these noise sources are generally significant during daytime hours, as they are already part of the existing urban noise environment, and generate noise levels which are lower than the existing ambient noise from Douglas Boulevard (according to the City of Roseville General Plan Noise Element, the 60 dB noise contour from the roadway extends into the residential area). In addition, the project includes a six-foot-tall masonry wall on the northern property boundary, which can generally be expected to reduce noise by approximately 5 dB.

However, the applicant originally proposed 24-hour operations for the facility. While the applicant has indicated a willingness to scale back those hours, the City has no mechanism by which to condition the hours of operation of the project. Noises which would be absorbed by background noise in the daytime conditions would become more audible during nighttime conditions, and could be expected to result in nuisance conditions for the nearest residence (such as a homeowner needing to keep windows shut at night).

Preserves Natural Features

Most of the project site is hard-packed dirt and gravel, with no natural features. The northern portion of the site contains typical landscape trees and grass, but is a level site with no wetlands, water courses, native trees, or other natural features to preserve or accentuate.

Building Design

The existing buildings along this section of Douglas Boulevard do not have a consistent design theme or style with which the project could conform, but all reflect older architectural trends. For this reason, the applicant has proposed a building form which is updated, without being too modern or out of keeping with this older corridor. The building includes the use of flat parapets, brick, and (faux) wood siding, which are designs and materials found in the existing nearby buildings. However, the building also includes effective architectural variation and the use of metal siding, a more modern material. The overall height and massing of the building has been kept lower-profile, at only 800 square feet and a maximum height of 24 feet.

The proposed building includes the use of flat parapets at several different heights (14, 20, and 24 feet) to provide roofline variation, and also includes wall plane variation on all four sides of the building. At 24 feet, the tallest portion of the building is similar to the typical roof peak height of a single-level residential structure, so will not be out of scale with the adjacent residential area. The faux wood and brick each have a slightly different but complementary grey-brown color, to provide a neutral backdrop for the saturated blue of the metal siding. The faux wood siding is a high-quality, textured material (New Tech Wood Shadowline). The proposed building provides variation in colors, materials, height, bulk, size, and relief, which is harmonious with the surrounding commercial and residential development.

Public Services Design

The trash bin for the proposed project is shown screened inside an enclosure faced with the same brick as the proposed building, and located interior to the site, away from either street frontage. All other equipment for the site will be roof-mounted, and screened from view by the parapets.

Parking

According to City Zoning Ordinance Chapter 19.26, Off-Street Parking and Loading, a restaurant with a drive-through requires one parking space for each 50 square feet of building area. The proposed project includes an 800-square-foot kiosk, which results in a parking requirement of 16 spaces. The applicant has provided 11 spaces on the project site and has provided a recorded reciprocal access and parking agreement granting the shared use of an additional 4 spaces on the neighboring commercial property. These spaces can be shared because an analysis of the total parking for the proposed building plus existing buildings shows there are 42 parking spaces provided, and a total of 42 parking spaces required. However, since the applicant requires 16 spaces and only has legal access to 15 spaces, either an Administrative Permit for a parking reduction of one parking space is required, or the reciprocal access and parking agreement would need to be amended to grant the use of five spaces, instead of four.

Lighting, Landscaping, and Open Space

The project includes a landscaping buffer along Douglas Boulevard, Donner Avenue, and the rear (northern) property line which is adjacent to residential property. The landscaping corridor on the roadway frontages is 20 feet deep, and includes a 3-foot tall wall to screen vehicles in the drive-through—particularly the headlights—from view. The landscaping includes a mix of groundcovers and shrubs, as well as Chinese pistache and London plane trees. The landscape buffer on the northern property line is

10 feet wide, includes a mix of shrubs and ornamental grasses and some crepe myrtle trees. A masonry sound wall is proposed on the northern property line, and the landscaping plans show the vines planted along the wall. The selected tree species are consistent with other trees in the area and exceed the minimum 50% parking lot shading requirement of the Community Design Guidelines. The proposed lighting for the site and parking area has been designed and located to ensure that there is no light trespass off-site (see the Photometric Plan, Exhibit E). To minimize the impact of the parking lot lighting, the lighting standards have been set back from the residential property line and have a maximum height of 20 feet.

EVALUATION – ADMINISTRATIVE PERMIT

An Administrative Permit for a parking reduction must be associated with either an existing development or approved development. Staff is recommending the Planning Commission deny the Design Review Permit, which would invalidate the request for an Administrative Permit. For this reason, staff has recommended Planning Commission take no action on the Administrative Permit.

EVALUATION – VOLUNTARY MERGER

The proposed Voluntary Merger could be completed regardless of the disposition of the Design Review Permit, but according to the City's Subdivision Ordinance, the approving authority for a stand-alone Voluntary Merger is the Planning Manager. Therefore, staff recommends Planning Commission request that the Voluntary Merger be processed administratively, and take no other action on this entitlement.

ENVIRONMENTAL DETERMINATION

The California Environmental Quality Act (CEQA) does not apply to a denial action. Pursuant to CEQA Guidelines Section 21080, CEQA only applies to "discretionary projects proposed to be carried out or approved by public agencies."

RECOMMENDATION

The Planning Division recommends the Planning Commission take the following actions:

- A. Concluding that finding 2 of the required four (4) findings of fact cannot be made to approve the Design Review Permit, and accordingly deny the **DESIGN REVIEW PERMIT – 1017 Douglas Boulevard – Infill Pcl 187 – Drive-Thru Coffee Kiosk – PL18-0006**.
- B. Decline to take action on the **ADMINISTRATIVE PERMIT – 1017 Douglas Boulevard – Infill Pcl 187 – Drive-Thru Coffee Kiosk – PL18-0006**, as the denial of the Design Review Permit invalidates the request.
- C. Direct staff to process the **VOLUNTARY MERGER – 1017 Douglas Boulevard – Infill Pcl 187 – Drive-Thru Coffee Kiosk – PL18-0006** administratively.

Attachments

1. Access and Stacking Analysis
2. Traffic Study

Exhibits

- A. Site Plan
- B. Grading Plan
- C. Utility Plan
- D. Landscape Plan
- E. Photometric Plan
- F. Elevations

<u>Note to Applicant and/or Developer:</u> 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.
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Memorandum

To: Marc Stout, P.E.

From: Chris Gregerson, P.E.
Matt Weir, P.E., T.E., PTOE

Re: ***Douglas Boulevard Coffee Kiosk***
Traffic Evaluation
Roseville, California

Date: January 26, 2017

Per your request and authorization, we have prepared this traffic evaluation for the above referenced project.

Project Understanding

Kimley-Horn understands that a drive-thru coffee kiosk is proposed for the vacant site located at 1017 Douglas Boulevard (see **Exhibit 1**). The adjacent properties (1025 and 1045 Douglas Boulevard) are under the same ownership as the proposed project and are described as sharing access and parking across all three parcels. According to the project applicant, when all three uses are considered, the parking supply required by the City will be exceeded. The proposed project consists of an approximately 450-square foot building and a drive-thru lane that provides approximately 200-feet for vehicle stacking (see **Exhibit 2**). Access to the proposed project will be from Douglas Boulevard via the existing alley located between 1017 and 1025, as well as to and from Folsom Road through 1025 and 1045. The purpose of this analysis is to evaluate the proposed project's access points, to determine the amount of storage and/or driveway treatments that are necessary to ensure safe and efficient operations, and to approximate and confirm adequate drive-thru storage.

Study Facilities and Evaluation Parameters

The following two intersections (see **Exhibit 3**) are included in this access evaluation. **Exhibit 3** details the study intersections' geometries while **Exhibit 4** details the peak-hour volumes. Traffic counts are provided in **Attachment A**. For each location, traffic/access control and the primary evaluation parameter(s) are described below:

1. Douglas Boulevard @ Existing Alley
 - Access initially assumed to be full
 - Primary considerations are the need for turn restrictions, a right-turn deceleration lane, and the minimum required throat depth (MRTD)
2. Douglas Boulevard @ Folsom Road
 - Existing traffic signal
 - Primary consideration is anticipated mix of volumes with project volumes, with a focus on the left-turn movements and queuing

The access evaluation was conducted for the weekday AM peak-hour for the following conditions:

- A. Existing Conditions plus Proposed Project

The access evaluation was performed for the time period and analysis scenario listed above. Methods defined in the *Highway Capacity Manual, 2010*, using appropriate traffic analysis software, were applied.

Assessment of Proposed Project

Trip Generation

Kimley-Horn completed a trip generation study in a manner consistent with the methodology contained in the *Trip Generation Manual, 9th Edition*, published by the Institute of Transportation Engineers (ITE). According to ITE, five sites are preferred (three minimum) to complete this study. Using the square footages (gross floor area) for three sample locations with drive-thru facilities (Starbucks, 1241 Pleasant Grove Boulevard – Roseville; Dutch Bros., 1225 Baseline Road – Roseville; Dutch Bros., 3450 Sunset Boulevard – Rocklin), we were able to develop a unique local trip generation rate (trips per thousand square feet). The data associated with this evaluation are presented in **Table 1**.

Table 1 – Trip Generation Data

Location	Size (ksf)	Ins	Outs	Total	Max Queue	Peak Hour
Dutch Bros Rocklin	0.45	110	117	227	12	7:00 - 8:00
Dutch Bros Roseville	0.86	84	92	176	13	8:00 - 9:00
Starbucks Roseville	0.50	73	70	143	17	7:30 - 8:30
Calculated Rate (#trips/ksf):		166	166	332		
Proposed Project	0.45	75	75	150		
<i>Pass-by Reduction (89%):</i>		<i>66</i>	<i>66</i>	<i>132</i>		
Net new trips:		9	9	18		

Note: The Dutch Bros in Rocklin data is normalized using ksf to enable integration with the other sites' data. Pass-by reduction is per ITE Land Use 938a

The data contained in **Table 1** indicate that the weighted average of the sample sites' data (weighted by the sites' square footage) is 332 total (166 in and 166 out) AM peak-hour trips per thousand square feet (ksf). Using this unique, local rate and an appropriate pass-by reduction as provided by ITE, the proposed project is anticipated to generate 9 new in, and 9 new out trips during the AM peak-hour. However, the proposed project's 150 total peak-hour trips are used in this analysis. Finally, the data collected show an average maximum drive thru queue of 14 vehicles (approximated to be 350-feet assuming each vehicle is 25-feet in length).

Trip Distribution

The distribution of project traffic was developed based on existing project area roadway volumes, general knowledge of project area traffic patterns, and engineering judgment. Project trips were assigned to the study intersections and the surrounding roadway network according to these patterns. AM peak-hour volumes for Existing and Existing (2016) plus Proposed Project Conditions are reflected in **Exhibit 4**.

Traffic Assessment Methodology

As previously discussed, the purpose of this analysis is to evaluate the proposed project's access points, to determine the amount of storage and/or driveway treatments that are necessary to ensure safe and efficient operations, and to approximate and confirm adequate drive-thru storage.

This traffic evaluation included consideration of vehicle queuing entering the site and the Minimum Required Throat Depth (MRTD) at the Douglas Boulevard site driveway. For this evaluation, the City's guidelines¹ were referenced to determine the driveways' MRTD and median left-turn storage required for entering vehicles. In addition, these guidelines were referenced to determine the need for a right-turn deceleration lane. Finally, Synchro was used to evaluate the anticipated operations at the adjacent signalized study intersection of Douglas Boulevard and Folsom Road.

¹ Section 4 Traffic Impact Studies, City of Roseville Design Standards, January 2016.

Minimum Required Throat Depth (MRTD) & Median Left-Turn Storage

The MRTD was calculated for the Douglas Boulevard site driveway. **Table 2** summarizes the findings of the MRTD evaluation based on the City's guidelines¹. Additionally, the minimum storage length was calculated for the median left-turn entering the project site.

Table 2 – MRTD and Left-Turn Storage for Douglas Boulevard Driveway, AM Peak-Hour

INT	TS	ConflVol (Left,Maj)	ConflVol (Left,Minor)	ConflVol (Right)	LT In	RT In	App Vol	RT%	Required Storage	Minimum Required Throat Depth (MRTD)
1	1	631	1553	631	39	19	52	50%	75	125

Note: All volumes come from the Existing plus Proposed Project scenario

MRTD

- Intersection #1, as currently proposed per **Exhibit 2**, would have a throat depth of approximately 45-feet, which is less than the minimum required distance of 125-feet. Based on the calculations, the proposed throat depth is insufficient.

Left-Turn Storage

- The existing storage for those left-turns attempting to enter the project from eastbound Douglas Boulevard is sufficient for the calculated required distance of 75-feet.

Right-Turn Deceleration Lane

- The focus of this evaluation was on the right-turn movement into the project site at the Douglas Boulevard site driveway. According to the City's guidelines², a right-turn deceleration lane is required when all four of the following conditions are satisfied:
 - The driveway is located on an arterial or expressway.
 - Right turn ingress volume is expected to exceed fifty (50) during peak hour flows on the roadway. For right turn ingress volumes between ten (10) and fifty (50) a right turn curb taper shall be constructed in conformance with the Standard Drawings.
 - There is ample room and frontage to fit a deceleration lane as determined by the City Engineer.
 - The travel speed of the roadway, as determined by the City Engineer, equals or exceeds 45 mph.

The requirements and the conditions are summarized in **Table 3**. Based on these guidelines, the Douglas Boulevard site driveway intersection does not require a right-turn deceleration lane. However, the projected volumes do necessitate that a right-turn curb taper be constructed.

Table 3 – Douglas Boulevard Deceleration Lane

Roadway	Time Period	Located on Arterial or Expressway?	Right Turn Volume	Right Turn Volume over 50?	Ample Room and Frontage?	85th Percentile Travel Speed	Travel Speed ≥ 45 mph?	Deceleration Lane Appropriate?
Project Driveway	AM	Yes	19	No	No	36.8	No	No

² Section 5 Site Access, City of Roseville Design Standards, January 2016.

Signalized Intersection Queuing and Operations

In an effort to confirm if the operations at the intersection of Douglas Boulevard and Folsom Road affect the project's Douglas Boulevard site driveway, Synchro was used to determine the anticipated 95th percentile vehicle queues, delay, and Level of Service (LOS) under Existing plus Project Conditions. **Table 4** summarizes the delay and LOS at the intersection while **Table 5** summarizes the queuing for select movements. Analysis worksheets are provided in **Attachment B**.

Table 4 – Intersection Level of Service for Existing plus Project Conditions

ID	Intersection	Peak Hour	Existing (2016) plus Project	
			Delay (sec)	LOS
2	Douglas Blvd @ Folsom Rd	AM	13.4	B

Table 5 – Intersection Queuing for Existing plus Project Conditions

Intersection / Analysis Scenario	Movement	AM Peak-Hour	
		Available Storage (ft)	95 th % Queue (ft)
#2, Douglas Blvd @ Folsom Rd	EBL		
Existing plus Project		100	74
	EBT		
Existing plus Project		-	305

Source: *Highway Capacity Manual (HCM)* methodology per Synchro® v9.
Note: Site driveway is located approximately 140-feet west of Folsom Rd.

As shown in **Table 4**, the intersection operates acceptably according to the City's Guidelines (75% of intersections at LOS C or better during the AM and PM peak-hours) during the peak-hour. **Table 5** displays that the eastbound through queuing extends past the site driveway during the AM peak-hour.

Conclusions

The following are the primary conclusions based on the analyses discussed herein:

- This study focused only on the AM peak-hour. As a result, there could be trip characteristics that occur throughout the day that are different than those documented herein. Nevertheless, it is the AM peak-hour during which the site's operations are anticipated to be critical.
- The following are the key findings of this evaluation:
 1. *Insufficient throat depth at the site's Douglas Boulevard driveway via the alley-* when combined with #2 below, this driveway configuration is anticipated to result in frequent vehicle conflicts and spillback onto Douglas Boulevard. According to the project site plan, it does not appear to be possible to achieve the required throat depth.
 2. *The maximum drive-thru queue is anticipated to reach 350-feet thereby spilling out of the project site and into the adjacent parcels-* when combined with #1 above, this well documented operational dynamic (see sample sites' observed queuing data) is anticipated to result in frequent vehicle conflicts (both on- and off-site) and spillback onto Douglas Boulevard, and create on-site parking and circulation (vehicles and pedestrians) challenges.
 3. *The need for a right-turn curb taper at the Douglas Boulevard driveway-* the adjacent parcel's restaurant has its patio located at the back of sidewalk. As a result, the required right-turn curb taper would conflict with and likely require the removal of this feature.

4. *Egress-only would be difficult to design and enforce-* if implemented, the egress only configuration would require design considerations to allow for effective one-way operation. Due to the limited space, physical measures would likely not be appropriate thereby leaving signing and striping to reinforce the configuration.
- Due to the site's limited size and access, the most viable mitigation measure to avoid spillback onto Douglas Boulevard during peak-periods would be conversion to an egress only configuration for the portion of the alley between Douglas Boulevard and the site's drive-thru exit lane. This access change would eliminate the potential conflicts that are reasonably anticipated to occur under typical and recurring conditions. However, after review and consideration, this mitigation would not be viable for the following reasons:
 1. Access for eastbound Douglas Boulevard traffic would be essentially eliminated due to the eastbound u-turn restriction at Folsom Road and Harding Boulevard, and the presence of the Folsom Road median at the adjacent parcel's access driveway.
 2. During the AM peak-hour when the eastbound Douglas Boulevard queue from the Folsom Road signal extends past the site driveway, exiting vehicles destined for points to the east may experience excessive delay and, although the subject driveway would be egress only, the drive-thru queue and on-site conflicts would only be magnified.
 3. This access modification would need to be accompanied by a reduction to the existing narrow, concrete median along Douglas Boulevard by approximately 25-feet to enable exiting vehicles to more comfortably enter the eastbound lanes, in particular the eastbound left-turn lane approaching the Folsom Road signal. However, this median modification would compromise the existing access restrictions for the easternmost driveway of the property located along the south side of Douglas Boulevard at this location.

Attachments:

Exhibit 1 – Vicinity Map

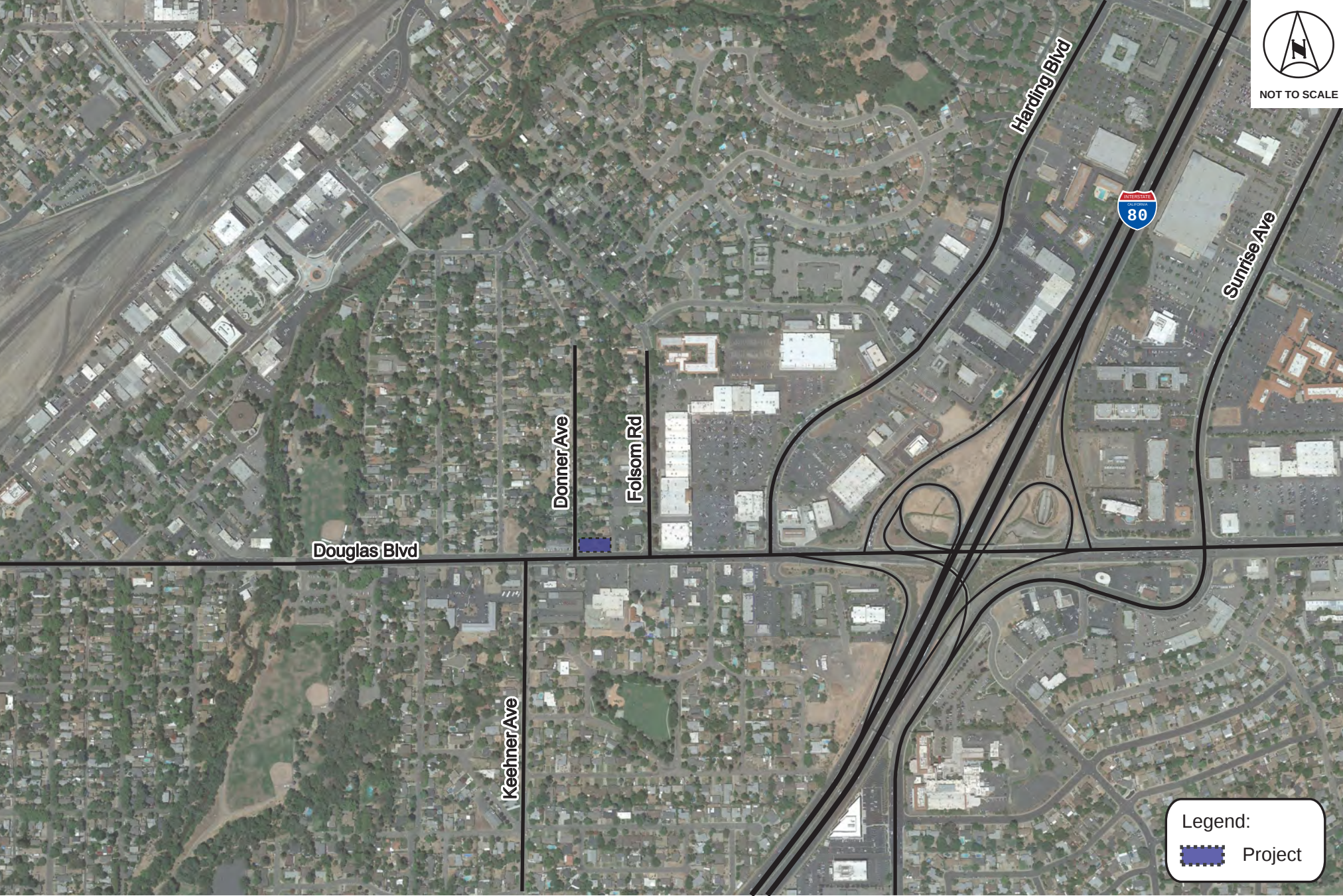
Exhibit 2 – Project Layout

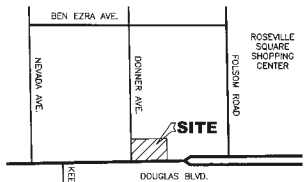
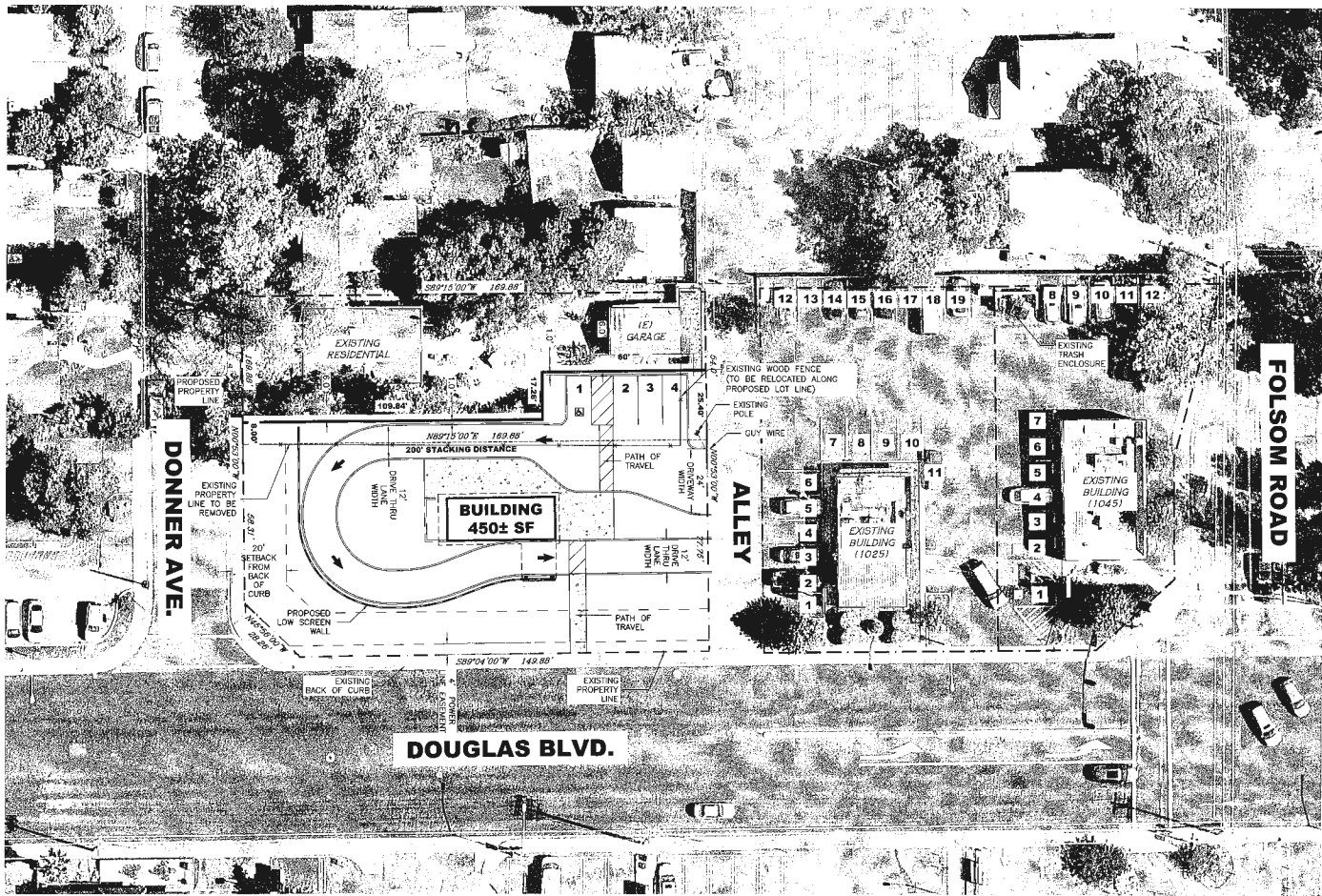
Exhibit 3 – Study Intersections, Traffic Control, and Lane Geometries

Exhibit 4 – Existing (2016) and Existing (2016) plus Proposed Project Peak-Hour Volumes

Attachment A – Traffic Count Data Sheets

Attachment B – Analysis Worksheets





VICINITY MAP
N.T.S.

OWNER

JMAC PROPERTIES, LLC
332 E. BIDWELL STREET
FOLSOM, CA 95630
PHONE: (916) 956-4100
CONTACT: JOHN MCINTOSH

DEVELOPER/APPLICANT:

ETHAN CONRAD PROPERTIES
1300 NATIONAL DRIVE, SUITE 100
SACRAMENTO, CA 95834
PHONE: (916) 779-1000
CONTACT: ETHAN CONRAD & CHASE BURKE

ENGINEER:

RSC ENGINEERING, INC.
2250 DOUGLAS BLVD., SUITE 150
ROSEVILLE, CA 95661
PHONE: (916) 788-2884
CONTACT: TIFFANY WILSON

APN:

013-194-027 & 013-194-012

LOT SIZE:

0.35± & 0.12± ACRES

GENERAL PLAN:

CC COMMUNITY COMMERCIAL (INFILL SPECIFIC PLAN AREA)

ZONING:

CC COMMUNITY COMMERCIAL (INFILL SPECIFIC PLAN AREA)

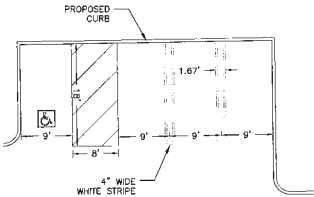
BUILDING SIZE:

450± S.F.

PARKING:

PARKING REQUIRED: 9 STALLS
PARKING PROVIDED*: 4 STALLS (3 STANDARD & 1 ADA)

*CROSS ACCESS AND PARKING PROPOSED WITH ADJACENT PROPERTIES UNDER SAME OWNERSHIP



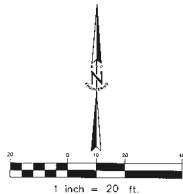
1 PROPOSED PARKING ENLARGEMENT DETAIL
SCALE: 1"=10'

LEGEND

- EXISTING BOUNDARY
- NEW LOT LINE
- - - LOT LINE TO BE REMOVED
- - - BUILDING SETBACK
- LOW SCREEN WALL

PARKING TABLE

ADDRESS	BLDG AREA	PARKING REQUIRED	PARKING PROPOSED
1017 DOUGLAS BLVD.	450 SF	9 STALLS	4 STALLS
1025 DOUGLAS BLVD.	1,421 SF	14 STALLS	19 STALLS
1045 DOUGLAS BLVD.	1,237 SF	12 STALLS	12 STALLS
TOTAL	3,108 SF	35 STALLS	35 STALLS



ETHAN CONRAD
PROPERTIES

DATE	BY	DESCRIPTION
09/26/2018	ETHAN CONRAD	PRELIMINARY SITE PLAN



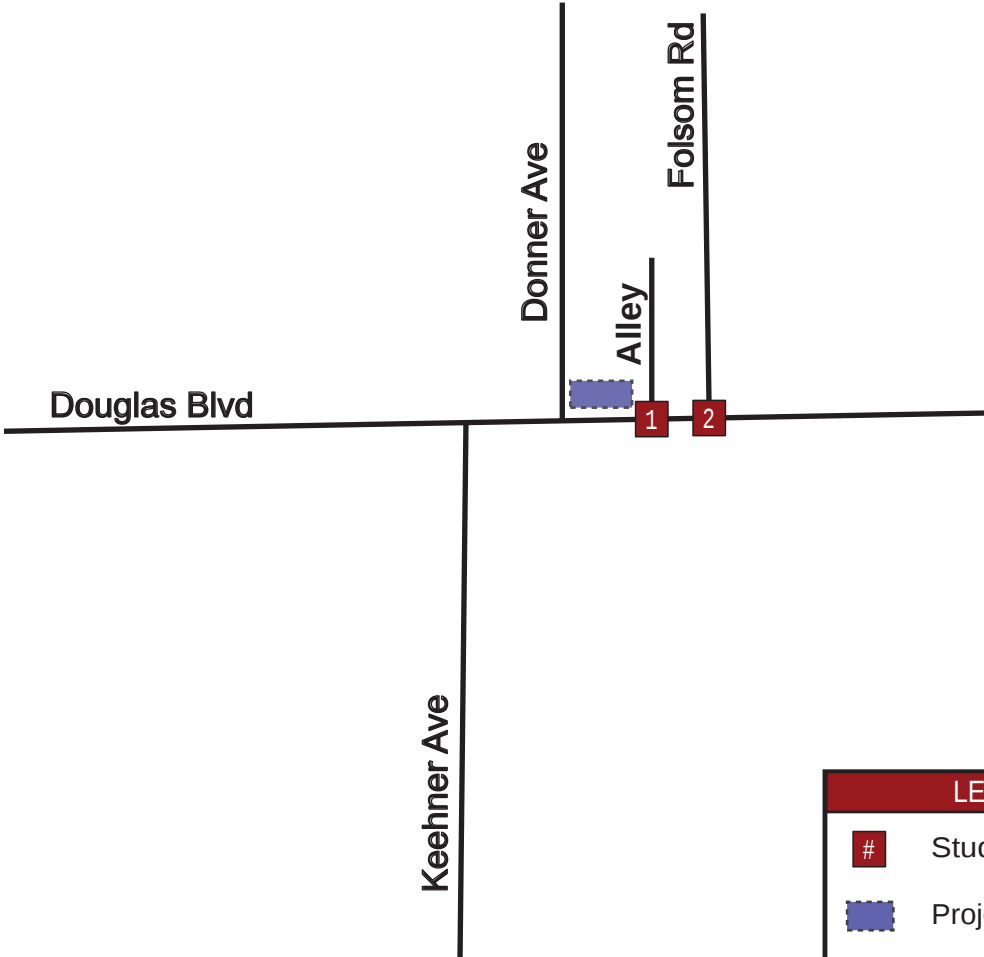
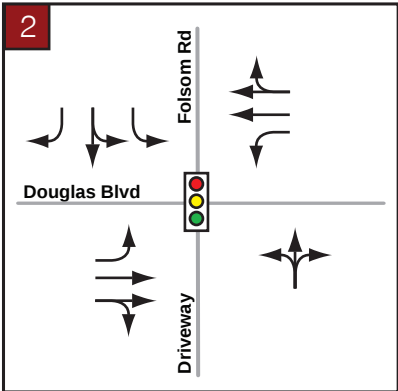
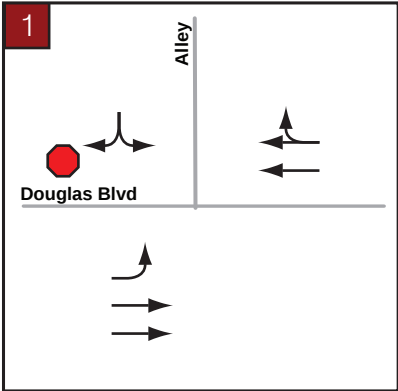
PROJECT NO: 158-002
DRAWN BY: RSC Eng
CHECKED BY: RSC Eng
DESIGNED BY: RSC Eng

PRELIMINARY SITE PLAN
DRIVE-THRU COFFEE KIOSK
1017 DOUGLAS BLVD. & 229 DONNER AVE.
ROSEVILLE, CA 95678

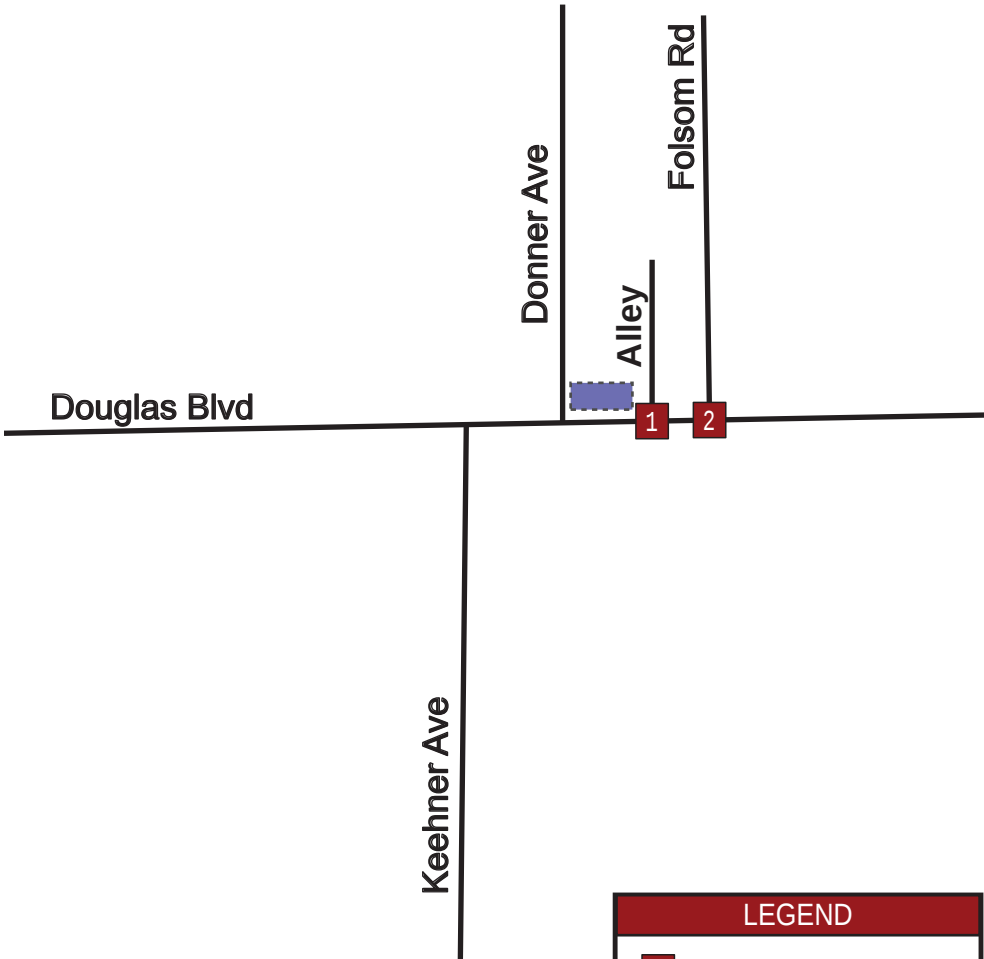
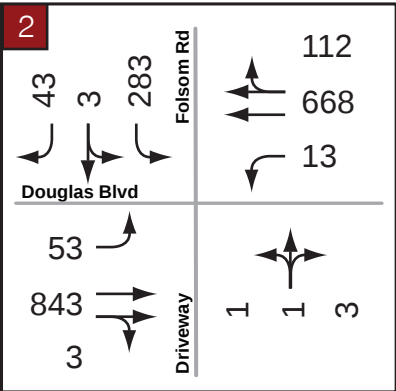
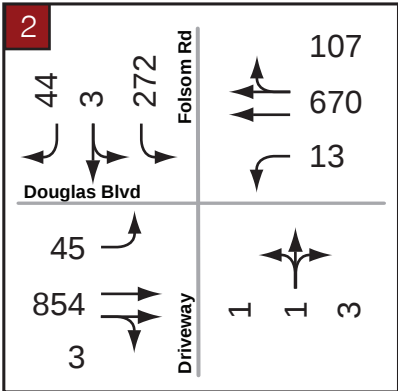
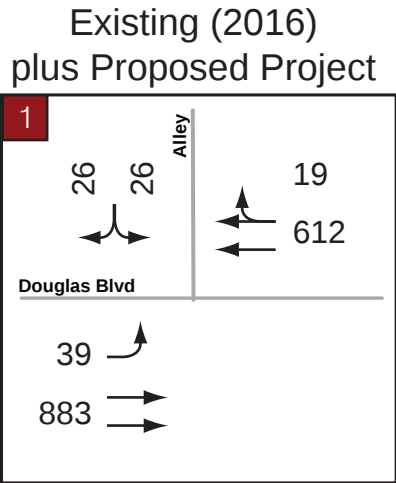
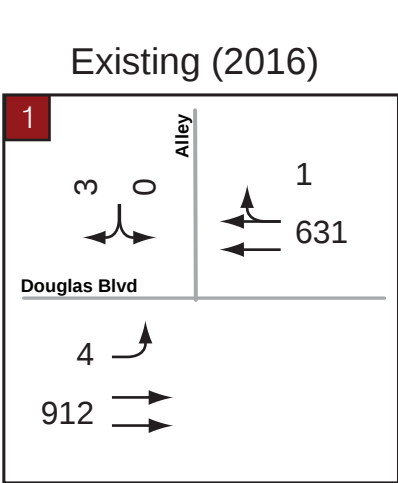
SHEET TITLE
**PRELIMINARY
SITE PLAN**

SHEET NO.
SP1
OF 1

DATE: SEPTEMBER 26, 2018



LEGEND	
#	Study Intersection
	Project
	Signalized Study Intersection
	Stop-controlled Approach



LEGEND	
#	Study Intersection
	Project
##	Peak-Hour Volume

Attachment A
Traffic Count Data Sheets

National Data and Surveying Services			
Job #: 16-7898-001 Location: Starbucks Dwy & 1241 Pleasant Grove Blvd City: Roseville			
Date: 12/1/2016 Day: Saturday			
Drive-through			
Time	Max Queue	IN	OUT
6:00 AM	6	12	7
6:15 AM	5	9	9
6:30 AM	3	11	10
6:45 AM	10	18	14
7:00 AM	11	15	15
7:15 AM	17	18	16
7:30 AM	16	17	16
7:45 AM	16	19	20
8:00 AM	13	19	15
8:15 AM	11	18	19
8:30 AM	11	16	15
8:45 AM	14	16	16

National Data and Surveying Services					
Job #: 16-7898-002 Location: Dutch Bros. Dwy & 1225 Baseline Rd City: Roseville					
Date: 12/1/2016 Day: Thursday					
		Drive-through Queue		Parking	
Time	Max Queue	IN	OUT	IN	OUT
6:00 AM	5	4	4	6	3
6:15 AM	10	14	9	10	7
6:30 AM	9	14	10	9	6
6:45 AM	7	17	15	7	5
7:00 AM	8	13	13	10	8
7:15 AM	13	11	13	8	9
7:30 AM	12	15	16	3	9
7:45 AM	7	18	20	4	4
8:00 AM	7	20	18	3	1
8:15 AM	8	11	14	7	6
8:30 AM	8	14	20	8	8
8:45 AM	13	16	17	5	8

National Data and Surveying Services

Job #: 16-7898-003
Location: Dutch Bros. Dwy & 3450 Sunset Blvd
City: Rocklin

Date: 12/1/2016
Day: Thursday

Time	Max Queue (Southern Entrance)	Southern Driveway Ins	Southern Driveway Outs	Max Queue (Northern Entrance)	Northern Driveway Ins	Northern Driveway Outs
6:00 AM	4	8	9	4	8	4
6:15 AM	5	10	13	5	6	6
6:30 AM	4	13	14	5	12	9
6:45 AM	7	17	17	5	8	8
7:00 AM	9	21	19	8	9	12
7:15 AM	8	23	18	8	4	7
7:30 AM	10	20	24	7	2	5
7:45 AM	7	24	26	6	7	6
8:00 AM	7	18	20	6	8	3
8:15 AM	6	13	20	5	6	2
8:30 AM	11	29	18	12	8	3
8:45 AM	9	18	19	10	3	10

National Data and Surveying Services

City of Roseville
All Vehicles & Uturns On Unshifted
Nothing On Bank 1
Nothing On Bank 2

(323) 782-0090
info@ndsdata.com

File Name : 16-7899-001 Douglas Blvd & Bet. Donner Ave and Folsom Rd
Date : 12/1/2016

Unshifted Count = All Vehicles & Uturns

	Douglas Blvd Southbound					Bet. Donner Ave and Folsom Rd Westbound					Douglas Blvd Northbound					Bet. Donner Ave and Folsom Rd Eastbound					Total	Uturns Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
6:00	0	0	1	0	1	0	32	0	1	33	0	0	0	0	0	0	50	0	0	50	84	1
6:15	0	0	0	0	0	0	39	0	0	39	0	0	0	0	0	1	75	0	0	76	115	0
6:30	0	0	0	0	0	0	70	0	0	70	0	0	0	0	0	0	79	0	0	79	149	0
6:45	0	0	1	0	1	0	120	0	0	120	0	0	0	0	0	0	92	0	0	92	213	0
Total	0	0	2	0	2	0	261	0	1	262	0	0	0	0	0	1	296	0	0	297	561	1
7:00	0	0	0	0	0	0	93	0	0	93	0	0	0	0	0	0	125	0	0	125	218	0
7:15	0	0	1	0	1	0	159	1	0	160	0	0	0	0	0	1	156	0	0	157	318	0
7:30	0	0	1	0	1	0	156	0	0	156	0	0	0	0	0	0	207	0	0	207	364	0
7:45	0	0	0	0	0	0	192	0	0	192	0	0	0	0	0	2	245	0	0	247	439	0
Total	0	0	2	0	2	0	600	1	0	601	0	0	0	0	0	3	733	0	0	736	1339	0
8:00	0	0	1	0	1	0	145	1	0	146	0	0	0	0	0	2	218	0	0	220	367	0
8:15	0	0	1	0	1	0	138	0	0	138	0	0	0	0	0	0	242	0	0	242	381	0
8:30	0	0	2	0	2	0	127	0	0	127	0	0	0	0	0	3	202	0	0	205	334	0
8:45	1	0	1	0	2	0	140	0	0	140	0	0	0	0	0	5	192	0	0	197	339	0
Total	1	0	5	0	6	0	550	1	0	551	0	0	0	0	0	10	854	0	0	864	1421	0
Grand Total	1	0	9	0	10	0	1411	2	1	1414	0	0	0	0	0	14	1883	0	0	1897	3321	1
Apprch %	10.0%	0.0%	90.0%	0.0%		0.0%	99.8%	0.1%	0.1%		0.0%	0.0%	0.0%	0.0%		0.7%	99.3%	0.0%	0.0%			
Total %	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	42.5%	0.1%	0.0%	42.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	56.7%	0.0%	0.0%	57.1%	100.0%	

AM PEAK HOUR	Douglas Blvd Southbound					Bet. Donner Ave and Folsom Rd Westbound					Douglas Blvd Northbound					Bet. Donner Ave and Folsom Rd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	1	0	1	0	156	0	0	156	0	0	0	0	0	0	207	0	0	207	364
7:45	0	0	0	0	0	0	192	0	0	192	0	0	0	0	0	2	245	0	0	247	439
8:00	0	0	1	0	1	0	145	1	0	146	0	0	0	0	0	2	218	0	0	220	367
8:15	0	0	1	0	1	0	138	0	0	138	0	0	0	0	0	0	242	0	0	242	381
Total Volume	0	0	3	0	3	0	631	1	0	632	0	0	0	0	0	4	912	0	0	916	1551
% App Total	0.0%	0.0%	100.0%	0.0%		0.0%	99.8%	0.2%	0.0%		0.0%	0.0%	0.0%	0.0%		0.4%	99.6%	0.0%	0.0%		
PHF	.000	.000	.750	.000	.750	.000	.822	.250	.000	.823	.000	.000	.000	.000	.000	.500	.931	.000	.000	.927	.883

Turning Movement Volume Report

12/1/2016

Douglas & Folsom (332)

Intersection: 63

Date & Time	N				S				E				W				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12/01/16 06:00-06:14	0	0	0	0	43	1	4	47	1	48	0	49	0	33	2	35	131
12/01/16 06:15-06:29	0	0	0	0	47	1	2	49	7	74	0	81	1	50	4	54	184
12/01/16 06:30-06:44	0	0	0	0	56	1	0	56	1	80	0	81	0	84	7	91	228
12/01/16 06:45-06:59	0	0	0	0	53	1	2	55	3	92	0	95	0	145	10	155	305
12/01/16 07:00-07:14	0	1	1	1	48	1	3	51	3	135	1	138	3	104	9	115	305
12/01/16 07:15-07:29	0	1	1	1	77	1	5	82	6	176	1	182	1	181	15	197	462
12/01/16 07:30-07:44	0	0	0	0	58	1	6	64	8	191	1	199	0	168	14	181	444
12/01/16 07:45-07:59	0	0	0	0	76	1	14	90	9	245	1	255	4	235	21	259	604
12/01/16 08:00-08:14	1	0	2	1	74	1	14	88	15	183	1	198	4	155	14	173	460
12/01/16 08:15-08:29	1	0	2	1	63	1	10	73	13	235	1	248	5	155	15	175	497
12/01/16 08:30-08:44	1	1	3	3	89	1	5	94	9	194	1	203	7	148	14	169	469
12/01/16 08:45-08:59	3	2	6	10	102	1	7	109	8	182	1	190	11	177	19	206	515
Total:	6	5	15	17	789	9	72	858	83	1835	8	1919	36	1635	144	1810	4604
Approach %:	35%	29%	87%		91%	1%	8%		4%	95%	0%		1%	90%	7%		
Int. %:	0%	0%	0%	0%	17%	0%	1%	18%	1%	39%	0%	41%	0%	35%	3%	39%	

Turning Movement Volume Report

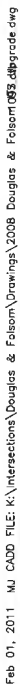
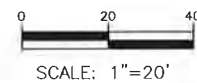
12/1/2016

Douglas & Keehner (332)

Intersection: 64

Date & Time	N				E				W								Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12/01/16 06:00-06:14	4	0	15	19	0	35	1	35	4	27	0	31	0	0	0	0	85
12/01/16 06:15-06:29	7	0	14	21	0	67	2	69	10	33	0	43	0	0	0	0	133
12/01/16 06:30-06:44	5	0	13	18	0	71	2	73	3	65	0	68	0	0	0	0	159
12/01/16 06:45-06:59	4	0	22	26	0	68	2	69	4	115	0	119	0	0	0	0	214
12/01/16 07:00-07:14	5	0	25	30	0	95	2	97	6	89	0	95	0	0	0	0	222
12/01/16 07:15-07:29	10	0	43	53	0	147	4	150	18	136	0	154	0	0	0	0	357
12/01/16 07:30-07:44	4	0	29	33	0	169	4	172	24	117	0	141	0	0	0	0	346
12/01/16 07:45-07:59	12	0	59	71	0	202	5	206	37	144	0	181	0	0	0	0	458
12/01/16 08:00-08:14	13	0	40	53	0	169	3	172	28	99	0	127	0	0	0	0	352
12/01/16 08:15-08:29	17	0	74	91	0	174	3	177	16	113	0	129	0	0	0	0	397
12/01/16 08:30-08:44	10	0	45	55	0	165	4	169	13	97	0	110	0	0	0	0	334
12/01/16 08:45-08:59	8	0	15	23	0	168	3	171	16	125	0	141	0	0	0	0	335
Total:	99	0	394	493	0	1530	36	1560	179	1160	0	1339	0	0	0	0	3392
Approach %:	20%	0%	79%		0%	98%	2%		13%	86%	0%		0%	0%	0%		
Int. %:	2%	0%	11%	14%	0%	45%	1%	45%	5%	34%	0%	39%	0%	0%	0%	0%	

- 1 Install model 2070 controller, and communication equipment in type 332 cabinet.
- 2 Remove existing pedestrian push buttons and replace with Polara Bulldog pedestrian push button model #BDLM2-G.
- 3 Install PTZ camera, and WiFi unit on pole (TBD).
- 4 Move RT DLC to 4J8U (det 26).
- 5 Install new DLC. Isolate back loop. Land onto 119U (det 13).
- 6 Install new DLC. Isolate back loop. Land onto 319L (det 14).

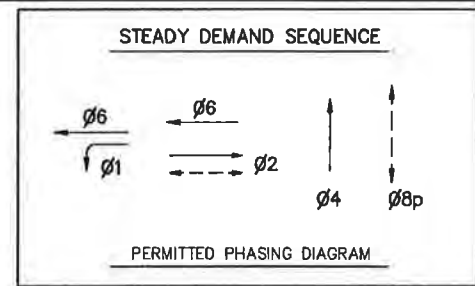
[illegible]

$\phi_L = ?$
 $\phi_T = ?$
 $\phi_R = ?$

Designed By: TZ
 Drawn By: TZ
 Checked By: JS
 Drawing No.: 2008 ITS Upgrade
 Date: April 30, 2008

CITY OF ROSEVILLE
DOUGLAS BLVD./FOLSOM RD.
2008 ITS Upgrade (2070/332)

SHEET
1
— OF —
1



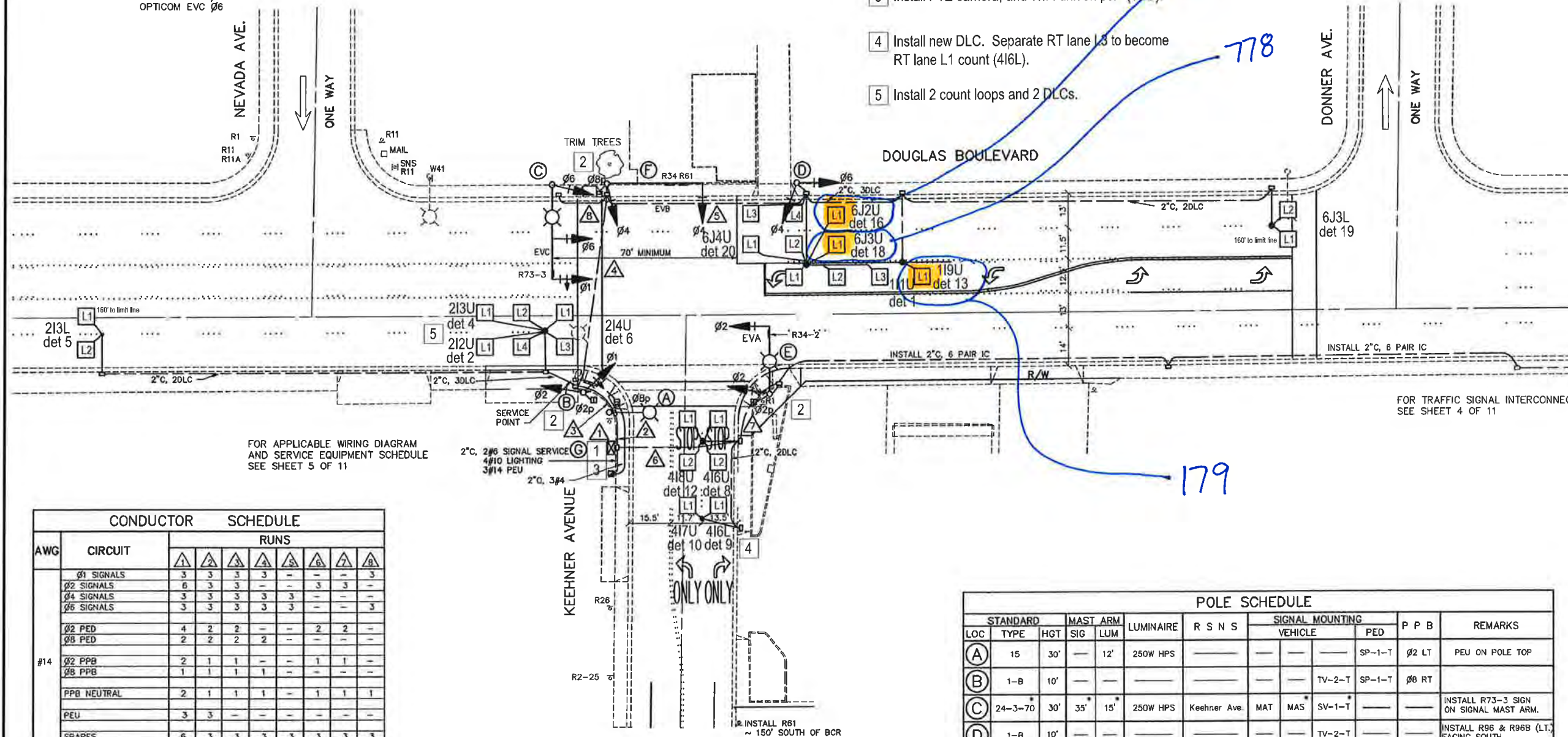
FLASHING OPERATION: ALL RED
EMERGENCY VEHICLE PRE-EMPTION:
OPTICOM EVA Ø2
OPTICOM EVB Ø4
OPTICOM EVC Ø6

Project Notes:

- 1 Install model 2070 controller, and communication equipment in type 332 cabinet.
- 2 Remove existing pedestrian push buttons and replace with Polara Bulldog pedestrian push button model #BDLM2-G.
- 3 Install PTZ camera, and WiFi unit on pole (TBD).
- 4 Install new DLC. Separate RT lane L3 to become RT lane L1 count (416L).
- 5 Install 2 count loops and 2 DLCs.



R61-2



FOR APPLICABLE WIRING DIAGRAM
AND SERVICE EQUIPMENT SCHEDULE
SEE SHEET 5 OF 11

FOR TRAFFIC SIGNAL INTERCONNECT
SEE SHEET 4 OF 11

CONDUCTOR		SCHEDULE							
AWG	CIRCUIT	RUNS							
		1	2	3	4	5	6	7	8
#14	Ø1 SIGNALS	3	3	3	3	3	3	3	3
	Ø2 SIGNALS	6	3	3	3	3	3	3	3
	Ø4 SIGNALS	3	3	3	3	3	3	3	3
	Ø6 SIGNALS	3	3	3	3	3	3	3	3
	Ø2 PED	4	2	2	2	2	2	2	2
	Ø6 PED	2	2	2	2	2	2	2	2
	Ø2 PPB	2	1	1	1	1	1	1	1
	Ø6 PPB	1	1	1	1	1	1	1	1
	PPB NEUTRAL	2	1	1	1	1	1	1	1
	PEU	3	3	3	3	3	3	3	3
#10	SIGNAL COMMON	2	1	1	1	1	1	1	1
	LIGHTING	3	3	3	3	3	3	3	3
	SIGNAL SERVICE	2	2	2	2	2	2	2	2
	6-PAIR IC CABLE	1	1	1	1	1	1	1	1
DLC	EVD CABLE	3	2	2	2	2	2	2	2
	Ø1 DETECTORS	2	2	2	2	2	2	2	2
	Ø2 DETECTORS	3	3	3	3	3	3	3	3
	Ø4 DETECTORS	4	4	4	4	4	4	4	4
	Ø6 DETECTORS	3	3	3	3	3	3	3	3
	TOTAL	12	8	8	8	8	8	8	8
MINIMUM CONDUIT SIZE		2-3"	3"	3"	3"	3"	3"	2"	2"

POLE SCHEDULE										
LOC	TYPE	HGT	SIG	LUM	LUMINAIRE	R S N S	SIGNAL MOUNTING			REMARKS
							VEHICLE	PED	P P B	
(A)	15	30'	—	12'	250W HPS	—	—	—	SP-1-T	Ø2 LT
(B)	1-B	10'	—	—	—	—	—	—	SP-1-T	Ø6 RT
(C)	24-3-70	30'	35'	15'	250W HPS	Keehner Ave.	MAT	MAS	SV-1-T	INSTALL R73-3 SIGN ON SIGNAL MAST ARM.
(D)	1-B	10'	—	—	—	—	—	—	—	INSTALL R96 & R96B (LT.) FACING SOUTH
(E)	19-3-70	30'	25'	15'	250W HPS	Keehner Ave.	—	MAS	SV-1-T	INSTALL R96 & R96B (RT.) FACING NORTH. INSTALL R34-2 ON SIGNAL MAST ARM.
(F)	23-4-70	17'	35'	—	—	Douglas Blvd.	—	MAS	SV-1-T	INSTALL R61 & R34 SIGNS ON SIGNAL MAST ARM. INSTALL SHAFT MOUNTED R34 FACING SOUTH.
(G)	INSTALL MODEL 170 CONTROLLER IN TYPE 332 CABINET.									

* RELOCATED FROM CIRBY/RIVERSIDE INTERSECTION (SEE SHEET 8)

BENCH MARK
ELEVATION _____ DATUM _____

DESIGN BY: TZ
DRAWN BY: TZ
CHECKED BY: JS
SCALE: NONE
DATE: Apr. 15, 2008
PROJECT NO: CMAQ 2

CITY OF ROSEVILLE
DEPARTMENT OF PUBLIC WORKS
311 VERNON STREET
ROSEVILLE, CA 95678
(916) 774-5339

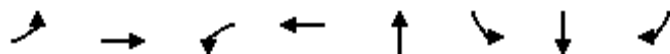


2008 ITS Upgrade (2070/332)
Douglas & Keehner
CITY OF ROSEVILLE
CALIFORNIA

Attachment B
Analysis Worksheets

Douglas Boulevard Coffee Kiosk
2: Driveway/Folsom Rd & Douglas Blvd

Existing plus Proposed Project
AM Peak



Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	60	961	17	1026	6	161	164	49
v/c Ratio	0.25	0.51	0.09	0.61	0.03	0.44	0.44	0.12
Control Delay	34.3	11.5	36.5	16.5	28.8	29.5	29.6	1.9
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	34.3	11.5	36.5	16.5	28.8	29.5	29.6	1.9
Queue Length 50th (ft)	20	79	6	146	1	55	56	0
Queue Length 95th (ft)	74	305	27	278	11	153	155	6
Internal Link Dist (ft)		120		458	380		462	
Turn Bay Length (ft)	100		50			65		50
Base Capacity (vph)	540	2505	667	2655	365	784	786	787
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.11	0.38	0.03	0.39	0.02	0.21	0.21	0.06
Intersection Summary								

Douglas Boulevard Coffee Kiosk
2: Driveway/Folsom Rd & Douglas Blvd

Existing plus Proposed Project
AM Peak

																		
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR						
Lane Configurations																		
Traffic Volume (veh/h)	53	843	3	13	668	112	1	1	3	283	3	43						
Future Volume (veh/h)	53	843	3	13	668	112	1	1	3	283	3	43						
Number	5	2	12	1	6	16	7	4	14	3	8	18						
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						
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1863	1863						
Adj Flow Rate, veh/h	60	958	3	17	879	147	1	1	4	324	0	49						
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	2	0	1						
Peak Hour Factor	0.88	0.88	0.88	0.76	0.76	0.76	0.70	0.70	0.70	0.88	0.88	0.88						
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2						
Cap, veh/h	76	1958	6	22	1549	259	2	2	7	501	0	224						
Arrive On Green	0.04	0.54	0.54	0.01	0.51	0.51	0.01	0.01	0.01	0.14	0.00	0.14						
Sat Flow, veh/h	1774	3619	11	1774	3035	508	276	276	1103	3548	0	1583						
Grp Volume(v), veh/h	60	468	493	17	512	514	6	0	0	324	0	49						
Grp Sat Flow(s),veh/h/ln	1774	1770	1861	1774	1770	1773	1654	0	0	1774	0	1583						
Q Serve(g_s), s	2.0	9.7	9.7	0.6	11.7	11.7	0.2	0.0	0.0	5.0	0.0	1.6						
Cycle Q Clear(g_c), s	2.0	9.7	9.7	0.6	11.7	11.7	0.2	0.0	0.0	5.0	0.0	1.6						
Prop In Lane	1.00		0.01	1.00		0.29	0.17		0.67	1.00		1.00						
Lane Grp Cap(c), veh/h	76	957	1007	22	903	905	11	0	0	501	0	224						
V/C Ratio(X)	0.79	0.49	0.49	0.77	0.57	0.57	0.57	0.00	0.00	0.65	0.00	0.22						
Avail Cap(c_a), veh/h	515	1240	1304	637	1240	1243	339	0	0	1577	0	704						
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	0.00	0.00	1.00	0.00	1.00						
Uniform Delay (d), s/veh	27.7	8.4	8.4	28.8	9.9	9.9	29.0	0.0	0.0	23.7	0.0	22.3						
Incr Delay (d2), s/veh	16.0	0.4	0.4	42.7	0.6	0.6	40.7	0.0	0.0	1.4	0.0	0.5						
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	1.3	4.8	5.0	0.5	5.7	5.7	0.2	0.0	0.0	2.6	0.0	0.7						
LnGrp Delay(d),s/veh	43.8	8.8	8.8	71.5	10.4	10.4	69.7	0.0	0.0	25.2	0.0	22.8						
LnGrp LOS	D	A	A	E	B	B	E			C		C						
Approach Vol, veh/h	1021				1043			6			373							
Approach Delay, s/veh	10.8				11.4			69.7			24.8							
Approach LOS	B				B			E			C							
Timer	1	2	3	4	5	6	7	8										
Assigned Phs	1	2			4	5	6	8										
Phs Duration (G+Y+Rc), s	4.7	36.5			4.4	6.5	34.8	12.9										
Change Period (Y+Rc), s	4.0	4.9			4.0	4.0	4.9	4.6										
Max Green Setting (Gmax), s	21.0	41.0			12.0	17.0	41.0	26.0										
Max Q Clear Time (g_c+I1), s	2.6	11.7			2.2	4.0	13.7	7.0										
Green Ext Time (p_c), s	0.0	16.9			0.0	0.1	16.2	1.2										
Intersection Summary																		
HCM 2010 Ctrl Delay 13.4																		
HCM 2010 LOS B																		
Notes																		

Memorandum

To: Marc Stout, P.E.
City Engineer, City of Roseville

From: Chris Gregerson, P.E., T.E.
Matt Weir, P.E., T.E., PTOE

Re: *Douglas Boulevard Coffee Kiosk*
Traffic Evaluation
Roseville, California

Date: July 19, 2018

Per your request and authorization, we have prepared this traffic evaluation for the above referenced project.

Project Understanding

Kimley-Horn understands that a drive-thru coffee kiosk is proposed for the vacant site located at 1017 Douglas Boulevard (see **Exhibit 1**). The adjacent properties (1025 and 1045 Douglas Boulevard) are under the same ownership as the proposed project and are described as sharing access and parking across all three parcels. According to the project applicant, when all three uses are considered, the parking supply required by the City will be exceeded. The proposed project consists of an approximately 800-square foot building and a drive-thru lane that provides approximately 350-feet for vehicle stacking (see **Exhibit 2**). Access to the proposed project will be from Douglas Boulevard via the existing alley located between 1017 and 1025, as well as to and from Folsom Road through 1025 and 1045¹. The proposed site was examined in a previous traffic evaluation memorandum prepared by Kimley-Horn dated January 26, 2017. Since that memo, an additional parcel at 229 Donner Way has been acquired in order to provide additional storage and parking on the site.

The purpose of this analysis is to expand on the previous analysis of the proposed project's updated access points, to determine the amount of storage and/or driveway treatments that are necessary to ensure safe and efficient operations, to determine potential impacts to surrounding residential roadways, and to approximate and confirm adequate drive-thru storage.

Study Facilities and Evaluation Parameters

The following two intersections (see **Exhibit 3**) are included in this access evaluation. **Exhibit 3** details the study intersections' geometries while **Exhibit 4** details the peak-hour volumes. Traffic counts are provided in **Attachment A**. For each location, traffic/access control and the primary evaluation parameter(s) are described below:

1. Douglas Boulevard @ Existing Alley
 - Access assumed to be ingress only (*was previously evaluated as full access*)
 - Primary considerations are the need for turn restrictions, a right-turn deceleration lane, and the minimum required throat depth (MRTD)

¹ Although depicted as full access in Exhibit 2, this technical analysis assumes an ingress only configuration for the Douglas Boulevard access at the existing alley (Intersection #1). This assumption was incorporated primarily based on the access conflicts and other access concerns noted in previous iterations of this analysis.

2. Douglas Boulevard @ Folsom Road

- o Existing traffic signal
- o Primary consideration is anticipated mix of volumes with project volumes, with a focus on the left-turn movements and queuing along Folsom Road

The access evaluation was conducted for the weekday AM peak-hour for the following conditions:

A. Existing Conditions plus Proposed Project

The access evaluation was performed for the time period and analysis scenario listed above. Methods defined in the *Highway Capacity Manual, 2010*, using appropriate traffic analysis software, were applied.

Assessment of Proposed Project

Trip Generation

Kimley-Horn completed a trip generation study in a manner consistent with the methodology contained in the *Trip Generation Manual, 9th Edition*, published by the Institute of Transportation Engineers (ITE). According to ITE, five sites are preferred (three minimum) to complete this study. Using the square footages (gross floor area) for three sample locations with drive-thru facilities (Starbucks, 1241 Pleasant Grove Boulevard – Roseville; Dutch Bros., 1225 Baseline Road – Roseville; Dutch Bros., 3450 Sunset Boulevard – Rocklin), we were able to develop a unique local trip generation rate (trips per thousand square feet). The data associated with this evaluation are presented in **Table 1**.

Table 1 – Trip Generation Data

Location	Size (ksf)	Ins	Outs	Total	Max Queue	Peak Hour
Dutch Bros Rocklin	0.45	110	117	227	12	7:00 - 8:00
Dutch Bros Roseville	0.86	84	92	176	13	8:00 - 9:00
Starbucks Roseville	0.50	73	70	143	17	7:30 - 8:30
<i>Calculated Rate (#trips/ksf):</i>		<i>166</i>	<i>166</i>	<i>332</i>		
Proposed Project	0.80	133	133	266		
<i>Local Pass-by Reduction:</i>		<i>71</i>	<i>71</i>	<i>142</i>		
<i>Regional Pass-by Reduction:</i>		<i>47</i>	<i>47</i>	<i>94</i>		
<i>Total Pass-by Reduction (Total 89%):</i>		<i>118</i>	<i>118</i>	<i>236</i>		
<i>Net new trips:</i>		<i>15</i>	<i>15</i>	<i>30</i>		

Note: The Dutch Bros in Rocklin data is normalized using ksf to enable integration with the other sites' data. Pass-by reduction is per ITE Land Use 938a

The data contained in **Table 1** indicate that the weighted average of the sample sites' data (weighted by the sites' square footage) is 332 total AM peak-hour trips (166 in and 166 out) per thousand square feet (ksf). Using this unique, local rate and an appropriate pass-by reduction as provided by ITE, the proposed project is anticipated to generate 15 new in, and 15 new out trips during the AM peak-hour. However, the proposed project's 266 total peak-hour trips are used to approximate driveway volumes in this analysis. Finally, the data collected show an average maximum drive thru queue of 14 vehicles (approximated to be 350-feet assuming each vehicle is 25-feet in length).

It should be noted that the previous memorandum completed by Kimley-Horn completed a trip generation for a 450 SF (0.45 ksf) facility. This facility was expected to generate 150 total AM peak-hour trips (vs. 266 total AM peak-hour trips), and 18 total new trips after the pass-by reduction was taken (vs. 30 total new trips).

Trip Distribution

The distribution of project traffic was developed based on existing project area roadway volumes, general knowledge of project area traffic patterns, StreetLight origin-destination (O-D) data, and engineering judgement. StreetLight O-D Data was obtained for an existing Dutch Brothers in Rocklin. This data provides an understanding on where vehicles are originating, allowing for the determination of whether traffic for the proposed development will be generated from the local area or a broader regional area. O-D data was also utilized to determine the origin and destination of pass-by trips to the development. Project trips were assigned to the study intersections and the surrounding roadway network according to these patterns. AM peak-hour volumes for Existing and Existing (2016) plus Proposed Project Conditions are reflected in **Exhibit 4**. AM peak-hour volumes for neighboring local roads are shown in **Exhibit 5**.

Traffic Assessment Methodology

As previously discussed, the purpose of this analysis is to evaluate the proposed project's access points, to determine the amount of storage and/or driveway treatments that are necessary to ensure safe and efficient operations, and to approximate and confirm adequate drive-thru storage.

This traffic evaluation included consideration of vehicle queuing entering the site and the Minimum Required Throat Depth (MRTD) at the Douglas Boulevard site driveway. For this evaluation, the City's guidelines² were referenced to determine the driveways' MRTD and median left-turn storage required for entering vehicles. In addition, these guidelines were referenced to determine the need for a right-turn deceleration lane. Finally, Synchro was used to evaluate the anticipated operations at the adjacent signalized study intersection of Douglas Boulevard and Folsom Road.

Minimum Required Throat Depth (MRTD) & Median Left-Turn Storage

The MRTD was calculated for the Douglas Boulevard site driveway. **Table 2** summarizes the findings of the MRTD evaluation based on the City's guidelines². In addition, the minimum storage length was calculated for the median left-turn entering the project site.

Table 2 – MRTD and Left-Turn Storage for Douglas Boulevard Driveway, AM Peak-Hour

INT	TS	ConfVol (Left,Maj)	ConfVol (Left,Minor)	ConfVol (Right)	LT In	RT In	App Vol	RT%	Required Storage	Minimum Required Throat Depth (MRTD)
1	1	640	1478	640	50	79	0	0%	75	N/A

Note: All volumes come from the Existing plus Proposed Project scenario

MRTD

- Intersection #1, as currently proposed per **Exhibit 2**, would not be restricted as ingress-only. However, due to the potential conflict with egressing vehicles attempting to make a left-turn, it is recommended by the City of Roseville that restricting Intersection #1 to ingress only should be studied as a viable option. As a result, the MRTD standards are not applicable. The purpose of the MRTD is to allow stacking distance for egressing vehicles¹, and with no egressing vehicles no throat depth is required.

Left-Turn Storage

- The existing storage for those left-turns attempting to enter the project from eastbound Douglas Boulevard is sufficient for the calculated required distance of 75-feet.

² Section 4 Traffic Impact Studies, City of Roseville Design Standards, January 2016.

Right-Turn Deceleration Lane

- The focus of this evaluation was on the right-turn movement into the project site at the Douglas Boulevard site driveway. According to the City's guidelines³, a right-turn deceleration lane is required when all four of the following conditions are satisfied:
 - A. The driveway is located on an arterial or expressway.
 - B. Right turn ingress volume is expected to exceed fifty (50) during peak hour flows on the roadway. For right turn ingress volumes between ten (10) and fifty (50) a right turn curb taper shall be constructed in conformance with the Standard Drawings.
 - C. There is ample room and frontage to fit a deceleration lane as determined by the City Engineer.
 - D. The travel speed of the roadway, as determined by the City Engineer, equals or exceeds 45 mph.

The requirements and the conditions are summarized in **Table 3**. Based on these guidelines, the Douglas Boulevard site driveway intersection does not require a right-turn deceleration lane based on travel speed and the ample room and frontage requirements. A curb taper may be required at this location instead based on city guidelines.

Table 3 – Douglas Boulevard Deceleration Lane

Roadway	Time Period	Located on Arterial or Expressway?	Right Turn Volume	Right Turn Volume over 50?	Ample Room and Frontage?	85th Percentile Travel Speed	Travel Speed ≥ 45 mph?	Deceleration Lane Appropriate?
Project Driveway	AM	Yes	69	Yes	No	36.8	No	No

Signalized Intersection Queuing and Operations

In an effort to confirm if the operations at the intersection of Douglas Boulevard and Folsom Road affect the project's Douglas Boulevard site driveway, Synchro was used to determine the anticipated 95th percentile vehicle queues, delay, and Level of Service (LOS) under Existing plus Project Conditions. **Table 4** summarizes the delay and LOS at the intersection while **Table 5** summarizes the queuing for select movements. Analysis worksheets are provided in **Attachment B**.

Table 4 – Intersection Level of Service for Existing plus Project Conditions

ID	Intersection	Peak Hour	Existing (2016) plus Project	
			Delay (sec)	LOS
2	Douglas Blvd @ Folsom Rd	AM	14.6	B

Table 5 – Intersection Queuing for Existing plus Project Conditions

Intersection / Analysis Scenario	Movement	AM Peak-Hour	
		Available Storage (ft)	95 th % Queue (ft)
#2, Douglas Blvd @ Folsom Rd	EBL		
	Existing plus Project	100	67
	EBT		
	Existing plus Project	-	303
Source: Highway Capacity Manual (HCM) methodology per Synchro® v9. Note: Site driveway is located approximately 140-feet west of Folsom Rd.			

³ Section 5 Site Access, City of Roseville Design Standards, January 2016.

As shown in **Table 4**, the intersection operates acceptably according to the City's Guidelines (75% of intersections at LOS C or better during the AM peak-hour) during the peak-hour. **Table 5** displays that the eastbound through queuing extends past the site driveway during the AM peak-hour. In addition, the City of Roseville provided videos of the eastbound approach of Douglas Boulevard from 6:00 AM – 9:00 AM on May 22, 2018, May 23, 2018, and May 24, 2018 to confirm queueing. Over the course of the three-day span, the eastbound through queue appeared to extend past the project driveway an average of nine (9) times per three-hour span.

Kimley-Horn collected videos of the southbound approach of Folsom Road from 6:00 AM – 9:00 AM on May 18, 2018 in an effort to confirm if the operations at the intersection of Douglas Boulevard at Folsom Road affect the project's shared Folsom Road site driveway. In review of this footage, it was found that queues extended past the driveway 25 total times during the three hours. However, in that three-hour span, all vehicles in the queue were able to enter to the intersection allowing for egressing vehicles to turn onto Folsom Road. Therefore, it is assumed with the addition of the proposed project, egressing vehicles that will use the Folsom Road driveway will be able to do so without causing internal circulation issues on the site.

Conclusions

The following are the primary conclusions based on the analyses discussed herein:

- This study focused only on the AM peak-hour. As a result, there could be trip characteristics that occur throughout the day that are different than those documented herein. Nevertheless, it is the AM peak-hour during which the site's operations are anticipated to be critical.
- The following are the key findings of this evaluation:
 1. *City of Roseville MRTD standards are not applicable at the alley along Douglas Boulevard (Intersection #1)* – The driveway at Intersection #1 will be restricted to ingress-only. As a result, MRTD standards are not applicable as they allow for egressing vehicles to stack.
 2. *The drive-thru length is expected to be adequate for typical queues* – based on the sample sites' observed queuing data, it is expected that the provided drive-thru queue length will be adequate. In addition, combined with the alley driveway being restricted to ingress-only, any queue spillbacks are expected to be contained on site. Excessive queue spillbacks will be directed towards the Folsom Road driveway and it is recommended that "KEEP CLEAR" pavement markings be installed along the alley to limit any vehicle conflicts for exiting vehicles wishing to access Folsom Road. It is also recommended that a Traffic Management Plan be utilized during the first few months of operation with a person on-site directing vehicles to ensure they do not block the alley.
 3. *Potential right-turn curb taper at the Douglas Boulevard driveway* – the adjacent parcel's restaurant has its patio located at the back of sidewalk. As a result, a right-turn curb taper at the alley would conflict with and likely require the removal of this feature. In addition, the travel speed of this section does not require a curb taper be installed.
 4. *Current site access restricts egress to the north* – Currently, a concrete median prevents left turns from the site onto Folsom Road. Vehicles leaving the site and access points north will have to exit onto Folsom Road, turn right onto Douglas Boulevard, turn right onto Donner Avenue, and turn right onto Ben Ezra Avenue to reach northbound Folsom Road. Although the volume of traffic heading north on Folsom Road is expected to be low, this routing may not be desirable. As a way to mitigate this routing, the median on Folsom Road could be opened at the site to allow left-turning traffic onto Folsom Road. "KEEP CLEAR" pavement markings should accompany the median opening so that southbound queues on Folsom Road do not restrict access out of the site. In addition, this modification should

also restrict access from left-turns in the northbound direction by installing a “NO LEFT TURN” sign at the median break. As a result, opening the median would not be anticipated to create a left-turn conflict.

5. *Queueing past the site driveway on Folsom Drive* – queueing along Folsom Road often extends past the site driveway during the AM Peak Hour. Despite this, the signal timing is such that the queue clears and any vehicles on the site wishing to access Folsom Road would be able to do so during a green light. “KEEP CLEAR” pavement markings proposed in Conclusion #4 above, while not required based on observations of the operation, would preserve access to the site when queues extend past the site driveway.

Attachments:

Exhibit 1 – Vicinity Map

Exhibit 2 – Project Layout

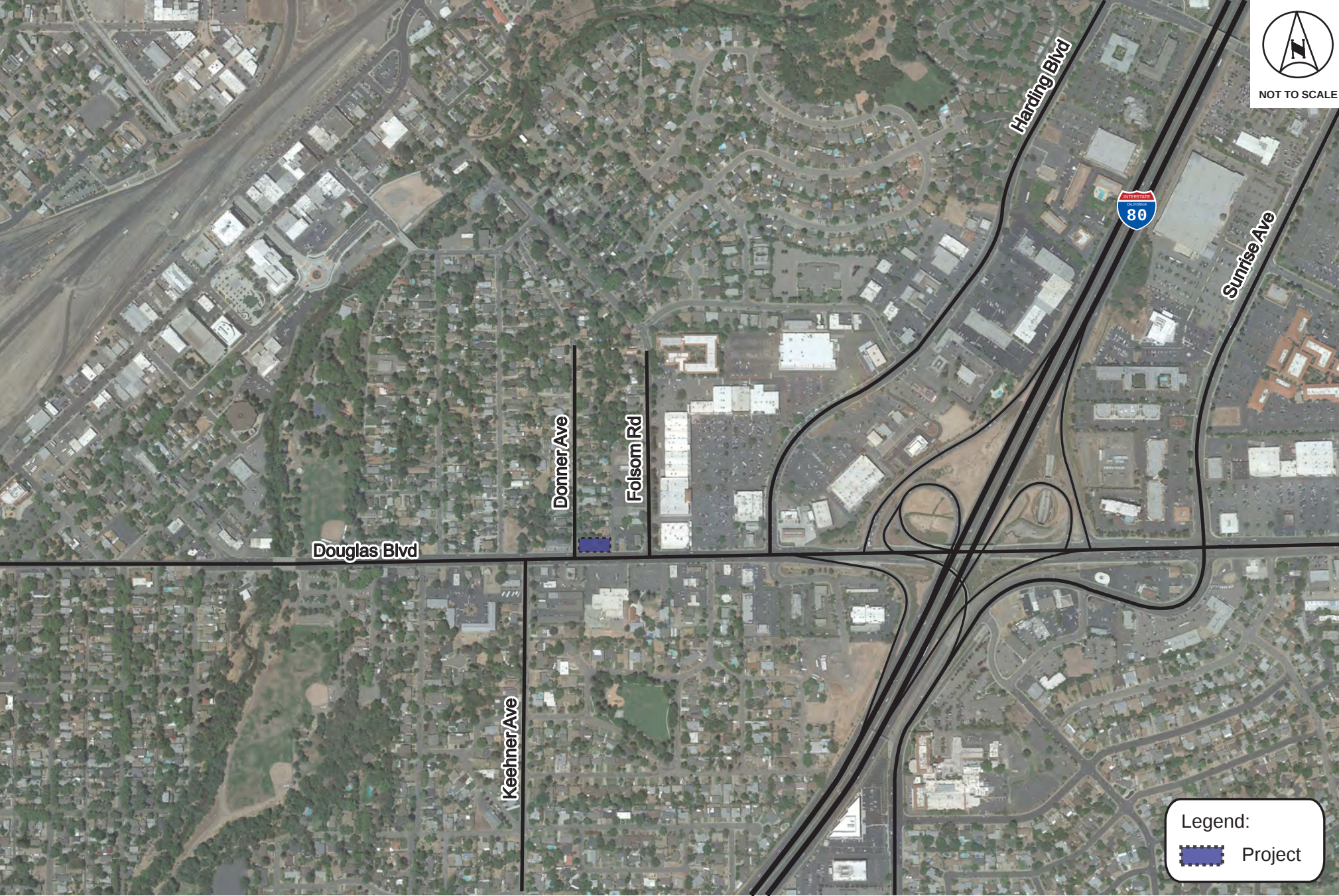
Exhibit 3 – Study Intersections, Traffic Control, and Lane Geometries

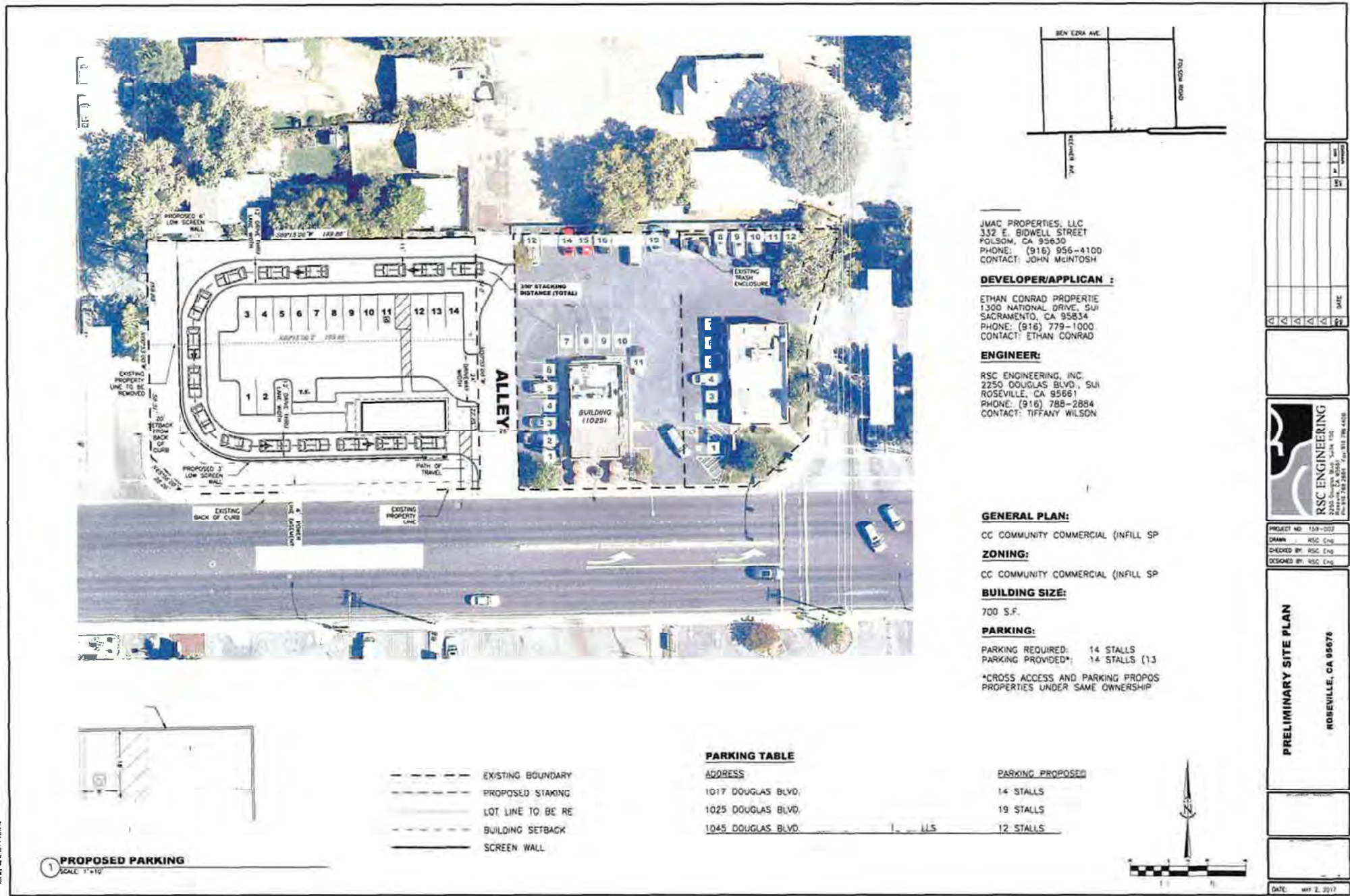
Exhibit 4 – Existing (2016) and Existing (2016) plus Proposed Project Peak-Hour Volumes

Exhibit 5 – Peak Hour Volumes for Local Roads.

Attachment A – Traffic Count Data Sheets

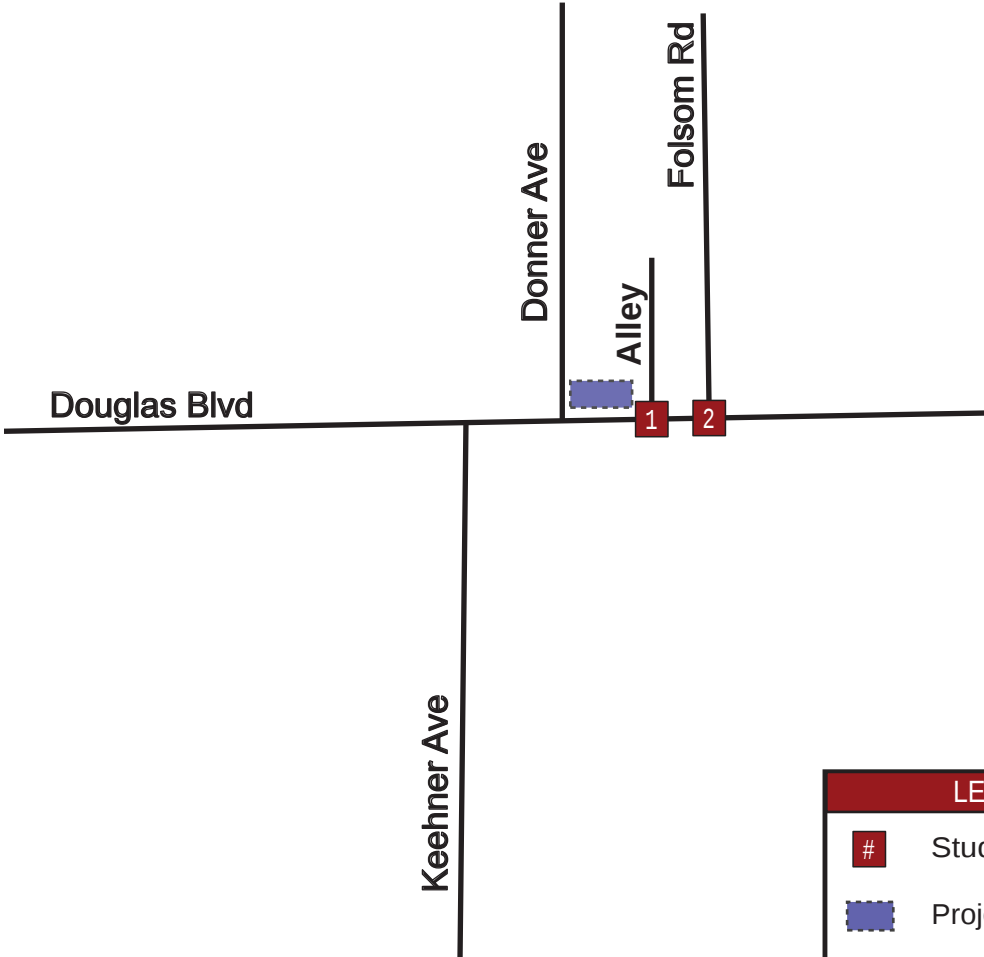
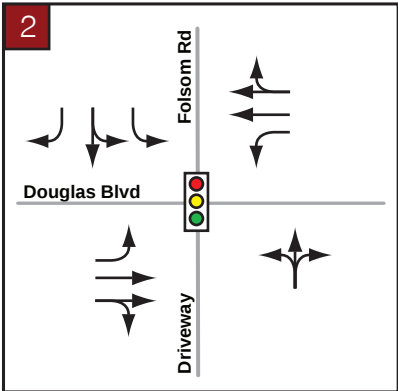
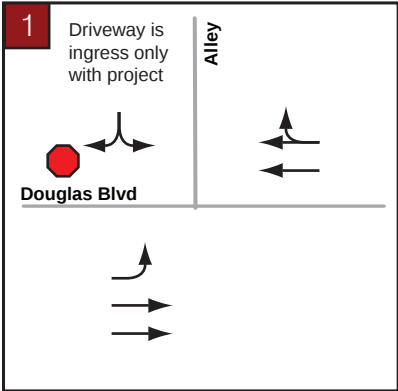
Attachment B – Analysis Worksheets



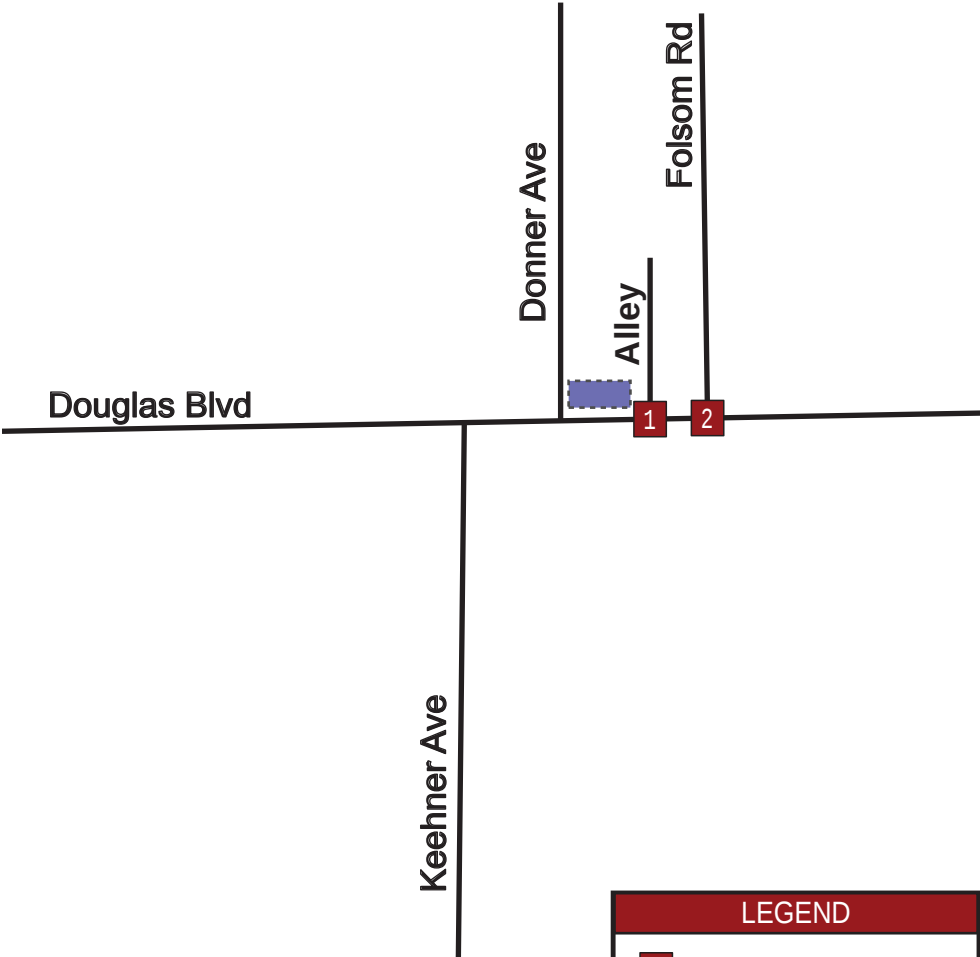
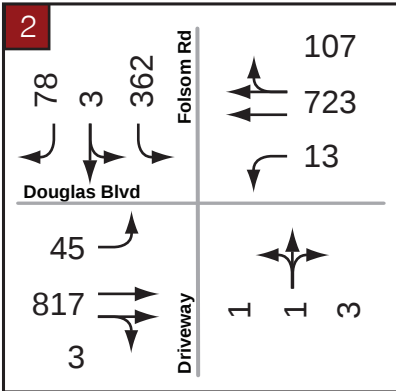
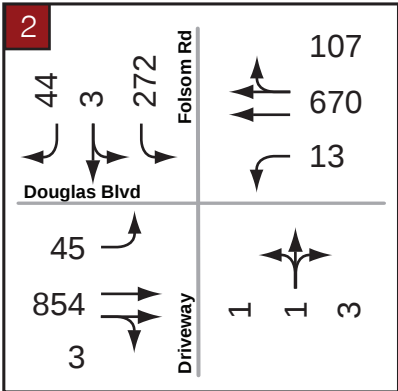
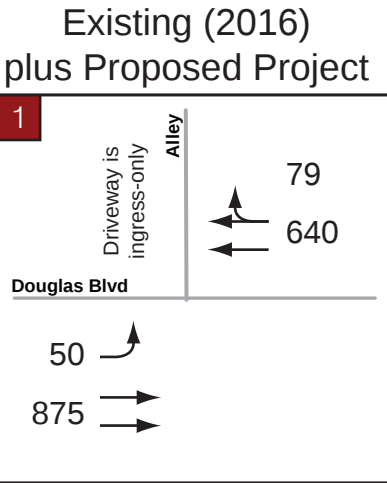
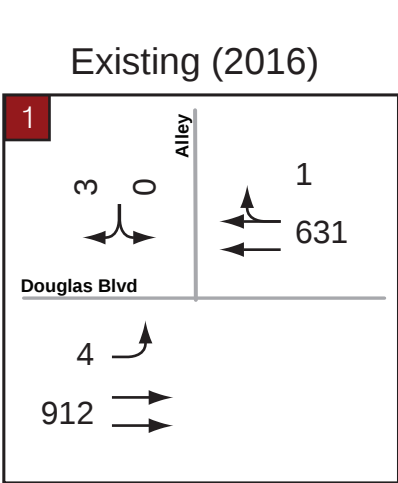




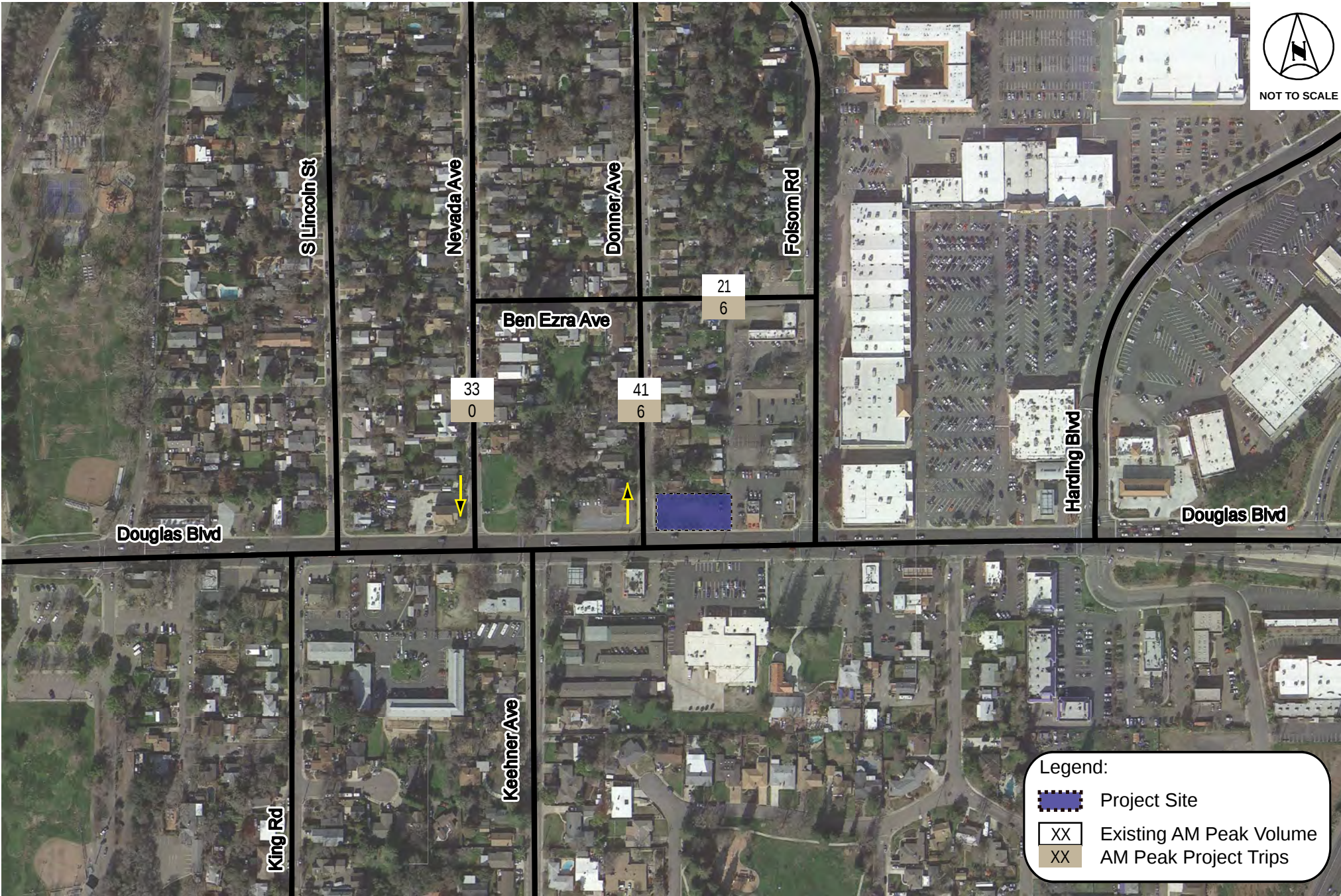
NOT TO SCALE



LEGEND	
#	Study Intersection
	Project
	Signalized Study Intersection
	Stop-controlled Approach



LEGEND	
#	Study Intersection
	Project
##	Peak-Hour Volume



Attachment A
Traffic Count Data Sheets

National Data and Surveying Services

City of Roseville
All Vehicles & Uturns On Unshifted
Nothing On Bank 1
Nothing On Bank 2

(323) 782-0090
info@ndsdata.com

File Name : 16-7899-001 Douglas Blvd & Bet. Donner Ave and Folsom Rd
Date : 12/1/2016

Unshifted Count = All Vehicles & Uturns

	Douglas Blvd Southbound					Bet. Donner Ave and Folsom Rd Westbound					Douglas Blvd Northbound					Bet. Donner Ave and Folsom Rd Eastbound					Total	Uturns Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL		
6:00	0	0	1	0	1	0	32	0	1	33	0	0	0	0	0	0	50	0	0	50	84	1
6:15	0	0	0	0	0	0	39	0	0	39	0	0	0	0	0	1	75	0	0	76	115	0
6:30	0	0	0	0	0	0	70	0	0	70	0	0	0	0	0	0	79	0	0	79	149	0
6:45	0	0	1	0	1	0	120	0	0	120	0	0	0	0	0	0	92	0	0	92	213	0
Total	0	0	2	0	2	0	261	0	1	262	0	0	0	0	0	1	296	0	0	297	561	1
7:00	0	0	0	0	0	0	93	0	0	93	0	0	0	0	0	0	125	0	0	125	218	0
7:15	0	0	1	0	1	0	159	1	0	160	0	0	0	0	0	1	156	0	0	157	318	0
7:30	0	0	1	0	1	0	156	0	0	156	0	0	0	0	0	0	207	0	0	207	364	0
7:45	0	0	0	0	0	0	192	0	0	192	0	0	0	0	0	2	245	0	0	247	439	0
Total	0	0	2	0	2	0	600	1	0	601	0	0	0	0	0	3	733	0	0	736	1339	0
8:00	0	0	1	0	1	0	145	1	0	146	0	0	0	0	0	2	218	0	0	220	367	0
8:15	0	0	1	0	1	0	138	0	0	138	0	0	0	0	0	0	242	0	0	242	381	0
8:30	0	0	2	0	2	0	127	0	0	127	0	0	0	0	0	3	202	0	0	205	334	0
8:45	1	0	1	0	2	0	140	0	0	140	0	0	0	0	0	5	192	0	0	197	339	0
Total	1	0	5	0	6	0	550	1	0	551	0	0	0	0	0	10	854	0	0	864	1421	0
Grand Total	1	0	9	0	10	0	1411	2	1	1414	0	0	0	0	0	14	1883	0	0	1897	3321	1
Apprch %	10.0%	0.0%	90.0%	0.0%		0.0%	99.8%	0.1%	0.1%		0.0%	0.0%	0.0%	0.0%		0.7%	99.3%	0.0%	0.0%			
Total %	0.0%	0.0%	0.3%	0.0%	0.3%	0.0%	42.5%	0.1%	0.0%	42.6%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	56.7%	0.0%	0.0%	57.1%	100.0%	

AM PEAK HOUR	Douglas Blvd Southbound					Bet. Donner Ave and Folsom Rd Westbound					Douglas Blvd Northbound					Bet. Donner Ave and Folsom Rd Eastbound					Total
START TIME	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	LEFT	THRU	RIGHT	UTURNS	APP.TOTAL	
Peak Hour Analysis From 07:30 to 08:30																					
Peak Hour For Entire Intersection Begins at 07:30																					
7:30	0	0	1	0	1	0	156	0	0	156	0	0	0	0	0	0	207	0	0	207	364
7:45	0	0	0	0	0	0	192	0	0	192	0	0	0	0	0	2	245	0	0	247	439
8:00	0	0	1	0	1	0	145	1	0	146	0	0	0	0	0	2	218	0	0	220	367
8:15	0	0	1	0	1	0	138	0	0	138	0	0	0	0	0	0	242	0	0	242	381
Total Volume	0	0	3	0	3	0	631	1	0	632	0	0	0	0	0	4	912	0	0	916	1551
% App Total	0.0%	0.0%	100.0%	0.0%		0.0%	99.8%	0.2%	0.0%		0.0%	0.0%	0.0%	0.0%		0.4%	99.6%	0.0%	0.0%		
PHF	.000	.000	.750	.000	.750	.000	.822	.250	.000	.823	.000	.000	.000	.000	.000	.500	.931	.000	.000	.927	.883

Turning Movement Volume Report

12/1/2016

Douglas & Folsom (332)

Intersection: 63

Date & Time	N				S				E				W				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12/01/16 06:00-06:14	0	0	0	0	43	1	4	47	1	48	0	49	0	33	2	35	131
12/01/16 06:15-06:29	0	0	0	0	47	1	2	49	7	74	0	81	1	50	4	54	184
12/01/16 06:30-06:44	0	0	0	0	56	1	0	56	1	80	0	81	0	84	7	91	228
12/01/16 06:45-06:59	0	0	0	0	53	1	2	55	3	92	0	95	0	145	10	155	305
12/01/16 07:00-07:14	0	1	1	1	48	1	3	51	3	135	1	138	3	104	9	115	305
12/01/16 07:15-07:29	0	1	1	1	77	1	5	82	6	176	1	182	1	181	15	197	462
12/01/16 07:30-07:44	0	0	0	0	58	1	6	64	8	191	1	199	0	168	14	181	444
12/01/16 07:45-07:59	0	0	0	0	76	1	14	90	9	245	1	255	4	235	21	259	604
12/01/16 08:00-08:14	1	0	2	1	74	1	14	88	15	183	1	198	4	155	14	173	460
12/01/16 08:15-08:29	1	0	2	1	63	1	10	73	13	235	1	248	5	155	15	175	497
12/01/16 08:30-08:44	1	1	3	3	89	1	5	94	9	194	1	203	7	148	14	169	469
12/01/16 08:45-08:59	3	2	6	10	102	1	7	109	8	182	1	190	11	177	19	206	515
Total:	6	5	15	17	789	9	72	858	83	1835	8	1919	36	1635	144	1810	4604
Approach %:	35%	29%	87%		91%	1%	8%		4%	95%	0%		1%	90%	7%		
Int. %:	0%	0%	0%	0%	17%	0%	1%	18%	1%	39%	0%	41%	0%	35%	3%	39%	

Turning Movement Volume Report

12/1/2016

Douglas & Keehner (332)

Intersection: 64

Date & Time	N				E				W								Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
12/01/16 06:00-06:14	4	0	15	19	0	35	1	35	4	27	0	31	0	0	0	0	85
12/01/16 06:15-06:29	7	0	14	21	0	67	2	69	10	33	0	43	0	0	0	0	133
12/01/16 06:30-06:44	5	0	13	18	0	71	2	73	3	65	0	68	0	0	0	0	159
12/01/16 06:45-06:59	4	0	22	26	0	68	2	69	4	115	0	119	0	0	0	0	214
12/01/16 07:00-07:14	5	0	25	30	0	95	2	97	6	89	0	95	0	0	0	0	222
12/01/16 07:15-07:29	10	0	43	53	0	147	4	150	18	136	0	154	0	0	0	0	357
12/01/16 07:30-07:44	4	0	29	33	0	169	4	172	24	117	0	141	0	0	0	0	346
12/01/16 07:45-07:59	12	0	59	71	0	202	5	206	37	144	0	181	0	0	0	0	458
12/01/16 08:00-08:14	13	0	40	53	0	169	3	172	28	99	0	127	0	0	0	0	352
12/01/16 08:15-08:29	17	0	74	91	0	174	3	177	16	113	0	129	0	0	0	0	397
12/01/16 08:30-08:44	10	0	45	55	0	165	4	169	13	97	0	110	0	0	0	0	334
12/01/16 08:45-08:59	8	0	15	23	0	168	3	171	16	125	0	141	0	0	0	0	335
Total:	99	0	394	493	0	1530	36	1560	179	1160	0	1339	0	0	0	0	3392
Approach %:	20%	0%	79%		0%	98%	2%		13%	86%	0%		0%	0%	0%		
Int. %:	2%	0%	11%	14%	0%	45%	1%	45%	5%	34%	0%	39%	0%	0%	0%	0%	

VOLUME

Nevada Ave Bet. Douglas Blvd & Ben Ezra Ave

Day: Tuesday
Date: 5/15/2018City: Roseville
Project #: CA18_7181_001

DAILY TOTALS					NB	SB					EB	WB	Total
					0	658					0	0	658
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	1			1		12:00	0	6			6	
00:15	0	2			2		12:15	0	9			9	
00:30	0	1			1		12:30	0	10			10	
00:45	0	0	4		0	4	12:45	0	11	36		11	36
01:00	0	4			4		13:00	0	9			9	
01:15	0	0			0		13:15	0	10			10	
01:30	0	0			0		13:30	0	8			8	
01:45	0	0	4		0	4	13:45	0	16	43		16	43
02:00	0	0			0		14:00	0	9			9	
02:15	0	0			0		14:15	0	7			7	
02:30	0	0			0		14:30	0	10			10	
02:45	0	0			0		14:45	0	16	42		16	42
03:00	0	0			0		15:00	0	12			12	
03:15	0	0			0		15:15	0	17			17	
03:30	0	0			0		15:30	0	11			11	
03:45	0	1	1		1	1	15:45	0	20	60		20	60
04:00	0	0			0		16:00	0	16			16	
04:15	0	0			0		16:15	0	14			14	
04:30	0	1			1		16:30	0	9			9	
04:45	0	3	4		3	4	16:45	0	14	53		14	53
05:00	0	1			1		17:00	0	18			18	
05:15	0	3			3		17:15	0	16			16	
05:30	0	2			2		17:30	0	20			20	
05:45	0	6	12		6	12	17:45	0	13	67		13	67
06:00	0	4			4		18:00	0	12			12	
06:15	0	7			7		18:15	0	9			9	
06:30	0	6			6		18:30	0	8			8	
06:45	0	4	21		4	21	18:45	0	8	37		8	37
07:00	0	10			10		19:00	0	9			9	
07:15	0	5			5		19:15	0	8			8	
07:30	0	17			17		19:30	0	6			6	
07:45	0	15	47		15	47	19:45	0	5	28		5	28
08:00	0	9			9		20:00	0	16			16	
08:15	0	7			7		20:15	0	12			12	
08:30	0	8			8		20:30	0	4			4	
08:45	0	9	33		9	33	20:45	0	6	38		6	38
09:00	0	9			9		21:00	0	6			6	
09:15	0	4			4		21:15	0	6			6	
09:30	0	8			8		21:30	0	13			13	
09:45	0	4	25		4	25	21:45	0	11	36		11	36
10:00	0	3			3		22:00	0	2			2	
10:15	0	5			5		22:15	0	2			2	
10:30	0	8			8		22:30	0	0			0	
10:45	0	8	24		8	24	22:45	0	1	5		1	5
11:00	0	10			10		23:00	0	3			3	
11:15	0	9			9		23:15	0	1			1	
11:30	0	4			4		23:30	0	2			2	
11:45	0	8	31		8	31	23:45	0	1	7		1	7
TOTALS	206				206		TOTALS	452				452	
SPLIT %	100.0%				31.3%		SPLIT %	100.0%				68.7%	

DAILY TOTALS					NB	SB					EB	WB	Total
					0	658					0	0	658
AM Peak Hour		07:30		07:30			PM Peak Hour		16:45		16:45		
AM Pk Volume		48		48			PM Pk Volume		68		68		
PK Hr Factor		0.706		0.706			PK Hr Factor		0.850		0.850		
7 - 9 Volume	0	80	0	0	80		4 - 6 Volume	0	120	0	0	120	
7 - 9 Peak Hour		07:30		07:30			4 - 6 Peak Hour		16:45			16:45	
7 - 9 Pk Volume	0	48	0	0	48		4 - 6 Pk Volume	0	68	0	0	68	
PK Hr Factor	0.000	0.706	0.000	0.000	0.706		PK Hr Factor	0.000	0.850	0.000	0.000	0.850	

VOLUME

Nevada Ave Bet. Douglas Blvd & Ben Ezra Ave

Day: Wednesday
Date: 5/16/2018City: Roseville
Project #: CA18_7181_001

DAILY TOTALS					NB	SB					EB	WB	Total
					0	542					0	0	542
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	0			0		12:00	0	10			10	
00:15	0	0			0		12:15	0	6			6	
00:30	0	1			1		12:30	0	7			7	
00:45	0	1	2		1	2	12:45	0	11	34		11	34
01:00	0	1			1		13:00	0	7			7	
01:15	0	2			2		13:15	0	6			6	
01:30	0	0			0		13:30	0	9			9	
01:45	0	1	4		1	4	13:45	0	7	29		7	29
02:00	0	1			1		14:00	0	3			3	
02:15	0	3			3		14:15	0	8			8	
02:30	0	1			1		14:30	0	4			4	
02:45	0	0	5		0	5	14:45	0	15	30		15	30
03:00	0	0			0		15:00	0	15			15	
03:15	0	0			0		15:15	0	5			5	
03:30	0	0			0		15:30	0	12			12	
03:45	0	0			0		15:45	0	11	43		11	43
04:00	0	0			0		16:00	0	15			15	
04:15	0	1			1		16:15	0	9			9	
04:30	0	3			3		16:30	0	4			4	
04:45	0	4	8		4	8	16:45	0	9	37		9	37
05:00	0	2			2		17:00	0	12			12	
05:15	0	1			1		17:15	0	21			21	
05:30	0	3			3		17:30	0	5			5	
05:45	0	5	11		5	11	17:45	0	10	48		10	48
06:00	0	3			3		18:00	0	5			5	
06:15	0	8			8		18:15	0	8			8	
06:30	0	9			9		18:30	0	5			5	
06:45	0	7	27		7	27	18:45	0	9	27		9	27
07:00	0	13			13		19:00	0	12			12	
07:15	0	8			8		19:15	0	6			6	
07:30	0	9			9		19:30	0	3			3	
07:45	0	11	41		11	41	19:45	0	9	30		9	30
08:00	0	11			11		20:00	0	8			8	
08:15	0	9			9		20:15	0	8			8	
08:30	0	8			8		20:30	0	6			6	
08:45	0	6	34		6	34	20:45	0	8	30		8	30
09:00	0	5			5		21:00	0	5			5	
09:15	0	8			8		21:15	0	4			4	
09:30	0	4			4		21:30	0	8			8	
09:45	0	7	24		7	24	21:45	0	2	19		2	19
10:00	0	5			5		22:00	0	4			4	
10:15	0	7			7		22:15	0	1			1	
10:30	0	4			4		22:30	0	0			0	
10:45	0	6	22		6	22	22:45	0	1	6		1	6
11:00	0	4			4		23:00	0	2			2	
11:15	0	8			8		23:15	0	4			4	
11:30	0	4			4		23:30	0	1			1	
11:45	0	7	23		7	23	23:45	0	1	8		1	8
TOTALS	201				201		TOTALS	341				341	
SPLIT %	100.0%				37.1%		SPLIT %	100.0%				62.9%	

DAILY TOTALS					NB	SB					EB	WB	Total
					0	542					0	0	542
AM Peak Hour	07:00				07:00		PM Peak Hour	17:00				17:00	
AM Pk Volume	41				41		PM Pk Volume	48				48	
PK Hr Factor	0.788				0.788		PK Hr Factor	0.571				0.571	
7 - 9 Volume	0	75	0	0	75		4 - 6 Volume	0	85	0	0	85	
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	17:00				17:00	
7 - 9 Pk Volume	0	41	0	0	41		4 - 6 Pk Volume	0	48	0	0	48	
PK Hr Factor	0.000	0.788	0.000	0.000	0.788		PK Hr Factor	0.000	0.571	0.000	0.000	0.571	

VOLUME

Nevada Ave Bet. Douglas Blvd & Ben Ezra Ave

Day: Thursday

Date: 5/17/2018

City: Roseville

Project #: CA18_7181_001

DAILY TOTALS					NB	SB					EB	WB	Total
					0	569					0	0	569
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00	0	0			0		12:00	0	6			6	
00:15	0	0			0		12:15	0	3			3	
00:30	0	1			1		12:30	0	9			9	
00:45	0	3	4		3	4	12:45	0	3	21		3	21
01:00	0	0			0		13:00	0	8			8	
01:15	0	2			2		13:15	0	8			8	
01:30	0	1			1		13:30	0	11			11	
01:45	0	0	3		0	3	13:45	0	6	33		6	33
02:00	0	1			1		14:00	0	7			7	
02:15	0	0			0		14:15	0	5			5	
02:30	0	0			0		14:30	0	11			11	
02:45	0	0	1		0	1	14:45	0	15	38		15	38
03:00	0	0			0		15:00	0	10			10	
03:15	0	0			0		15:15	0	7			7	
03:30	0	0			0		15:30	0	14			14	
03:45	0	0			0		15:45	0	17	48		17	48
04:00	0	0			0		16:00	0	11			11	
04:15	0	0			0		16:15	0	10			10	
04:30	0	2			2		16:30	0	8			8	
04:45	0	1	3		1	3	16:45	0	9	38		9	38
05:00	0	1			1		17:00	0	13			13	
05:15	0	3			3		17:15	0	15			15	
05:30	0	6			6		17:30	0	15			15	
05:45	0	7	17		7	17	17:45	0	11	54		11	54
06:00	0	4			4		18:00	0	9			9	
06:15	0	2			2		18:15	0	11			11	
06:30	0	8			8		18:30	0	7			7	
06:45	0	11	25		11	25	18:45	0	12	39		12	39
07:00	0	14			14		19:00	0	1			1	
07:15	0	7			7		19:15	0	4			4	
07:30	0	10			10		19:30	0	9			9	
07:45	0	17	48		17	48	19:45	0	3	17		3	17
08:00	0	6			6		20:00	0	6			6	
08:15	0	7			7		20:15	0	8			8	
08:30	0	7			7		20:30	0	6			6	
08:45	0	16	36		16	36	20:45	0	5	25		5	25
09:00	0	8			8		21:00	0	4			4	
09:15	0	6			6		21:15	0	4			4	
09:30	0	6			6		21:30	0	2			2	
09:45	0	7	27		7	27	21:45	0	3	13		3	13
10:00	0	8			8		22:00	0	1			1	
10:15	0	6			6		22:15	0	5			5	
10:30	0	8			8		22:30	0	4			4	
10:45	0	10	32		10	32	22:45	0	1	11		1	11
11:00	0	5			5		23:00	0	1			1	
11:15	0	7			7		23:15	0	2			2	
11:30	0	6			6		23:30	0	2			2	
11:45	0	13	31		13	31	23:45	0	0	5		0	5
TOTALS	227				227		TOTALS	342				342	
SPLIT %	100.0%				39.9%		SPLIT %	100.0%				60.1%	

DAILY TOTALS					NB	SB					EB	WB	Total
					0	569					0	0	569
AM Peak Hour	07:00				07:00		PM Peak Hour	17:00				17:00	
AM Pk Volume	48				48		PM Pk Volume	54				54	
PK Hr Factor	0.706				0.706		PK Hr Factor	0.900				0.900	
7 - 9 Volume	0	84	0	0	84		4 - 6 Volume	0	92	0	0	92	
7 - 9 Peak Hour	07:00				07:00		4 - 6 Peak Hour	17:00				17:00	
7 - 9 Pk Volume	0	48	0	0	48		4 - 6 Pk Volume	0	54	0	0	54	
PK Hr Factor	0.000	0.706	0.000	0.000	0.706		PK Hr Factor	0.000	0.900	0.000	0.000	0.900	

VOLUME

Donner Ave Bet. Douglas Blvd & Ben Ezra Ave

Day: Tuesday
Date: 5/15/2018City: Roseville
Project #: CA18_7181_002

DAILY TOTALS					NB	SB						EB	WB	Total
					542	0						0	0	542
AM Period	NB		SB	EB	WB	TOTAL	PM Period	NB		SB	EB	WB	TOTAL	
00:00	0		0			0	12:00	7		0			7	
00:15	1		0			1	12:15	11		0			11	
00:30	2		0			2	12:30	5		0			5	
00:45	0	3	0			0	12:45	9	32	0			9	
01:00	1		0			1	13:00	4		0			4	
01:15	0		0			0	13:15	9		0			9	
01:30	0		0			0	13:30	6		0			6	
01:45	0	1	0			0	13:45	13	32	0			13	
02:00	0		0			0	14:00	7		0			7	
02:15	0		0			0	14:15	10		0			10	
02:30	0		0			0	14:30	10		0			10	
02:45	1	1	0			1	14:45	8	35	0			8	
03:00	0		0			0	15:00	8		0			8	
03:15	0		0			0	15:15	9		0			9	
03:30	0		0			0	15:30	7		0			7	
03:45	0		0			0	15:45	19	43	0			19	
04:00	0		0			0	16:00	13		0			13	
04:15	0		0			0	16:15	10		0			10	
04:30	0		0			0	16:30	14		0			14	
04:45	1	1	0			1	16:45	15	52	0			15	
05:00	0		0			0	17:00	5		0			5	
05:15	0		0			0	17:15	13		0			13	
05:30	1		0			1	17:30	5		0			5	
05:45	3	4	0			3	17:45	10	33	0			10	
06:00	4		0			4	18:00	11		0			11	
06:15	3		0			3	18:15	8		0			8	
06:30	4		0			4	18:30	10		0			10	
06:45	7	18	0			7	18:45	4	33	0			4	
07:00	2		0			2	19:00	8		0			8	
07:15	7		0			7	19:15	12		0			12	
07:30	10		0			10	19:30	4		0			4	
07:45	15	34	0			15	19:45	3	27	0			3	
08:00	13		0			13	20:00	3		0			3	
08:15	11		0			11	20:15	7		0			7	
08:30	15		0			15	20:30	5		0			5	
08:45	11	50	0			11	20:45	4	19	0			4	
09:00	13		0			13	21:00	2		0			2	
09:15	6		0			6	21:15	3		0			3	
09:30	8		0			8	21:30	5		0			5	
09:45	10	37	0			10	21:45	4	14	0			4	
10:00	4		0			4	22:00	6		0			6	
10:15	8		0			8	22:15	3		0			3	
10:30	8		0			8	22:30	1		0			1	
10:45	7	27	0			7	22:45	2	12	0			2	
11:00	11		0			11	23:00	3		0			3	
11:15	5		0			5	23:15	0		0			0	
11:30	4		0			4	23:30	0		0			0	
11:45	9	29	0			9	23:45	2	5	0			2	
TOTALS	205					205	TOTALS	337					337	
SPLIT %	100.0%					37.8%	SPLIT %	100.0%					62.2%	

DAILY TOTALS					NB	SB						EB	WB	Total
					542	0						0	0	542

AM Peak Hour	07:45				07:45	PM Peak Hour	15:45				15:45
AM Pk Volume	54				54	PM Pk Volume	56				56
PK Hr Factor	0.900				0.900	PK Hr Factor	0.737				0.737
7 - 9 Volume	84	0	0	0	84	4 - 6 Volume	85	0	0	0	85
7 - 9 Peak Hour	07:45				07:45	4 - 6 Peak Hour	16:00				16:00
7 - 9 Pk Volume	54	0	0	0	54	4 - 6 Pk Volume	52	0	0	0	52
PK Hr Factor	0.900	0.000	0.000	0.000	0.900	PK Hr Factor	0.867	0.000	0.000	0.000	0.867

VOLUME

Donner Ave Bet. Douglas Blvd & Ben Ezra Ave

Day: Wednesday
Date: 5/16/2018City: Roseville
Project #: CA18_7181_002

DAILY TOTALS					NB	SB						EB	WB						Total
					505	0						0	0						505
AM Period	NB		SB	EB	WB	TOTAL	PM Period	NB		SB	EB	WB	TOTAL						
00:00	0		0			0	12:00	3		0			3						
00:15	0		0			0	12:15	11		0			11						
00:30	1		0			1	12:30	8		0			8						
00:45	2	3	0			2	12:45	8	30	0			8	30					
01:00	2		0			2	13:00	9		0			9						
01:15	1		0			1	13:15	5		0			5						
01:30	0		0			0	13:30	7		0			7						
01:45	0	3	0			0	13:45	6	27	0			6	27					
02:00	1		0			1	14:00	8		0			8						
02:15	1		0			1	14:15	16		0			16						
02:30	0		0			0	14:30	4		0			4						
02:45	0	2	0			0	14:45	5	33	0			5	33					
03:00	0		0			0	15:00	13		0			13						
03:15	1		0			1	15:15	10		0			10						
03:30	0		0			0	15:30	11		0			11						
03:45	0	1	0			0	15:45	9	43	0			9	43					
04:00	0		0			0	16:00	3		0			3						
04:15	0		0			0	16:15	10		0			10						
04:30	0		0			0	16:30	19		0			19						
04:45	1	1	0			1	16:45	6	38	0			6	38					
05:00	0		0			0	17:00	8		0			8						
05:15	0		0			0	17:15	12		0			12						
05:30	1		0			1	17:30	10		0			10						
05:45	2	3	0			2	17:45	15	45	0			15	45					
06:00	2		0			2	18:00	9		0			9						
06:15	1		0			1	18:15	12		0			12						
06:30	4		0			4	18:30	7		0			7						
06:45	7	14	0			7	18:45	5	33	0			5	33					
07:00	6		0			6	19:00	11		0			11						
07:15	10		0			10	19:15	3		0			3						
07:30	7		0			7	19:30	5		0			5						
07:45	14	37	0			14	19:45	5	24	0			5	24					
08:00	7		0			7	20:00	7		0			7						
08:15	10		0			10	20:15	4		0			4						
08:30	13		0			13	20:30	7		0			7						
08:45	12	42	0			12	20:45	5	23	0			5	23					
09:00	3		0			3	21:00	3		0			3						
09:15	5		0			5	21:15	5		0			5						
09:30	2		0			2	21:30	7		0			7						
09:45	13	23	0			13	21:45	2	17	0			2	17					
10:00	3		0			3	22:00	1		0			1						
10:15	4		0			4	22:15	2		0			2						
10:30	8		0			8	22:30	0		0			0						
10:45	8	23	0			8	22:45	0	3	0			0	3					
11:00	3		0			3	23:00	2		0			2						
11:15	11		0			11	23:15	2		0			2						
11:30	6		0			6	23:30	0		0			0						
11:45	10	30	0			10	23:45	3	7	0			3	7					
TOTALS	182					182	TOTALS	323					323						
SPLIT %	100.0%					36.0%	SPLIT %	100.0%					64.0%						

DAILY TOTALS					NB	SB						EB	WB						Total
					505	0						0	0						505

AM Peak Hour	07:45				07:45	PM Peak Hour	17:15				17:15
AM Pk Volume	44				44	PM Pk Volume	46				46
PK Hr Factor	0.786				0.786	PK Hr Factor	0.767				0.767
7 - 9 Volume	79	0	0	0	79	4 - 6 Volume	83	0	0	0	83
7 - 9 Peak Hour	07:45				07:45	4 - 6 Peak Hour	16:30				16:30
7 - 9 Pk Volume	44	0	0	0	44	4 - 6 Pk Volume	45	0	0	0	45
PK Hr Factor	0.786	0.000	0.000	0.000	0.786	PK Hr Factor	0.592	0.000	0.000	0.000	0.592

VOLUME

Donner Ave Bet. Douglas Blvd & Ben Ezra Ave

Day: Thursday
Date: 5/17/2018City: Roseville
Project #: CA18_7181_002

DAILY TOTALS					NB	SB						EB	WB						Total
					604	0						0	0						604
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL							
00:00	1	0			1		12:00	6	0			6							
00:15	1	0			1		12:15	9	0			9							
00:30	2	0			2		12:30	12	0			12							
00:45	0	4	0		0	4	12:45	7	34	0		7	34						
01:00	0	0			0		13:00	14	0			14							
01:15	1	0			1		13:15	4	0			4							
01:30	1	0			1		13:30	6	0			6							
01:45	1	3	0		1	3	13:45	12	36	0		12	36						
02:00	0	0			0		14:00	7	0			7							
02:15	0	0			0		14:15	19	0			19							
02:30	0	0			0		14:30	13	0			13							
02:45	0	0			0		14:45	13	52	0		13	52						
03:00	0	0			0		15:00	7	0			7							
03:15	0	0			0		15:15	9	0			9							
03:30	0	0			0		15:30	8	0			8							
03:45	0	0			0		15:45	10	34	0		10	34						
04:00	0	0			0		16:00	16	0			16							
04:15	0	0			0		16:15	6	0			6							
04:30	1	0			1		16:30	13	0			13							
04:45	0	1	0		0	1	16:45	16	51	0		16	51						
05:00	0	0			0		17:00	14	0			14							
05:15	1	0			1		17:15	18	0			18							
05:30	0	0			0		17:30	10	0			10							
05:45	0	1	0		0	1	17:45	12	54	0		12	54						
06:00	1	0			1		18:00	15	0			15							
06:15	3	0			3		18:15	13	0			13							
06:30	4	0			4		18:30	14	0			14							
06:45	7	15	0		7	15	18:45	10	52	0		10	52						
07:00	4	0			4		19:00	6	0			6							
07:15	12	0			12		19:15	2	0			2							
07:30	3	0			3		19:30	4	0			4							
07:45	15	34	0		15	34	19:45	7	19	0		7	19						
08:00	5	0			5		20:00	4	0			4							
08:15	13	0			13		20:15	10	0			10							
08:30	15	0			15		20:30	7	0			7							
08:45	14	47	0		14	47	20:45	3	24	0		3	24						
09:00	16	0			16		21:00	6	0			6							
09:15	10	0			10		21:15	7	0			7							
09:30	3	0			3		21:30	5	0			5							
09:45	7	36	0		7	36	21:45	7	25	0		7	25						
10:00	6	0			6		22:00	0	0			0							
10:15	4	0			4		22:15	4	0			4							
10:30	10	0			10		22:30	3	0			3							
10:45	7	27	0		7	27	22:45	2	9	0		2	9						
11:00	12	0			12		23:00	2	0			2							
11:15	11	0			11		23:15	3	0			3							
11:30	13	0			13		23:30	1	0			1							
11:45	3	39	0		3	39	23:45	1	7	0		1	7						
TOTALS	207				207		TOTALS	397				397							
SPLIT %	100.0%				34.3%		SPLIT %	100.0%				65.7%							

DAILY TOTALS					NB	SB						EB	WB						Total
					604	0						0	0						604

AM Peak Hour	08:15				08:15		PM Peak Hour	16:30				16:30							
AM Pk Volume	58				58		PM Pk Volume	61				61							
Pk Hr Factor	0.906				0.906		Pk Hr Factor	0.847				0.847							
7 - 9 Volume	81	0	0	0	81		4 - 6 Volume	105	0	0	0	105							
7 - 9 Peak Hour	07:45				07:45		4 - 6 Peak Hour	16:30				16:30							
7 - 9 Pk Volume	48	0	0	0	48		4 - 6 Pk Volume	61	0	0	0	61							
Pk Hr Factor	0.800	0.000	0.000	0.000	0.800		Pk Hr Factor	0.847	0.000	0.000	0.000	0.847							

VOLUME

Ben Ezra Ave Bet. Donner Ave & Folsom Rd

Day: Tuesday
Date: 5/15/2018City: Roseville
Project #: CA18_7181_003

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	164					126	290
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			0	0	0		12:00			0	0	0	
00:15			0	0	0		12:15			2	1	3	
00:30			0	0	0		12:30			1	2	3	
00:45			0	0	0		12:45			4	7	3	6
01:00			0	0	0		13:00			2	2	4	
01:15			0	0	0		13:15			2	1	3	
01:30			0	0	0		13:30			2	2	4	
01:45			0	0	0		13:45			4	10	3	8
02:00			0	1	1		14:00			1	1	2	
02:15			0	0	0		14:15			1	1	2	
02:30			0	0	0		14:30			2	3	5	
02:45			0	0	1	1	14:45			2	6	3	8
03:00			0	0	0		15:00			2	1	3	
03:15			0	0	0		15:15			2	2	4	
03:30			1	0	1		15:30			6	1	7	
03:45			0	1	0	1	15:45			6	16	3	7
04:00			0	0	0		16:00			9	3	12	
04:15			0	0	0		16:15			2	4	6	
04:30			0	0	0		16:30			6	5	11	
04:45			1	1	0	1	16:45			9	26	4	16
05:00			0	0	0		17:00			2	3	5	
05:15			0	0	0		17:15			1	5	6	
05:30			3	0	3		17:30			3	3	6	
05:45			3	6	1	1	17:45			3	9	6	17
06:00			4	1	5		18:00			1	3	4	
06:15			1	0	1		18:15			2	2	4	
06:30			1	1	2		18:30			1	0	1	
06:45			2	8	1	3	18:45			1	5	2	7
07:00			2	1	3		19:00			1	2	3	
07:15			2	1	3		19:15			1	3	4	
07:30			5	3	8		19:30			1	0	1	
07:45			3	12	0	5	19:45			1	4	0	5
08:00			4	2	6		20:00			0	2	2	
08:15			3	3	6		20:15			0	1	1	
08:30			8	3	11		20:30			0	3	3	
08:45			6	21	0	8	20:45			3	3	2	8
09:00			3	3	6		21:00			2	1	3	
09:15			2	1	3		21:15			0	1	1	
09:30			3	1	4		21:30			2	1	3	
09:45			3	11	1	6	21:45			0	4	1	4
10:00			0	1	1		22:00			0	1	1	
10:15			1	4	5		22:15			0	0	0	
10:30			1	3	4		22:30			0	0	0	
10:45			1	3	2	10	22:45			0	0	1	
11:00			1	1	2		23:00			0	0	0	
11:15			1	1	2		23:15			0	0	0	
11:30			1	2	3		23:30			2	0	2	
11:45			5	8	1	5	23:45			1	3	0	
TOTALS	71				39	110	TOTALS	93				87	180
SPLIT %	64.5%				35.5%	37.9%	SPLIT %	51.7%				48.3%	62.1%

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						164	126						290
AM Peak Hour			08:00	10:00	08:00		PM Peak Hour			16:00	16:30	16:00							
AM Pk Volume			21	10	29		PM Pk Volume			26	17	42							
Pk Hr Factor			0.656	0.625	0.659		Pk Hr Factor			0.722	0.850	0.808							
7 - 9 Volume	0	0	33	13	46		4 - 6 Volume	0	0	35	33	68							
7 - 9 Peak Hour			08:00	07:30	08:00		4 - 6 Peak Hour			16:00	16:30	16:00							
7 - 9 Pk Volume	0	0	21	8	29		4 - 6 Pk Volume	0	0	26	17	42							
Pk Hr Factor	0.000	0.000	0.656	0.667	0.659		Pk Hr Factor	0.000	0.000	0.722	0.850	0.808							

VOLUME

Ben Ezra Ave Bet. Donner Ave & Folsom Rd

Day: Wednesday
Date: 5/16/2018City: Roseville
Project #: CA18_7181_003

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	154					125	279
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			0	0	0		12:00			0	3		3
00:15			0	0	0		12:15			3	1		4
00:30			0	0	0		12:30			0	4		4
00:45			0	0	0		12:45			4	7	2	10
01:00			0	0	0		13:00			1	2		3
01:15			0	0	0		13:15			0	3		3
01:30			0	0	0		13:30			1	0		1
01:45			0	0	0		13:45			4	6	0	5
02:00			0	0	0		14:00			2	1		3
02:15			0	0	0		14:15			6	0		6
02:30			0	0	0		14:30			1	2		3
02:45			0	0	0		14:45			2	11	4	7
03:00			0	0	0		15:00			1	3		4
03:15			0	0	0		15:15			6	3		9
03:30			0	0	0		15:30			6	3		9
03:45			0	0	0		15:45			5	18	1	10
04:00			0	0	0		16:00			5	4		9
04:15			0	0	0		16:15			4	3		7
04:30			0	0	0		16:30			3	4		7
04:45			1	1	0	1	16:45			2	14	2	13
05:00			0	0	0		17:00			3	4		7
05:15			0	0	0		17:15			1	6		7
05:30			0	0	0		17:30			3	0		3
05:45			0	0	0		17:45			4	11	3	13
06:00			1	1	2		18:00			0	3		3
06:15			2	0	2		18:15			4	1		5
06:30			3	0	3		18:30			2	1		3
06:45			1	7	0	1	18:45			2	8	1	6
07:00			4	0	4		19:00			3	6		9
07:15			0	0	0		19:15			0	2		2
07:30			3	1	4		19:30			1	0		1
07:45			3	10	0	1	19:45			2	6	4	12
08:00			3	3	6		20:00			1	2		3
08:15			1	2	3		20:15			1	3		4
08:30			6	5	11		20:30			0	2		2
08:45			9	19	0	10	20:45			0	2	1	8
09:00			1	1	2		21:00			1	2		3
09:15			3	2	5		21:15			2	1		3
09:30			1	0	1		21:30			0	0		0
09:45			5	10	2	5	21:45			0	3	0	3
10:00			2	2	4		22:00			0	0		0
10:15			1	1	2		22:15			0	1		1
10:30			2	1	3		22:30			0	0		0
10:45			2	7	2	6	22:45			0	2	3	2
11:00			3	2	5		23:00			0	0		0
11:15			5	1	6		23:15			1	2		3
11:30			3	4	7		23:30			0	0		0
11:45			2	13	3	10	23:45			0	1	0	2
TOTALS	67				33	100	TOTALS	87				92	179
SPLIT %	67.0%				33.0%	35.8%	SPLIT %	48.6%				51.4%	64.2%

DAILY TOTALS					NB	SB						EB	WB						Total
					0	0						154	125						279
AM Peak Hour			08:00	11:15	08:00		PM Peak Hour			15:15	16:30	15:15							
AM Pk Volume			19	11	29		PM Pk Volume			22	16	33							
Pk Hr Factor			0.528	0.688	0.659		Pk Hr Factor			0.917	0.667	0.917							
7 - 9 Volume	0	0	29	11	40		4 - 6 Volume	0	0	25	26	51							
7 - 9 Peak Hour			08:00	07:45	08:00		4 - 6 Peak Hour			16:00	16:30	16:00							
7 - 9 Pk Volume	0	0	19	10	29		4 - 6 Pk Volume	0	0	14	16	27							
Pk Hr Factor	0.000	0.000	0.528	0.500	0.659		Pk Hr Factor	0.000	0.000	0.700	0.667	0.750							

VOLUME

Ben Ezra Ave Bet. Donner Ave & Folsom Rd

Day: Thursday
Date: 5/17/2018City: Roseville
Project #: CA18_7181_003

DAILY TOTALS					NB	SB	EB					WB	Total
					0	0	206					129	335
AM Period	NB	SB	EB	WB	TOTAL		PM Period	NB	SB	EB	WB	TOTAL	
00:00			0	0	0		12:00			1	2	3	
00:15			0	0	0		12:15			1	1	2	
00:30			0	0	0		12:30			5	1	6	
00:45			0	0	0		12:45			3	10	2	6
01:00			0	0	0		13:00			2	3	5	
01:15			0	0	0		13:15			1	3	4	
01:30			0	0	0		13:30			2	2	4	
01:45			0	0	0		13:45			2	7	1	9
02:00			0	0	0		14:00			4	3	7	
02:15			0	0	0		14:15			3	3	6	
02:30			0	0	0		14:30			7	1	8	
02:45			0	0	0		14:45			7	21	1	8
03:00			0	0	0		15:00			1	1	2	
03:15			0	0	0		15:15			3	2	5	
03:30			0	0	0		15:30			2	6	8	
03:45			0	0	0		15:45			3	9	2	11
04:00			0	0	0		16:00			4	2	6	
04:15			0	0	0		16:15			2	0	2	
04:30			0	0	0		16:30			3	2	5	
04:45			2	2	0	2	16:45			8	17	2	6
05:00			0	0	0		17:00			2	4	6	
05:15			0	0	0		17:15			3	5	8	
05:30			1	0	1		17:30			5	4	9	
05:45			1	2	0	1	17:45			6	16	4	17
06:00			2	1	3		18:00			1	4	5	
06:15			1	0	1		18:15			4	6	10	
06:30			1	0	1		18:30			5	1	6	
06:45			4	8	0	4	18:45			4	14	4	15
07:00			7	0	7		19:00			1	4	5	
07:15			3	2	5		19:15			2	4	6	
07:30			5	0	5		19:30			2	2	4	
07:45			8	23	0	8	19:45			2	7	1	11
08:00			2	2	4		20:00			2	1	3	
08:15			4	1	5		20:15			1	2	3	
08:30			10	2	12		20:30			1	1	2	
08:45			6	22	8	29	20:45			1	5	3	7
09:00			2	0	2		21:00			1	0	1	
09:15			2	1	3		21:15			1	1	2	
09:30			2	3	5		21:30			0	2	2	
09:45			4	10	5	15	21:45			1	3	1	4
10:00			2	3	5		22:00			0	0	0	
10:15			3	1	4		22:15			0	0	0	
10:30			2	2	4		22:30			0	0	0	
10:45			4	11	6	19	22:45			1	1	1	1
11:00			4	3	7		23:00			1	1	2	
11:15			1	1	2		23:15			4	0	4	
11:30			3	3	6		23:30			0	0	0	
11:45			5	13	8	23	23:45			0	5	0	1
TOTALS	91				33	124	TOTALS	115				96	211
SPLIT %	73.4%				26.6%	37.0%	SPLIT %	54.5%				45.5%	63.0%

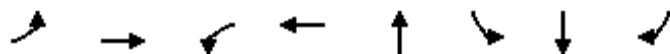
DAILY TOTALS					NB	SB					EB	WB	Total	
					0	0					206	129	335	
AM Peak Hour			07:45	11:00	07:45		PM Peak Hour			14:00	17:30	17:30		
AM Pk Volume			24	10	29		PM Pk Volume			21	18	34		
Pk Hr Factor			0.600	0.833	0.604		Pk Hr Factor			0.750	0.750	0.850		
7 - 9 Volume	0	0	45	9	54		4 - 6 Volume	0	0	33	23	56		
7 - 9 Peak Hour			07:45	08:00	07:45		4 - 6 Peak Hour			16:45	17:00	16:45		
7 - 9 Pk Volume	0	0	24	7	29		4 - 6 Pk Volume	0	0	18	17	33		
Pk Hr Factor	0.000	0.000	0.600	0.875	0.604		Pk Hr Factor	0.000	0.000	0.563	0.850	0.825		

Attachment B
Analysis Worksheets

Intersection						
Int Delay, s/veh	0.3					
Movement	EBL	EBT	WBT	WBR	SBL	SBR
Lane Configurations						
Traffic Vol, veh/h	50	875	640	79	0	0
Future Vol, veh/h	50	875	640	79	0	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	50	-	-	-	0	-
Veh in Median Storage, #	-	0	0	-	0	-
Grade, %	-	0	0	-	0	-
Peak Hour Factor	93	93	82	82	75	75
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	941	780	96	0	0
Major/Minor	Major1	Major2	Minor2			
Conflicting Flow All	876	0	-	0	1407	438
Stage 1	-	-	-	-	828	-
Stage 2	-	-	-	-	579	-
Critical Hdwy	4.14	-	-	-	6.84	6.94
Critical Hdwy Stg 1	-	-	-	-	5.84	-
Critical Hdwy Stg 2	-	-	-	-	5.84	-
Follow-up Hdwy	2.22	-	-	-	3.52	3.32
Pot Cap-1 Maneuver	766	-	-	-	130	567
Stage 1	-	-	-	-	389	-
Stage 2	-	-	-	-	524	-
Platoon blocked, %		-	-	-		
Mov Cap-1 Maneuver	766	-	-	-	121	567
Mov Cap-2 Maneuver	-	-	-	-	121	-
Stage 1	-	-	-	-	362	-
Stage 2	-	-	-	-	524	-
Approach	EB	WB		SB		
HCM Control Delay, s	0.5	0		0		
HCM LOS				A		
Minor Lane/Major Mvmt	EBL	EBT	WBT	WBR	SBLn1	
Capacity (veh/h)	766	-	-	-	-	
HCM Lane V/C Ratio	0.07	-	-	-	-	
HCM Control Delay (s)	10.1	-	-	-	0	
HCM Lane LOS	B	-	-	-	A	
HCM 95th %tile Q(veh)	0.2	-	-	-	-	

Douglas Boulevard Coffee Kiosk
2: Driveway/Folsom Rd & Douglas Blvd

Existing plus Proposed Project
AM Peak



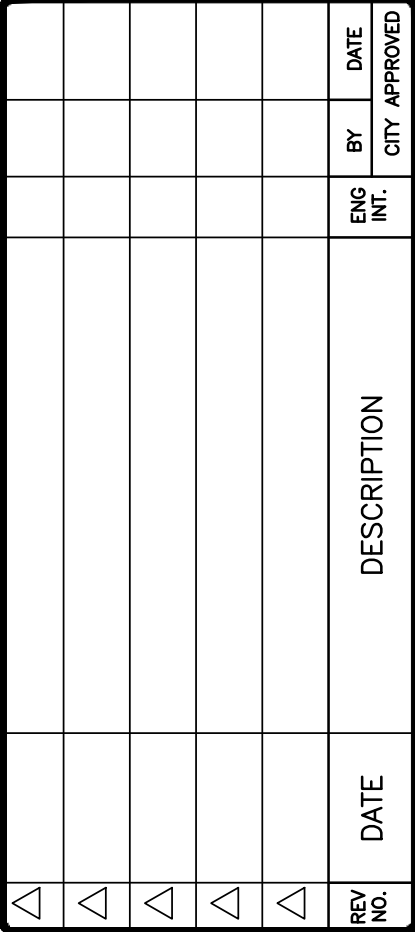
Lane Group	EBL	EBT	WBL	WBT	NBT	SBL	SBT	SBR
Lane Group Flow (vph)	51	931	17	1092	6	205	209	89
v/c Ratio	0.23	0.51	0.09	0.66	0.04	0.50	0.50	0.19
Control Delay	37.1	12.4	38.9	18.2	30.2	30.5	30.7	7.6
Queue Delay	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Total Delay	37.1	12.4	38.9	18.2	30.2	30.5	30.7	7.6
Queue Length 50th (ft)	20	90	7	176	1	80	81	0
Queue Length 95th (ft)	67	303	27	310	11	190	193	34
Internal Link Dist (ft)		120		458	380		462	
Turn Bay Length (ft)	100		50			65		50
Base Capacity (vph)	524	2409	647	2528	354	761	763	767
Starvation Cap Reductn	0	0	0	0	0	0	0	0
Spillback Cap Reductn	0	0	0	0	0	0	0	0
Storage Cap Reductn	0	0	0	0	0	0	0	0
Reduced v/c Ratio	0.10	0.39	0.03	0.43	0.02	0.27	0.27	0.12
Intersection Summary								

Douglas Boulevard Coffee Kiosk
2: Driveway/Folsom Rd & Douglas Blvd

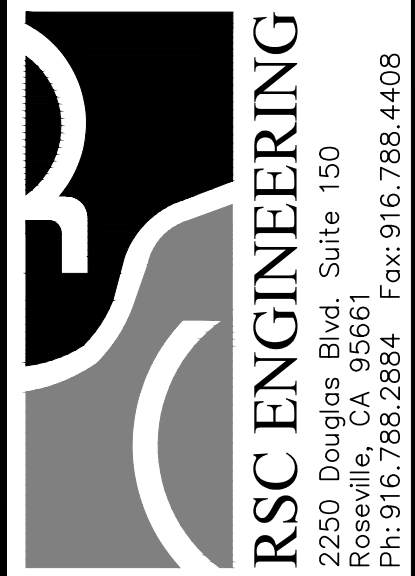
Existing plus Proposed Project
AM Peak

												
Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	45	817	3	13	723	107	1	1	3	362	3	78
Future Volume (veh/h)	45	817	3	13	723	107	1	1	3	362	3	78
Number	5	2	12	1	6	16	7	4	14	3	8	18
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
Adj Sat Flow, veh/h/ln	1863	1863	1900	1863	1863	1900	1900	1863	1900	1863	1863	1863
Adj Flow Rate, veh/h	51	928	3	17	951	141	1	1	4	413	0	89
Adj No. of Lanes	1	2	0	1	2	0	0	1	0	2	0	1
Peak Hour Factor	0.88	0.88	0.88	0.76	0.76	0.76	0.70	0.70	0.70	0.88	0.88	0.88
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	71	1704	6	22	1372	203	2	2	7	633	0	282
Arrive On Green	0.04	0.47	0.47	0.01	0.44	0.44	0.01	0.01	0.01	0.18	0.00	0.18
Sat Flow, veh/h	1774	3619	12	1774	3093	458	276	276	1103	3548	0	1583
Grp Volume(v), veh/h	51	454	477	17	544	548	6	0	0	413	0	89
Grp Sat Flow(s),veh/h/ln	1774	1770	1861	1774	1770	1782	1654	0	0	1774	0	1583
Q Serve(g_s), s	1.5	9.6	9.6	0.5	13.0	13.0	0.2	0.0	0.0	5.7	0.0	2.6
Cycle Q Clear(g_c), s	1.5	9.6	9.6	0.5	13.0	13.0	0.2	0.0	0.0	5.7	0.0	2.6
Prop In Lane	1.00		0.01	1.00		0.26	0.17		0.67	1.00		1.00
Lane Grp Cap(c), veh/h	71	833	876	22	785	790	11	0	0	633	0	282
V/C Ratio(X)	0.72	0.54	0.54	0.76	0.69	0.69	0.57	0.00	0.00	0.65	0.00	0.32
Avail Cap(c_a), veh/h	572	1376	1447	707	1376	1386	377	0	0	1750	0	781
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	0.00	0.00	1.00	0.00	1.00
Uniform Delay (d), s/veh	25.0	9.9	9.9	26.0	11.8	11.8	26.1	0.0	0.0	20.1	0.0	18.9
Incr Delay (d2), s/veh	12.8	0.6	0.5	40.9	1.1	1.1	40.2	0.0	0.0	1.1	0.0	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	1.0	4.8	5.0	0.5	6.6	6.6	0.2	0.0	0.0	2.9	0.0	1.2
LnGrp Delay(d),s/veh	37.8	10.5	10.5	66.8	12.9	12.9	66.3	0.0	0.0	21.3	0.0	19.5
LnGrp LOS	D	B	B	E	B	B	E			C		B
Approach Vol, veh/h		982			1109			6			502	
Approach Delay, s/veh		11.9			13.7			66.3			21.0	
Approach LOS		B			B			E			C	
Timer	1	2	3	4	5	6	7	8				
Assigned Phs	1	2		4	5	6		8				
Phs Duration (G+Y+Rc), s	4.7	29.7		4.3	6.1	28.3		14.0				
Change Period (Y+Rc), s	4.0	4.9		4.0	4.0	4.9		4.6				
Max Green Setting (Gmax), s	21.0	41.0		12.0	17.0	41.0		26.0				
Max Q Clear Time (g_c+I1), s	2.5	11.6		2.2	3.5	15.0		7.7				
Green Ext Time (p_c), s	0.0	6.9		0.0	0.1	8.3		1.7				
Intersection Summary												
HCM 2010 Ctrl Delay				14.6								
HCM 2010 LOS				B								
Notes												

**ETHAN CONRAD
PROPERTIES**



	EXISTING BOUNDARY
	PROPOSED STACKING DISTANCE
	BUILDING SETBACK
	PROPOSED WALL
	EXISTING POWER LINE OVERHANG EASEMENT
	PROPOSED BACKLIT MENU BOARD

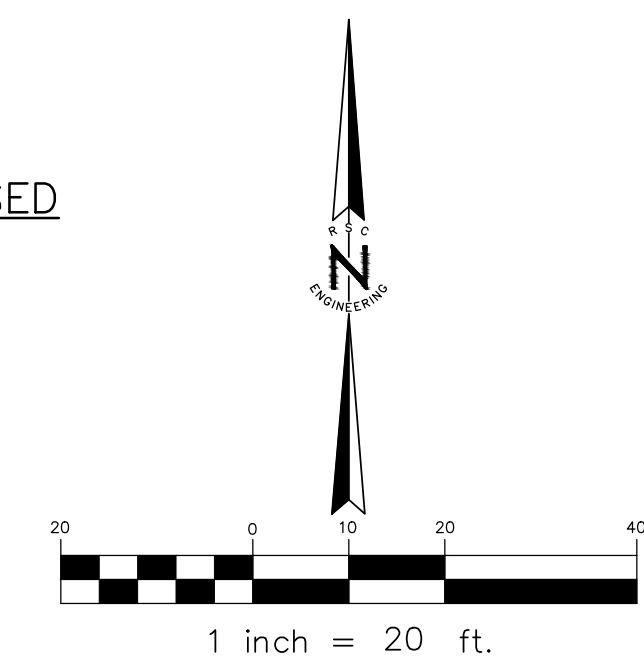
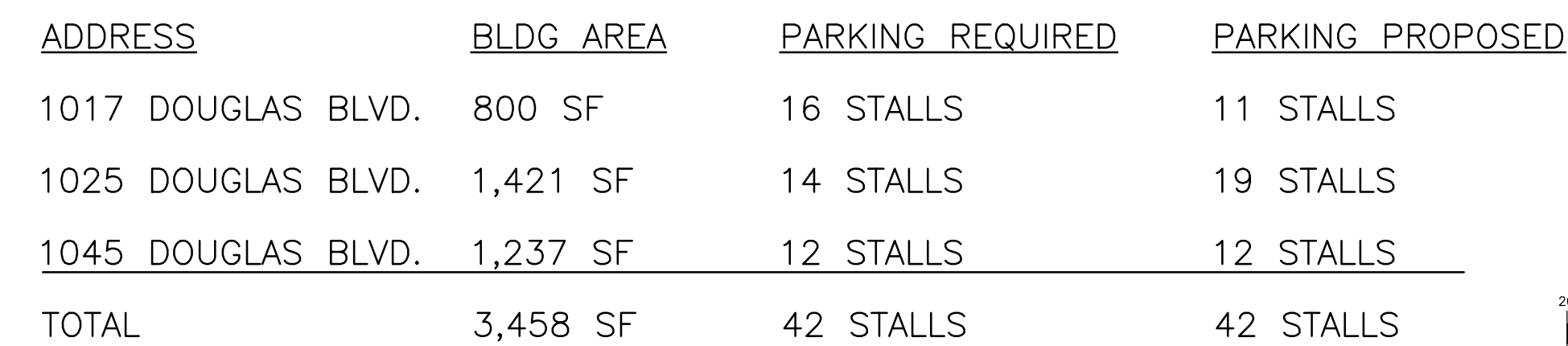


**PRELIMINARY SITE PLAN
DRIVE-THRU COFFEE KIOSK**

**1017 DOUGLAS BLVD. & 229 DONNER AVE.
ROSEVILLE, CA 95678**

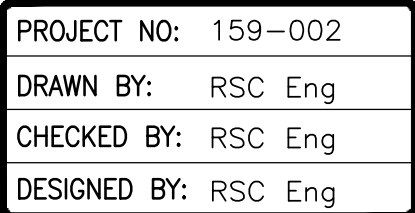
SHEET NO.
SP1
OF **1**

DATE: FEBRUARY 28, 2018



CMU WALL ELEVATIONS

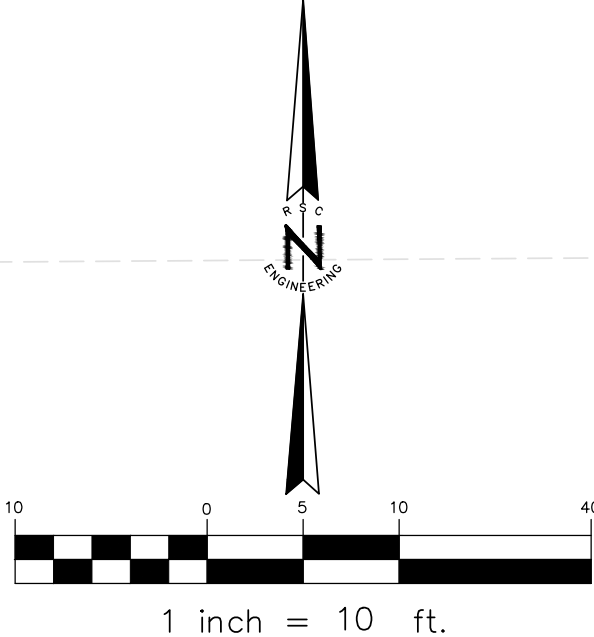
WALL CAP BY
BASALITE
C Exhi
- "V"X16 SOLID GR J
SMOOTH FACE BLOCK
COLOR: NEUTRAL TO MATCH
BUILDING (TYP)

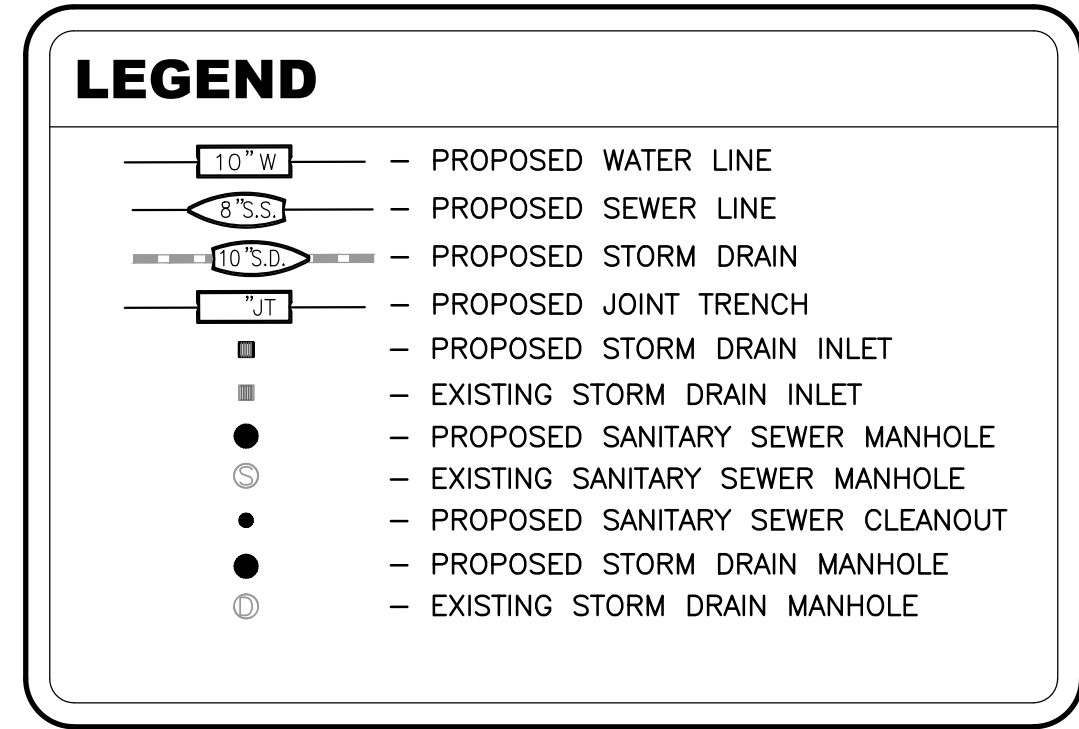
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SHEET TITLE

**PRELIMINARY
GRADING PLAN**

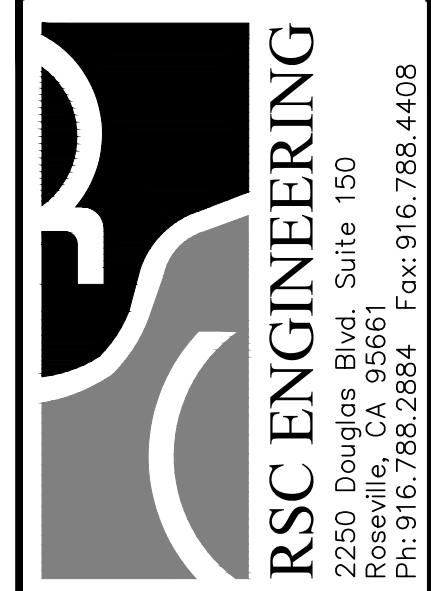
DATE: FEBRUARY 28, 2018





**ETHAN CONRAD
PROPERTIES**

REV	DATE	DESCRIPTION	ENG	BY	DATE
NO.			INT.	CITY	
	△				
	△				
	△				
	△				
	△				



PROJECT NO:	159-002
DRAWN BY:	RSC Eng
CHECKED BY:	RSC Eng
DESIGNED BY:	RSC Eng

**PRELIMINARY SITE PLAN
DRIVE-THRU COFFEE KIOSK**

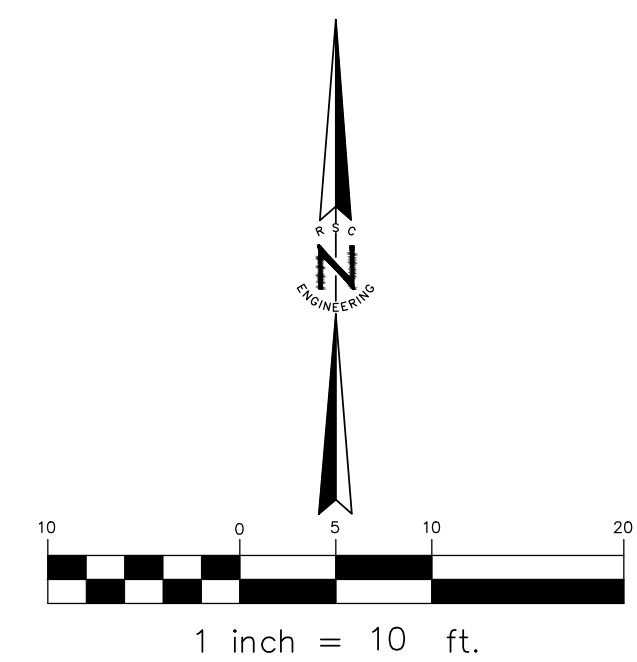
**1017 DOUGLAS BLVD. & 229 DONNER AVE.
ROSEVILLE, CA 95678**

SHEET TITLE

**PRELIMINARY
UTILITY PLAN**

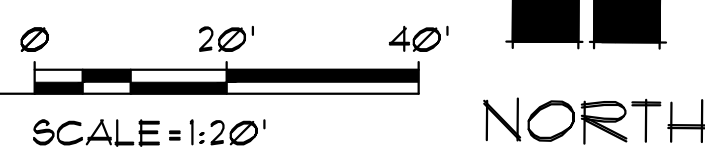
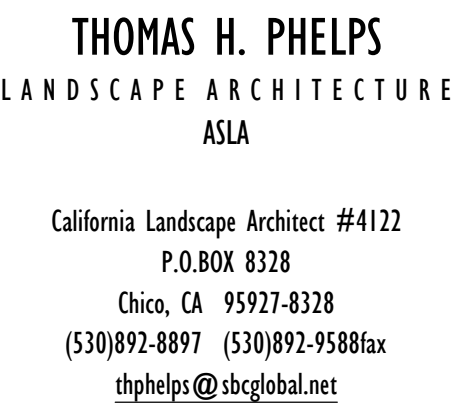
SHEET NO.
UT1
OF **1**

DATE: FEBRUARY 28, 2018



PLANT SCHEDULE

Dutch Bros. Shade Calculations			
<u>Tree</u>	<u>Interior Planter - 100%</u>	<u>South, East and West - 50%</u>	<u>Corner and North - 25%</u>
Quercus lobata		1 X (962) *.50 = 481	
Valley Oak			
Platanus x acerifolia	1 x (962)=962		2 x (962)*.25 = 481
London Plane Tree			
Calculated Total	962	481	481
Total Shade Provided	1,924		
Area Required to be shaded:	3,485 x 50% = 1,743 sf	1,924 > 1,729 sf	
	Shade provided exceeds amount required, Thus shading requirements satisfied		



PLANTING PLAN

- | | | |
|---|--|---|
| <p>NOTES:</p> | <p>F. The Project Landscape Plans shall comply with the following:</p> | <p>SOIL PREPARATION AND AMENDING:</p> |
| <p>A. Around trash enclosures, canports, pool equipment, electric transformers, cable boxes, etc.) landscaping shall be designed to provide a visual screen.</p> <p>B. A Soils Fertility Test with recommendations shall be provided with the Landscape documentation Package per the Model Water Efficient Landscape Ordinance (MNELO) Requirements. The Landscape Contractor is responsible for obtaining a soils report. The soils test shall be collected after grading operations and prior to installation of landscape materials. The Landscape Contractor shall install all soil amendments, as recommended or better, to correct deficiencies noted by the soils report</p> <p>C. Shrub planting shall be a minimum five-gallon size. Groundcover plants used for mass planting shall be containerized woody, shrub groundcover plantings planted no farther apart than three (3'-0") feet on center in order to achieve full coverage within one (1) year.</p> <p>D. The landscape plans will comply with the requirements of the Model Water Efficient Landscape Ordinance (MNELO).</p> <p>E. A Certificate of Completion shall be obtained from the City and the project applicant shall fill out the certificate to the satisfaction of the City upon completion of the landscape project.</p> | <ul style="list-style-type: none"> • The Landscape Plan shall indicate the location of, and be designed to avoid conflicts with, all pole-mounted light fixtures and utility equipment including (but not limited to) electric transformers, switchgear, and overhead lines, backflow preventors, fire department connections, and public water, sewer, and storm drain facilities. (Planning, Fire, EUD, Electric, Public Works) • The tree plantings in the parking lot are designed to provide a minimum of 50% shade coverage after 15 years. (Planning) • At a minimum, landscaped areas not covered with live material shall be covered with a rock, (2") bark (no shredded bark) or (2") mulch covering. (Planning) • The landscape plan complies with the City of Roseville Water Efficient Landscape ordinance (Ordinance 4786, adopted 11/04/2009). (Planning) • All landscaping in areas containing electrical service equipment shall conform with the Electric Department's Landscape Requirements and Work Clearances as outlined in Section 10.00 of the Departments "Specification for Commercial Construction." (Electric) | <p>A. After rough grading operations, the contractor is responsible for obtaining a soils report that provides an analysis of the existing soil that states what soil amendments are required for optimum planting growth. The contractor shall incorporate the recommended quantities by thoroughly cultivating all planting areas to a depth of eight (8) inches. Rough finish grade all areas.</p> <ol style="list-style-type: none"> 1) Broadcast the following soil amendments. Quantities given are per 1,000 square feet of area. <ul style="list-style-type: none"> • Nitrogen stabilized and Iron fortified compost: per soil analysis recommendations, or 4 cy for bid purposes • Pelletized fertilizer (21-0-0), 10lbs., or as per soil analysis recommendations • Soil Sulfur: per soil analysis recommendations 2) Cultivate and thoroughly incorporate the amendments into the top eight (8) inches of soil. 3) De-rock area to be planted by using a mechanical rock picker. All rocks larger than 1 inch in diameter are to be removed.. <p>E. Install 3" depth fir bark mulch over all shrub and ground cover planting areas. Bark mulch shall be wood residual derived and manufactured from Pine, White and/or Red Fir Tree bark. The material shall be equal to that referred to as 'Walk on Bark' in the trade.</p> |

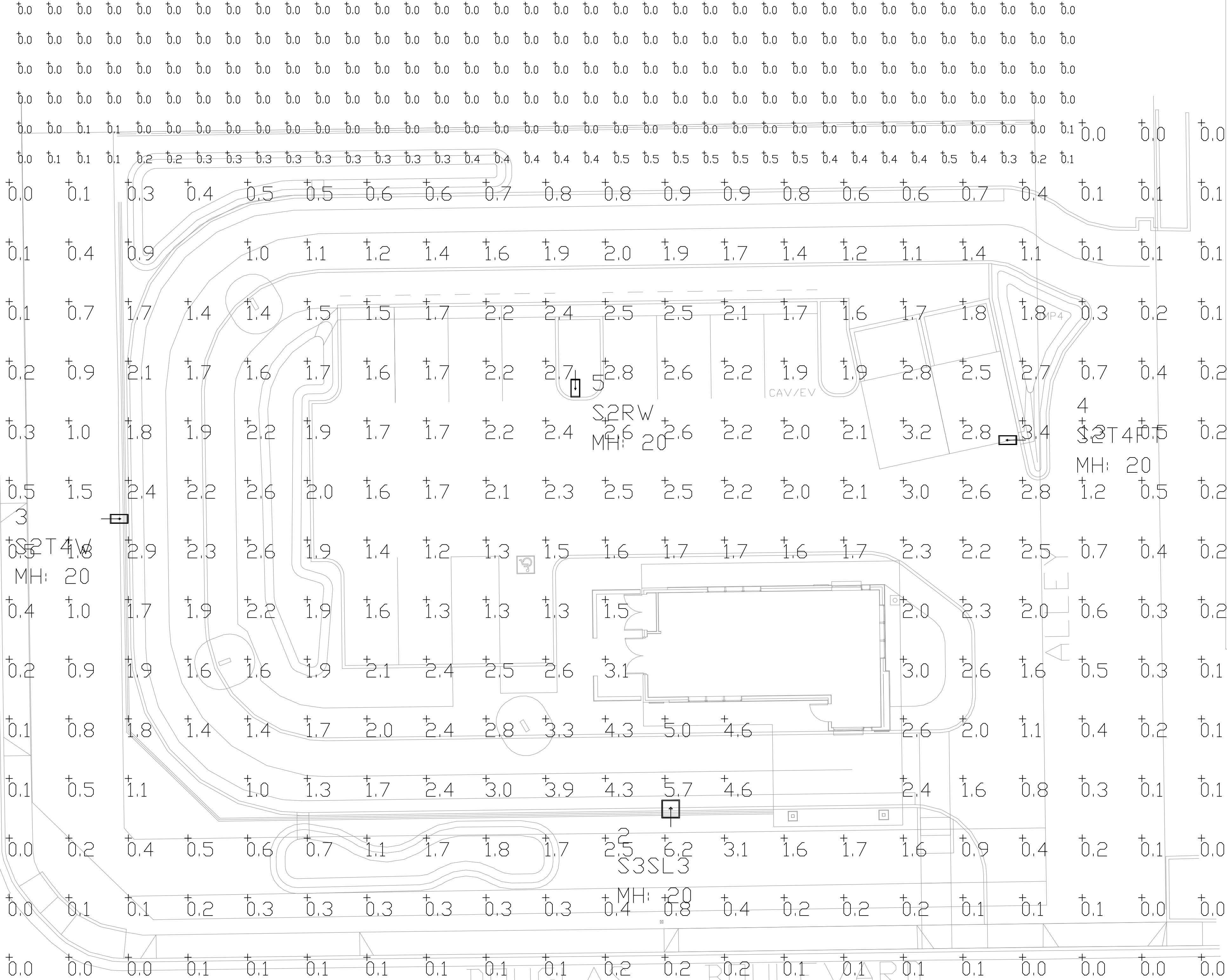


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USER: RSC\JCS Date: 02/28/18 Time: 11:24 AM
PLOT DATE: Feb 28, 2018 Time: 9:32:36 PM

Calculation Summary				
Label	Description	Max	Min	Max/Min
CalcPts_1		6.2	0.0	N.A.
Spill 2		0.5	0.0	N.A.

Luminaire Schedule						
Symbol	Label	Arrangement	LLF	Lum. Watts	Qty	Description
	S3SL3	SINGLE	0.850	166	1	McGraw-Edison GLEDN-AF-03-LED-E1-SL3 - 17' Pole on 3' Base
	S2T4FT	SINGLE	0.850	113	1	McGraw-Edison GLEDN-AF-02-LED-E1-T4FT-7030 - 17' Pole on 3' Base
	S2T4W	SINGLE	0.850	113	1	McGraw-Edison GLEDN-AF-02-LED-E1-T4W-7030 - 17' Pole on 3' Base
	S2RW	SINGLE	0.850	113	1	McGraw-Edison GLEDN-AF-02-LED-E1-RW-7030 - 17' Pole on 3' Base

DONNER AVENUE



DOUGLAS BOULEVARD

PC Exhibit E

McGraw-Edison

DESCRIPTION
The Galleon™ LED luminaire delivers exceptional performance in a highly scalable, low-profile design. Patented, high-efficiency AccuLED Optics™ system provides uniform and energy conscious illumination to walkways, parking lots, roadways, building areas and security lighting applications. IP66 rated and UL/cUL Listed for wet locations.

SPECIFICATION FEATURES

Construction
Extruded aluminum driver enclosure thermally isolated from Light Squares for optimal thermal performance. Heavy wall, die-cast aluminum end caps enclose housing and die-cast aluminum heat sinks. A unique, patent pending interlocking housing and heat sink provides scalability with superior structural rigidity. 3G vibration tested and rated. Optional tool-less hardware available for ease of entry into electrical chamber. Housing is IP66 rated.

Optics
Patented, high-efficiency injection-molded AccuLED Optics technology. Optics are precisely designed to shape the distribution maximizing efficiency and application spacing. AccuLED Optics creates consistent distributions with the scalability to meet customized application requirements. Offered standard in 4000K (w/ 2780 CCT 70 CRI). Optional 3000K, 5000K and 6000K CCT.

Electrical
LED drivers are mounted to removable tray assembly for ease of maintenance. 120-277V 50/60Hz, 347V 60Hz or 480V 60Hz operation. 480V is compatible for use with 480V Wye systems only. Standard with 0-10V dimming. Shipped standard with Eaton proprietary circuit module designed to withstand 10kV of transient line surge. The Galleon LED luminaire is suitable for operation in -40°C to 40°C ambient environments. For applications with ambient temperatures exceeding 40°C, specify the HA (High Ambient) option. Light Squares are IP66 rated. Greater than 90% lumen maintenance expected at 60,000 hours. Available in standard 1A drive current and optional 600mA, 800mA and 1200mA drive currents (nominal).

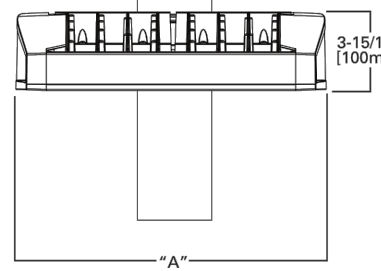
Mounting
STANDARD ARM MOUNT: Extruded aluminum arm includes internal bolt guides allowing for easy positioning of fixture during mounting. When mounting two or more luminaires at 90° and 120° apart, the EA extended arm may be required. Refer to the

arm mounting requirement table. Round pole adapter included. For wall mounting, specify wall mount bracket option. **QUICK MOUNT ARM:** Adapter is bolted directly to the pole. Quick mount arm slide into place on the adapter and is secured via two screws, facilitating quick and easy installation. The versatile, patent pending, quick mount arm accommodates multiple drill patterns ranging from 1-1/2" to 4-7/8". Removal of the door on the quick mount arm enables wiring of the fixture without having to access the driver compartment. A knock-out enables round pole mounting.

Finish
Housing finished in super durable TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Heat sink is powder coated black. Standard housing colors include black, bronze, grey, white, dark platinum and graphite metallic. RAL and custom color matches available.

Warranty
Five-year warranty.

DIMENSIONS



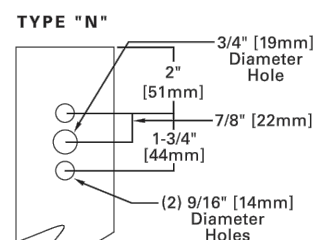
DIMENSION DATA

Number of Light Squares	"A" Width 16-1/2" (394mm)	"B" Standard Arm Length 7" (178mm)	"B" Optional Arm Length 10" (254mm)	Weight with Arm (lbs.) 33 (15.0 kgs.)	EPA with Arm 1 (Sq. Ft.) 0.96
1-4	21-5/8" (549mm)	7"	10"	44 (20.0 kgs.)	1.00
5-6	27-5/8" (702mm)	7"	10"	64 (29.0 kgs.)	1.07
7-8	33-3/4" (857mm)	7"	10"	83 (37.6 kgs.)	1.12

NOTES: 1. Optional arm length to be used when mounting two fixtures at 90° on a single pole. 2. EPA calculated with optional arm length.



DRILLING PATTERN



*www.designlights.org

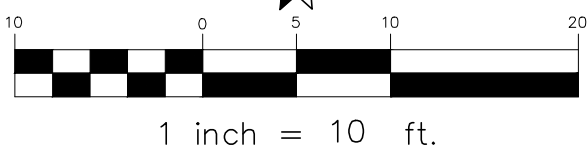
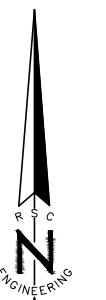


CERTIFICATION DATA
UL/cUL Wet Location Listed
ISO 9001
LM79 / LM80 Compliant
3G Vibration Rated
IP66 Rated
DesignLights Consortium™ Qualified*

ENERGY DATA
Electronic LED Driver
>0.9 Power Factor
<20% Total Harmonic Distortion
120V/277V 50/60Hz
347V & 480V 60Hz
>40°C Min. Temperature
40°C Max. Temperature
90°C Max. Temperature (HA Option)

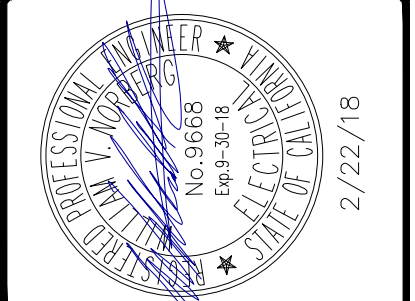


TD500020EN
2016-09-28 15:31:55



ETHAN CONRAD
PROPERTIES

DATE	BY	CITY	APPROVED



RSC ENGINEERING
2250 Douglas Blvd., Suite 150
Roseville, CA 95661
Ph: 916.786.2684 Fax: 916.786.4408

PROJECT NO:	12133
DRAWN BY:	WVN
CHECKED BY:	
DESIGNED BY:	

**PRELIMINARY SITE PLAN
DRIVE-THRU COFFEE KIOSK**

**1017 DOUGLAS BLVD. & 229 DONNER AVE.
ROSEVILLE, CA 95678**

SHEET TITLE
PHOTOMETRIC PLAN

SHEET NO.
E1
1 OF 1

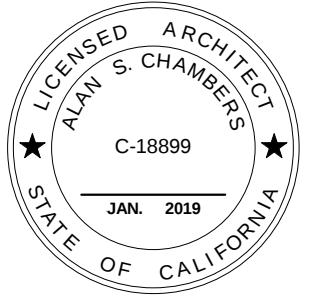
DATE: FEBRUARY 7, 2018

PC Exhibit F

Eagle Architects

349 Silver Lake Drive
Chico, CA 95973
530-898-0123

ALAN CHAMBERS
Architect



DUTCH BROS. DOUGLAS
1017 DOUGLAS BLVD.
ROSEVILLE, CA

[illegible]

DUTCH BROS.
COFFEE

EXTERIOR
ELEVATIONS
COLOR

Project number	1709
Date	12/13/17
Drawn by	KC
Checked by	AC

DR-4B

Scale	1/4" = 1'-0"
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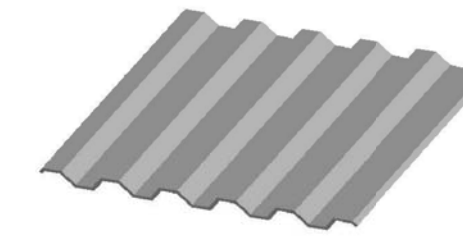
AEP SPAN, CLIP SYSTEM
COLOR: DUTCH BROS.
BLUE



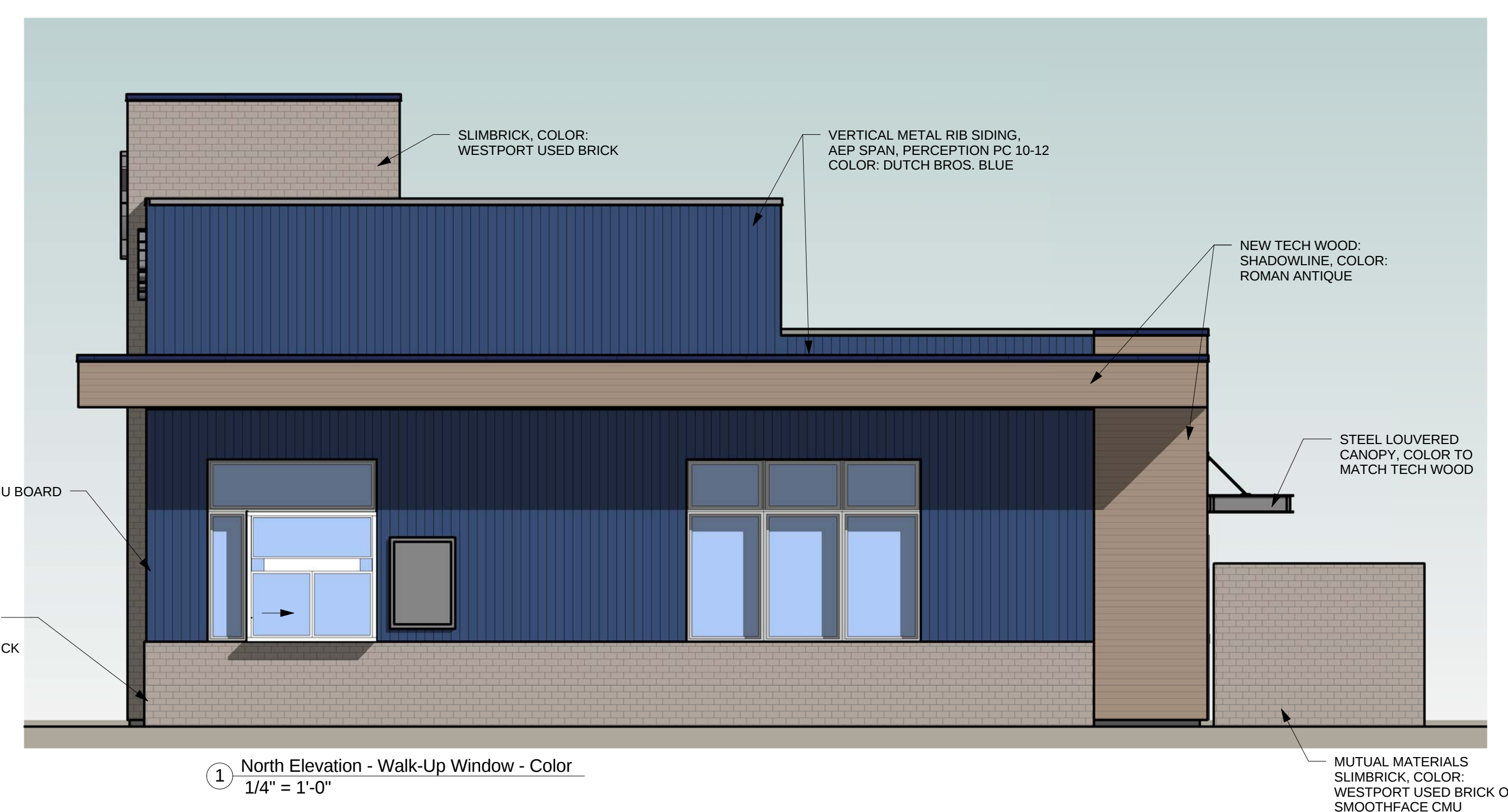
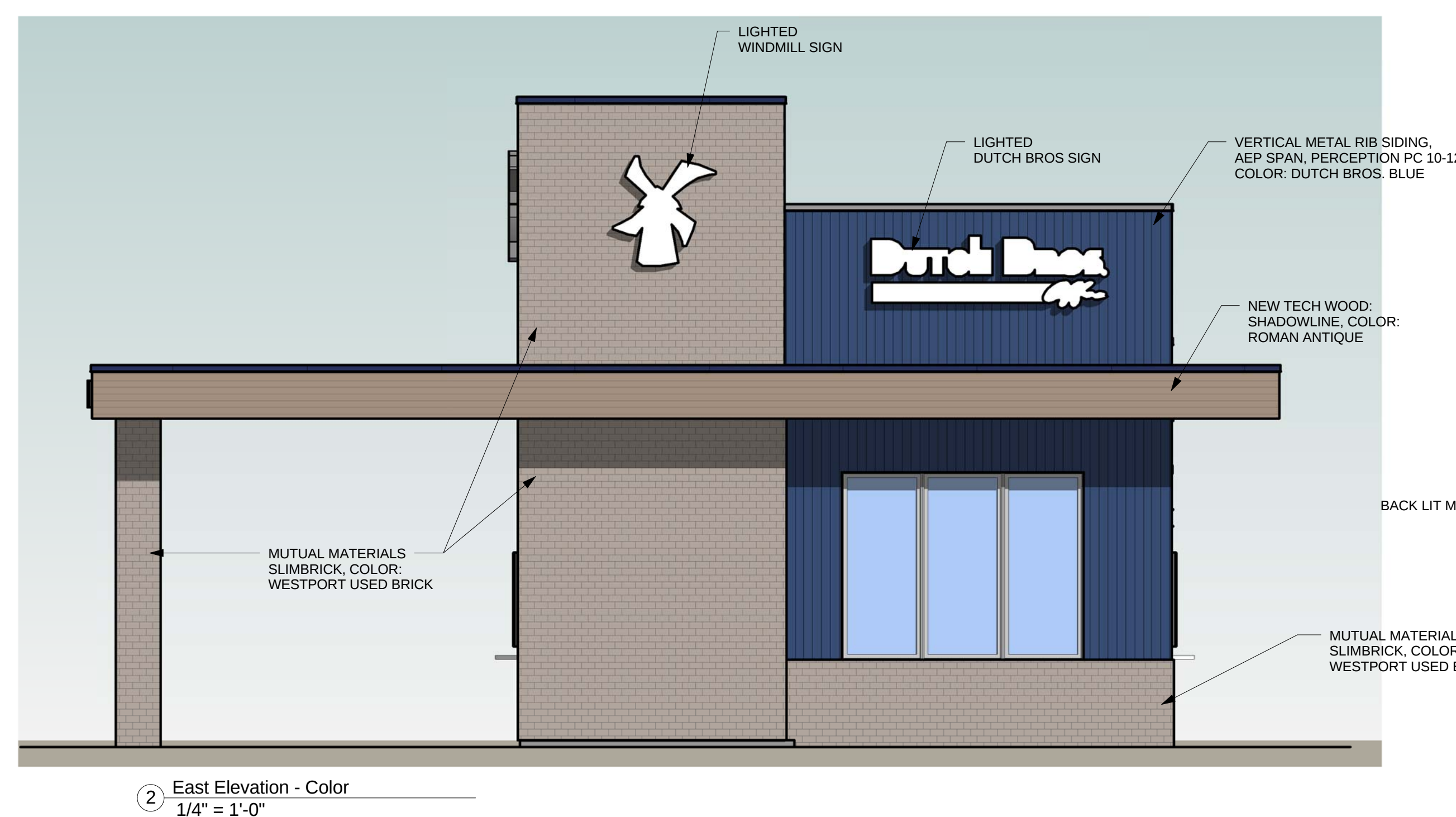
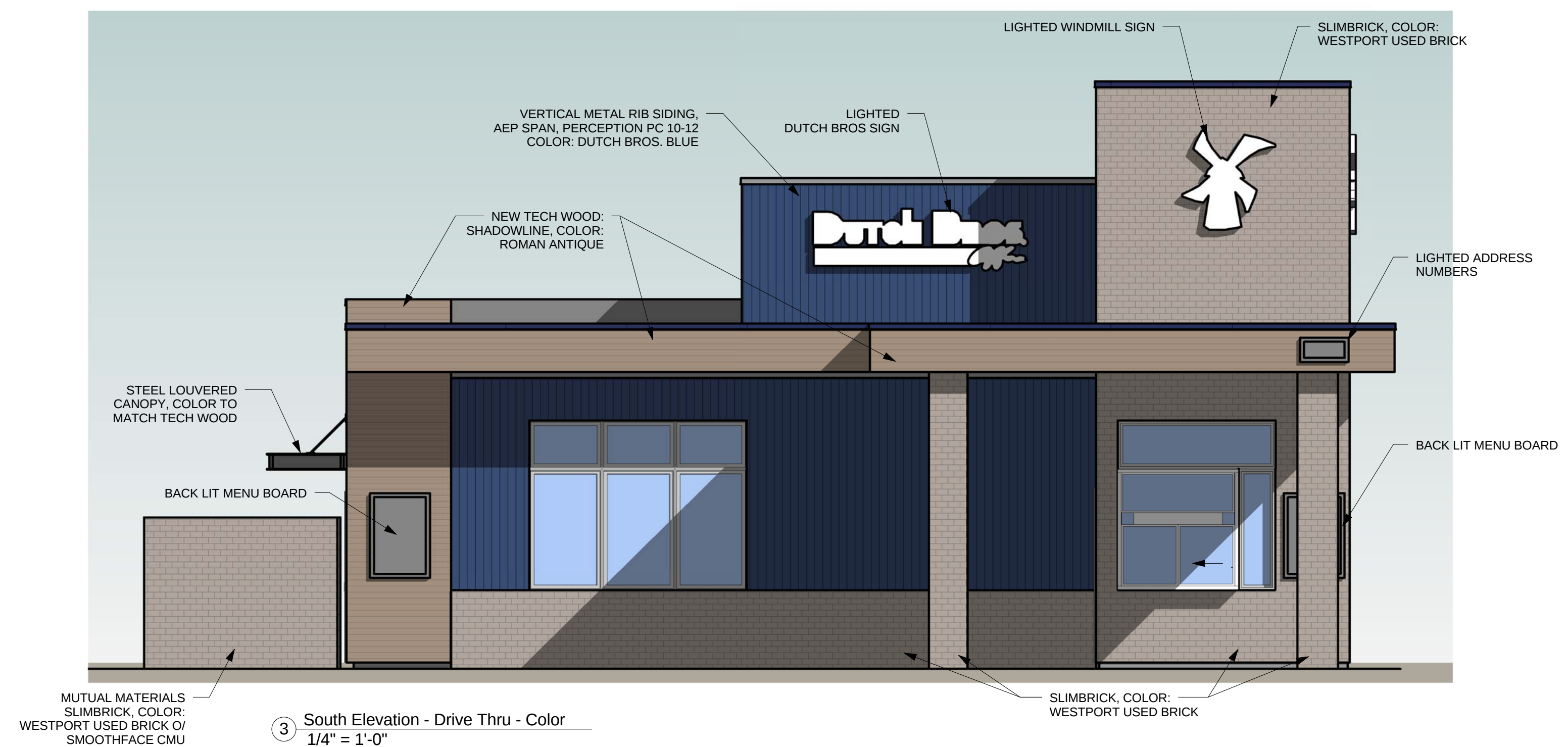
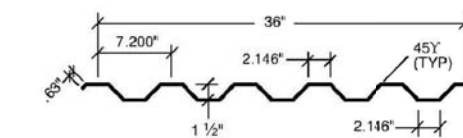
NEW TECH WOOD: SHADOWLINE,
COLOR: ROMAN ANTIQUE



MUTUAL MATERIALS SLIMBRICK,
COLOR: WESTPORT USED BRICK



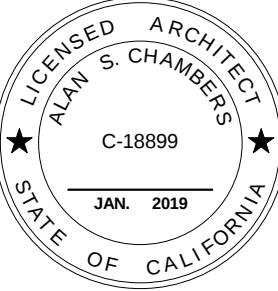
SOFFIT: MBCI - METAL WALL AND ROOF SYSTEM
26 GA. CORRUGATED PANE (EXPOSED FASTENER)
COLOR: GALVALUME



Eagle Architects

349 Silver Lake Drive
Chico, CA 95973
530-898-0123

ALAN CHAMBERS
Architect



DUTCH BROS. DOUGLAS
1017 DOUGLAS BLVD.
ROSEVILLE, CA

No.	Description	Date

DUTCH BROS. COFFEE

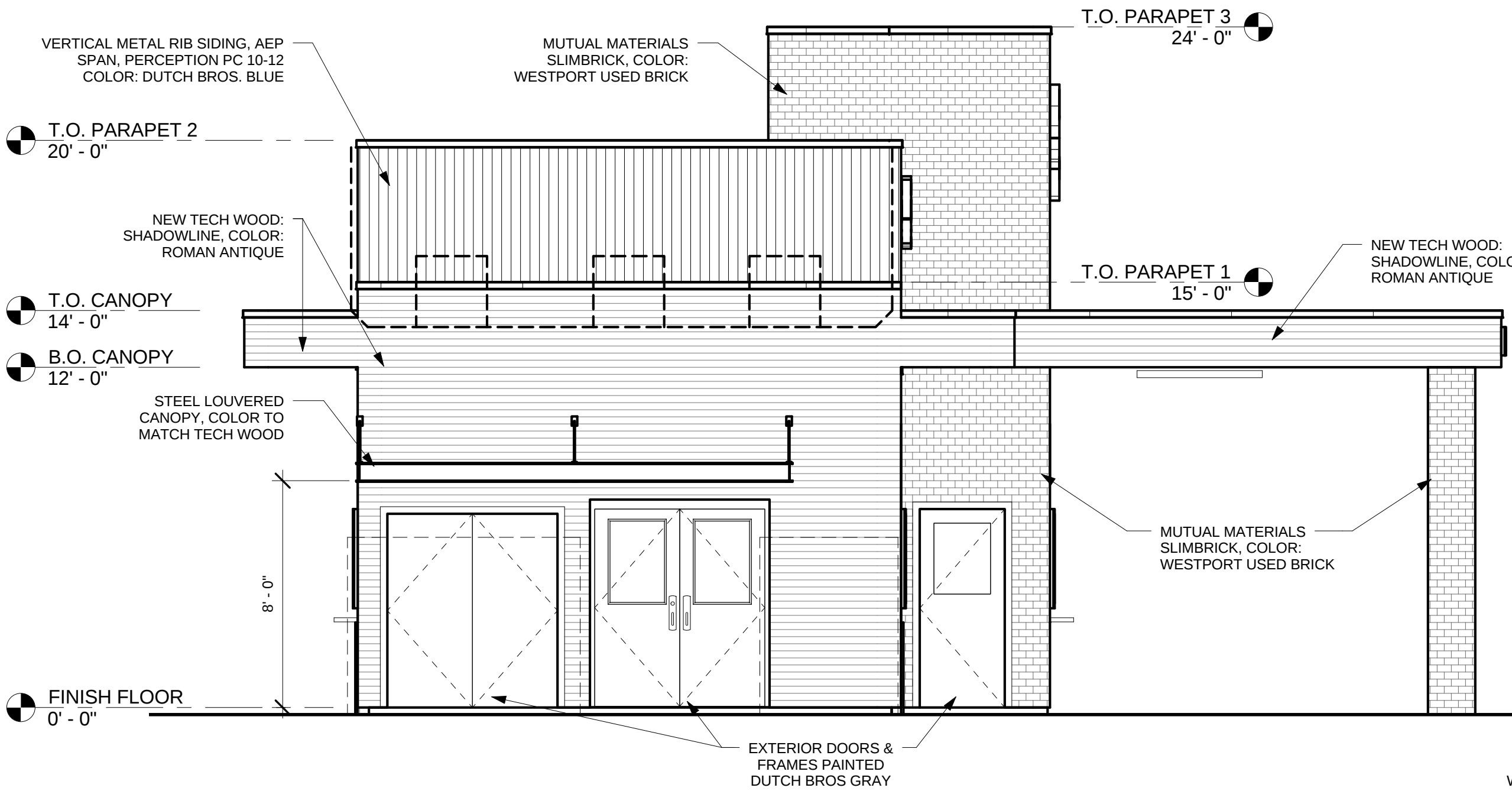
EXTERIOR ELEVATIONS

Project number	1709
Date	12/13/17
Drawn by	KC
Checked by	AC

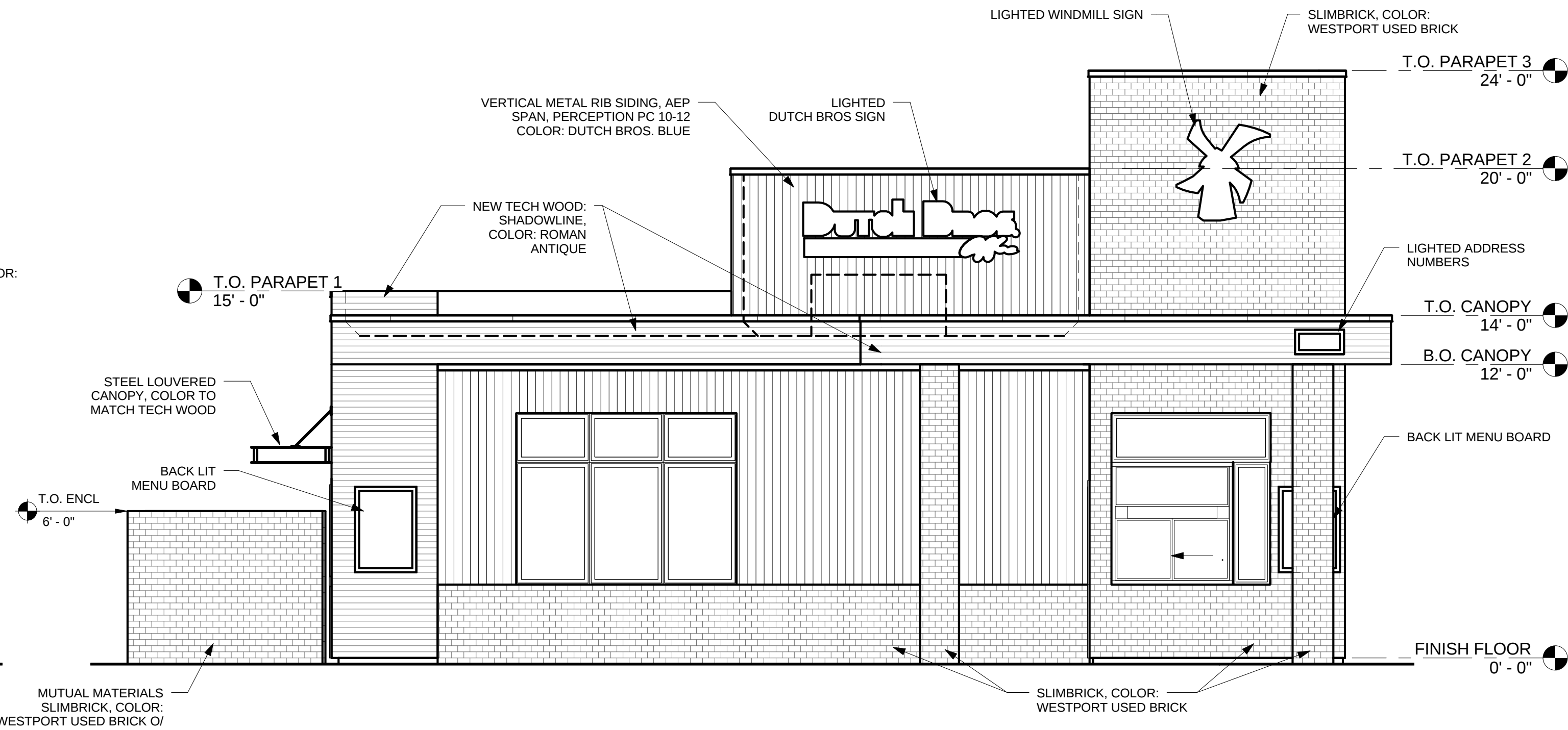
DR-4A

Scale	1/4" = 1'-0"
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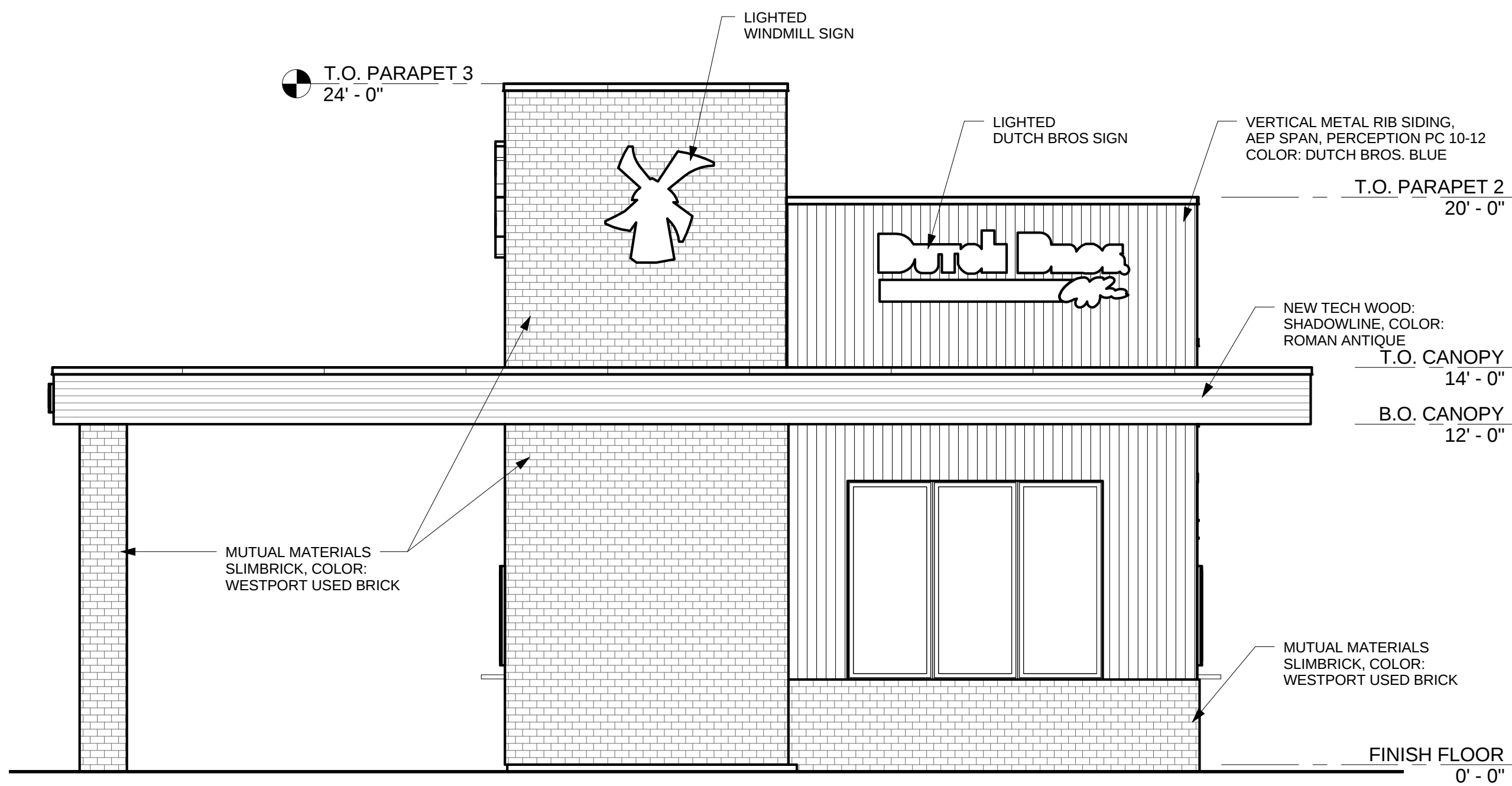
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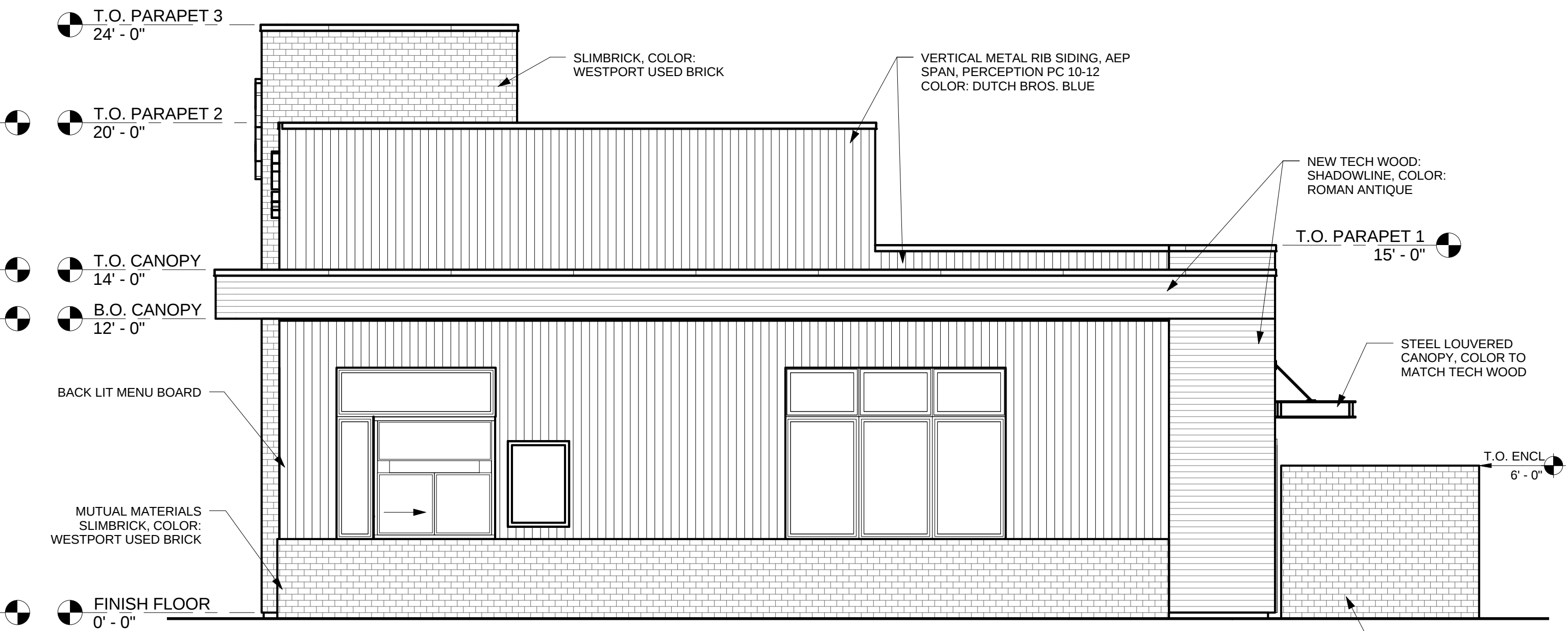
④ West Elevation - Donner Ave
1/4" = 1'-0"



③ South Elevation - Drive Thru - Douglas Blvd
1/4" = 1'-0"



② East Elevation
1/4" = 1'-0"



① North Elevation - Walk-Up Window
1/4" = 1'-0"