



AGENDA

May 18, 2021

TRANSPORTATION COMMISSION MEETING
6:00 P.M.
311 VERNON STREET
ROSEVILLE, CA
www.roseville.ca.us

Commissioners may teleconference pursuant to Executive Order N-29-20.

Members of the public may view the meeting on Comcast channel 14, Consolidated Communications channel 73 and AT&T U-verse. Meetings are also video streamed live and are available on the City's website and YouTube channel.

Members of the public may offer public comment by the following means:
Dial in Phone Number: 916-774-5353, Email: publiccomment@roseville.ca.us

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

THE CITY OF ROSEVILLE WELCOMES YOUR PARTICIPATION

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

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

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

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

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

Audio/Visual Presentations - If making a presentation regarding an agenda item, audio/visual

materials must be submitted to the City Clerk or Secretary at least 72 hours in advance.

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. MINUTES

5.1. Approval of the January 19, 2021 Minutes

6. REQUESTS/PRESENTATIONS

6.1. Placer Rides Non-Emergency Medical Transportation Services Changes

This item is an informational update regarding Placer Rides, a new program that will result in changes to non-emergency medical transportation services in Placer County.

6.2. Mahany Park Open Space Multi-Use Trail Feasibility Study

The Mahany Park Open Space Multi-Use Trail Feasibility Study resulted in a proposed trail alignment through the open space that will connect existing trails leading into the study area and close gaps in the City's bikeway network. The study process included evaluation of existing trails, approved planning documents, field walks with assessment of existing conditions, monthly Project Development Team meetings including the consultant and City staff, consultation with regulatory agencies, interviews with nearby stakeholders, and a robust community engagement program. The proposed alignment through the Mahany open space provides various lengths of recreational loop trails along with important active transportation connections between residential areas, schools, employment, shopping, and recreational amenities. Staff recommends the Transportation Commission request that City Council accept the study and direct staff to pursue funding opportunities for the next steps including environmental documents, permits, design, and construction.

6.3. Fiscal Year 2020/21 Semi-Annual Transit Performance Report

This item is an informational update regarding the status of Roseville Transit operations and planning activities.

6.4. Public Works Capital Improvement Projects for Fiscal Year 2022

Public Works Director Jason Shykowski will be providing an informational presentation on planned Capital Improvement Projects for Fiscal Year 2022.

7. BOARD MEMBER / COMMISSIONER / STAFF REPORT

8. ADJOURNMENT



TRANSPORTATION COMMISSION COMMUNICATION

Title: Placer Rides Non-Emergency Medical Transportation Services Changes

Contact: Michael Dour, mdour@roseville.ca.us, (916) 746-1304

Meeting Date: 5/18/2021

Item #: 6.1.

RECOMMENDATION

No action is requested. This item is an informational update regarding upcoming changes to non-emergency medical transportation services in Placer County.

BACKGROUND

Kathleen Hanley, Associate Planner for the Placer County Transportation Planning Agency (PCTPA) and the West Placer Consolidated Transportation Service Agency (WPCTSA), will be providing an information presentation regarding upcoming changes to non-emergency medical transportation services in Placer County. A new program called Placer Rides will replace two existing WPCTSA programs, Health Express and My Rides. For background information, please see the staff report and service policies presented to the WPCTSA Board of Directors at their meeting on April 28, 2021.

Respectfully Submitted,

Michael Dour, Alternative Transportation Manager

Jason Shykowski, Public Works Director

ATTACHMENTS:

Description

WPCTSA Staff Report

Placer Rides Service Policies



**Consolidated
Transportation
Services Agency**

MEMORANDUM

TO: WPCTSA Board of Directors

DATE: April 28, 2021

FROM: Kathleen Hanley, Associate Planner

**SUBJECT: PUBLIC HEARING: NON-EMERGENCY MEDICAL TRANSPORTATION
SERVICE CHANGES**

ACTION REQUESTED

1. Conduct a public hearing to obtain testimony regarding staff-recommended changes to WPCTSA's non-emergency medical transportation programs.
2. Adopt Resolution No. 21-13 to eliminate the Health Express program.
3. Adopt Resolution No. 21-14 to eliminate the My Rides program.
4. Adopt Resolution No. 21-15 to establish the Placer Rides program.
5. Adopt the Placer Rides Service Policies as presented in the staff report
6. Adopt FY 2020/2021 Budget Amendment #2 as presented in the staff report

BACKGROUND

WPCTSA funds two non-emergency medical transportation services, known as Health Express and My Rides. Health Express provides Dial-A-Ride equivalent trips for medical appointment trips between Placer County's jurisdictions. My Rides matches passengers with volunteer drivers and reimburses drivers for mileage for medical appointment trips anywhere in Placer County. Both programs are funded by WPCTSA's Local Transportation Fund (LTF) apportionment. Ridership on both services and funding has been significantly limited by shelter-in-place restrictions and decreased sales tax revenue as a result of the COVID-19 pandemic. As a result, the cost per trip has increased and the number of passengers the service can accommodate has decreased.

At their February 2021 meeting, the WPCTSA Board of Directors directed staff to develop an alternative voucher-based non-emergency medical transportation program to more cost-effectively provide these trips based on the TRIP model developed by the Riverside-based nonprofit, Independent Living Partnership (ILP).

DISCUSSION

Due to COVID-19 social distancing restrictions and long trips lengths, Health Express has not been able to reach the shared-ride efficiency it was intended to have. Over the last year, Health Express has served 2,569 one-way trips covering 47,542 miles. With that long mileage, Health express is only serving 0.6 trips per hour. With this limited availability, only about 7 unique individuals utilize the Health Express service each month. Health Express costs about \$550,000 a year to operate—about \$212 per one-way trip and \$5,101 per unique individual annually.

Given the inefficiency of Health Express service, WPCTSA staff, in partnership with Placer agency staff, our service provider Seniors First and other social service partners, have developed a new transportation assistance program, called Placer Rides, to replace the Health Express and My Rides programs and to balance WPCTSA's long-term budget. Placer Rides builds upon My Rides much more efficient volunteer driver model but tweaks its format to help the program scale. As it currently functions, My Rides could

WPCTSA Board of Directors
Public Hearing: NEMT Service Changes
April 28, 2021
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not absorb Health Express' demand because it requires Seniors First staff to recruit and maintain volunteer lists and match drivers and riders for each trip.

Placer Rides empowers riders to locate volunteer drivers from within their own community networks and reimburses them for eligible trips on a per-mile basis up to 200 miles per month. Because this new program eliminates the expenses associated with professional driver requirements and the overhead required to individually match volunteers, the new Placer Rides program will be open to more individuals for more trip purposes while still decreasing expenses. To address the need for last-resort trips and fully accessible vehicle trips, Placer Rides will also cover the cost of Uber/Lyft and ADA taxi trips on a case-by-case basis. The full Placer Rides service policies are detailed in Attachment 1.

WPCTSA staff mailed notice of this public hearing to all registered Health Express and My Rides passengers. A notice of this public hearing was also published in the Auburn Journal on April 17, 2021. WPCTSA and Seniors First staff have received calls from many residents and have worked to clarify the recommended change and explain how to provide testimony at this public hearing. If the requested action is approved, WPCTSA staff will work with agency staff, and Seniors First to migrate existing Health Express and My Rides passengers to Placer Rides and to make the community aware of the new service. This work will include further mailers to existing passengers and presentations to relevant groups including the Placer County Older Adult Advisory Committee, Roseville Transportation Commission, Placer Collaborative Network, and the Placer Aging and Disability Resource Connection.

Staff recommends that the Board eliminate the Health Express and My Rides programs and establish the new Placer Rides program. June 30, 2021, is the proposed last day of service for Health Express and My Rides and July 1, 2021 is the proposed first day of service for Placer Rides. Staff further recommends that the Board adopt Placer Rides Service Policies (Attachment 1) and Amendment #2 to the FY 2020-2021 WPCTSA Budget (Attachment 2) to support these service changes. The TOWG and Technical Advisory Committee (TAC) concurred with the staff recommendation at their April 12th and April 13th meetings, respectively.

KH:ML:ss



Placer Rides Service Policies

Transportation Assistance Program

Service Description

Placer Rides is a voucher-based transportation assistance program jointly administered by Western Placer Consolidated Transportation Services Agency (WPCTSA) and Seniors First. Eligible riders are reimbursed on a per-mile basis for eligible trips provided by volunteer drivers in private vehicles.

Rider Eligibility

To be eligible for Placer Rides, individuals must be:

1. Residents of Placer County who can demonstrate they are:
 - Seniors (60 +), or
 - Individuals with Disabilities, or
 - Low Income Individuals
2. *And* do not have another means to take essential trips. Potential riders will describe their inability to drive or be driven, or take another form of public transportation.

Trip Eligibility

Placer Rides is meant to provide last-resort trips. If an eligible rider has another means of taking a trip, including utilizing public transportation, that trip is not eligible for reimbursement through Placer Rides. If an eligible rider has no other means, trip purposes that are eligible for reimbursement include:

- All non-emergency medical trips including clinical, dental, vision, preventative screenings, mental health, addiction treatment, dialysis, chemotherapy, radiation, and physical therapy
- Essential errands including food and basic goods shopping, pharmacy trips, correctional and rehabilitation appointments, and government assistance appointments
- Trips to bus stop, train station, or airport to make connections for a listed eligible purpose
- Trips determined to be eligible on a case-by-case basis by WPCTSA and Seniors First staff

Placer Rides does not have established service days or hours. As long as the trips are for an eligible purpose, trips can be taken at any time agreed upon by the rider and their volunteer. Similarly, trips can include multiple stops as long as each stop is an eligible purpose and the stops are mutually agreed upon by the rider and their volunteer.

Volunteer Drivers

Placer Rides is a rider-centric program. Riders are expected to recruit their own volunteers and coordinate their rides without the assistance of Placer Rides staff. Neighbors, friends, acquaintances, and caregivers all make great volunteer drivers. In general, it is Placer Rides' policy that if a family is financially able to provide a trip, it is not a trip of last resort. However, in cases where a rider can demonstrate financial need, family members are eligible to be volunteers and receive reimbursement. Placer Rides staff do not recruit, screen, train, match, or manage volunteer drivers. However, Placer Rides staff are available to coach riders and make suggestions on how to secure their own volunteers. In addition, Placer Rides staff do maintain a list of potential volunteers who are willing to provide trips, but it is the riders responsibility to make contact.

Placer Rides Service Policies, cont.

Physical Assistance, Mobility Devices, Service Animals, and Personal Attendants

Placer Rides riders may bring mobility devices (walkers, scooters, wheelchairs, etc), service animals, and/or personal attendants as long as their volunteer has agreed to accommodate them. Additionally, riders who need physical assistance getting in and out of the vehicle are eligible for Placer Rides so long as they secure a volunteer who is willing to provide that physical assistance.

Monthly Trip Limits

Placer Rides riders are eligible to receive reimbursement for up to 200 miles per month. There is no maximum for individual trips. If riders request reimbursement for more than 200 miles, they will only be reimbursed for the first 200 miles.

Last Resort Placer Rides

If an eligible rider has an urgent need for an eligible trip and is unable to secure a volunteer to provide that trip, Placer Rides staff may, at their discretion, arrange for the trip to be provided by a private transportation service (Uber/Lyft, taxi, ADA transportation service). Placer Rides will cover the cost of a maximum of two such trips per rider per month.

Service Area

Placer Rides trips should begin and end in Placer County and only Placer County residents are eligible for Placer Rides. However, trips to and from medical facilities in Sacramento County including UC Davis Medical Center, Shriners Hospital, Mercy San Juan, Sutter Sacramento, Kaiser Sacramento, and the Veterans Affairs Hospitals are eligible for reimbursement through Placer Rides. At Placer Rides staff discretion, additional trips to destinations outside Placer County may be deemed eligible for reimbursement.

Application and Reimbursement Processes

To determine eligibility, prospective riders must complete the Placer Rides Application Form and submit it to Seniors First at the mailing address or email address included on the form. Individuals will be contacted by Placer Rides staff with the results of the eligibility determination. If approved, riders will be mailed a welcome packet including a program brochure, a copy of service policies, and reimbursement request forms. If there are any changes to the information submitted on the application form (address, phone number, disability status, income) riders are required to contact Placer Rides staff to update the information.

Reimbursement requests for a month must be received no later than the 10th day of the following month. Riders may only be reimbursed for up to 200 miles of eligible trips per month. In signing the reimbursement forms, riders are verifying the accuracy of reported trips. Miles are reimbursed according to the Internal Revenue Service standard mileage rate (\$0.56 per mile currently). Once processed, riders will receive a check in their name for the requested reimbursement. It is the riders responsibility to pass on the reimbursement to their volunteer driver(s).

Policy Violation

Riders and their volunteers are expected to follow all Placer Rides policies. If riders are found to be in violation of policy, including requesting reimbursement for ineligible trip purposes, requesting reimbursement for trips that did not occur, or requesting reimbursement without passing along reimbursement to the volunteer driver, the riders will be notified of the reported violation and suspended for 30 days. If a second violation is reported, the rider will be terminated from the Placer Rides program.



TRANSPORTATION COMMISSION COMMUNICATION

Title: Mahany Park Open Space Multi-Use Trail Feasibility Study
Contact: Jeannie Gandler jgandler@roseville.ca.us 916-746-1289

Meeting Date: 5/18/2021
Item #: 6.2.

RECOMMENDATION

Staff recommends the Transportation Commission request the City Council accept the Mahany Park Open Space Multi-Use Trail Feasibility Study and direct staff to pursue funding for the steps necessary to construct the trail.

BACKGROUND

The 133-acre Mahany Park Open Space Study Area (Study Area) is located in western Roseville between Fiddymont Road and Woodcreek Oaks Boulevard, south of Pleasant Grove Boulevard. The study area is adjacent to Mahany Park, the Roseville Aquatics Complex, and Woodcreek High School on the east and bounded by residential development on the north and south. Although part of the project area is a public park, most of the area was designated as an open space preserve in the early 1990's when residential construction projects were approved along the southern border of the Study Area. At that time, the west half of the Mahany Park Open Space was established as a preserve, and approximately 10 acres of vernal pools were created and interspersed next naturally occurring vernal pools throughout the area. The Silverado Oaks Urban Reserve, another open space preserve, is also located immediately south of the Study Area.

Study Goals and Process

The purpose of this feasibility study was to explore the potential for a paved multi-use trail through the Mahany Park Open Space, resulting in a conceptual alignment, cost estimates, and next steps leading to construction. Helix Environment Planning was hired to complete the study which included the following tasks:

- Establish a Project Development Team comprised of the consultants and relevant City staff;
- Field walks and preparation of Biological Resources, and an Opportunities and Constraints report;
- Develop and implement a robust public engagement program to learn about current use and desired uses of the open space area;
- Evaluate previously approved planning documents and suggested trail alignments including the City of Roseville Bicycle Master Plan (BMP), the Roseville Open Space and

Overarching Management Plan (OSOMP), and Specific Plans for developments adjacent to the area;

- Consultation with regulatory agencies regarding acceptable uses in the open space;
- Develop potential trail alignments for public review;
- Evaluate trail alignments based on public review; and,
- Develop a recommended alignment and cost estimate.

As described above, the Study Area includes open space and open space preserves that were established to protect natural resources, including vernal pools, wetlands, creeks and oak trees. However, the area has become popular for walking, running and biking and many user-created dirt paths have been established through the area. A paved, connected trail system through the open space may reduce impacts to natural resources, would provide additional year-round recreational opportunities, and would improve the connectivity of the City's trail system.

A trail through this area has been considered in several previous planning documents, including the Roseville Open Space Overarching Management Plan (OSOMP), the City of Roseville Bicycle Master Plan, and Specific Plans for developments adjacent to the area. This study refines the trail alignments previously considered in those documents based on site conditions, public engagement, information gathered from regulatory, utility, and City agencies and input from the City's project development team.

Public Engagement

A robust public engagement process was developed to inform the public about the study, current conditions, and to learn about potential user preferences leading to a recommended trail alignment. However, due to COVID-19 precautions and public health guidelines, public engagement components had to be adjusted. Methods of engaging the public and informing them about the study and the public engagement process and components included:

- Direct mailers
- News feature on ABC 10
- Email newsletters
- Facebook, Twitter, Instagram, Nextdoor notifications
- Signage in the project area.

Additionally, a project website was created and updated frequently by City staff, and includes an informational video. In-person workshops were replaced with two interactive online surveys. The first survey was designed to inform the public about the study, to learn how people currently use the open space, and how they would like to use the open space. The second online survey presented trail alignment alternatives based on information from the first online survey, field walks, site analysis including Biological Resources, Opportunities and Constraints reports, assessment of existing planning documents, consultation with regulatory agencies, phone interviews with stakeholders including Woodcreek High School biology and extra-curricular program teachers, and utility agencies.

Evaluation of Alignment Options

Trail alignment options, developed from the first public engagement/online survey along with a thorough assessment of existing conditions, were presented in the second public engagement/online survey. To simplify the presentation of the trail alignment options, the Study Area was split into east and west sections. Three trail alignment options were developed for the western half of the Study Area and two trail alignment options were developed for the eastern half of the Study Area. Any of the western trail alignment options would connect with either of the

eastern trail alignment options.

The western and eastern trail alignment options presented in the second online survey, also listed specific features of each trail alignment which contributed to the suggested location of the trail. Trail alignments were chosen that would include some or all of the following features:

- Avoid sensitive habitats including vernal pools
- Provide shaded areas
- Provide points of interest/educational opportunities
- Provide north-south connections through the open space to neighborhoods, shopping, schools, parks, roads, and transit stops
- Close gaps in the existing paved trail system by connecting to existing paved trails
- Connect to a planned trail in an adjacent development
- Connect to roadways near controlled intersections

A recommended alignment was developed based on thorough site assessments and the results received from the second public engagement/online survey.

Recommended Trail Alignment

The recommended trail alignment was developed using information from existing planning documents, site assessments resulting in the Biological Resources, Opportunities and Constraints reports, interviews with stakeholders, a robust public engagement program including two online interactive surveys, consultation with regulatory agencies, and ongoing coordination with City departments. The recommended trail alignment combines elements of the western and eastern trail alignment options presented in the second public engagement/online survey. It closes gaps in the existing bikeway system with approximately 2.4 miles of new trail through the Study Area. The proposed alignment is comprised of paved trails which provide varying lengths of recreational loops and connect users to all existing and planned trails surrounding and leading to the Mahany Park open space. The recommended trail alignment will also:

- Provide multiple connections to the surrounding neighborhoods, schools, transit stops, roads and parks
- Provide permanent all-weather crossings of creeks in the Study Area to allow safe use year-round
- Protect natural resources, including vernal pool habitat
- Maintain required access for existing utilities
- Close gaps in the trail and bikeway system to provide safe and convenient bicycle/pedestrian connections to recreational, educational and employment opportunities for people of all ages, abilities and incomes, and,
- Include a variety of amenities along the trail.

The preliminary cost to construct the trail, including a mid-block crossing on Fiddymment Road, ranges from 4.3 million dollars using standard paving materials to 6.7 million dollars if permeable materials are used throughout. This cost estimate includes all of the remaining steps to complete the project, which include additional traffic studies for a proposed mid-block crossing of Fiddymment Road, geotechnical studies, additional studies required by regulatory agencies, preliminary engineering, environmental reviews, permitting, final design, and construction.

Funding

Funding for the next steps of this project have not been identified. At City Council direction, staff will pursue funding through various federal, state and local sources over the next several years to

complete the project. General Fund and Measure B funds were not used for this study and are not used for multi-use trail construction.

Respectfully Submitted,

Jeannie Gandler, Administrative Analyst II/Bikeways

Jason Shykowski, Public Works Director

ATTACHMENTS:

Description

Mahany Park Open Space Multi-Use Trail Feasibility Study

Appendix A

Appendix B

Appendix C

Appendix D

Appendix E

Mahany Park Open Space Multi-Use Trail Feasibility Study

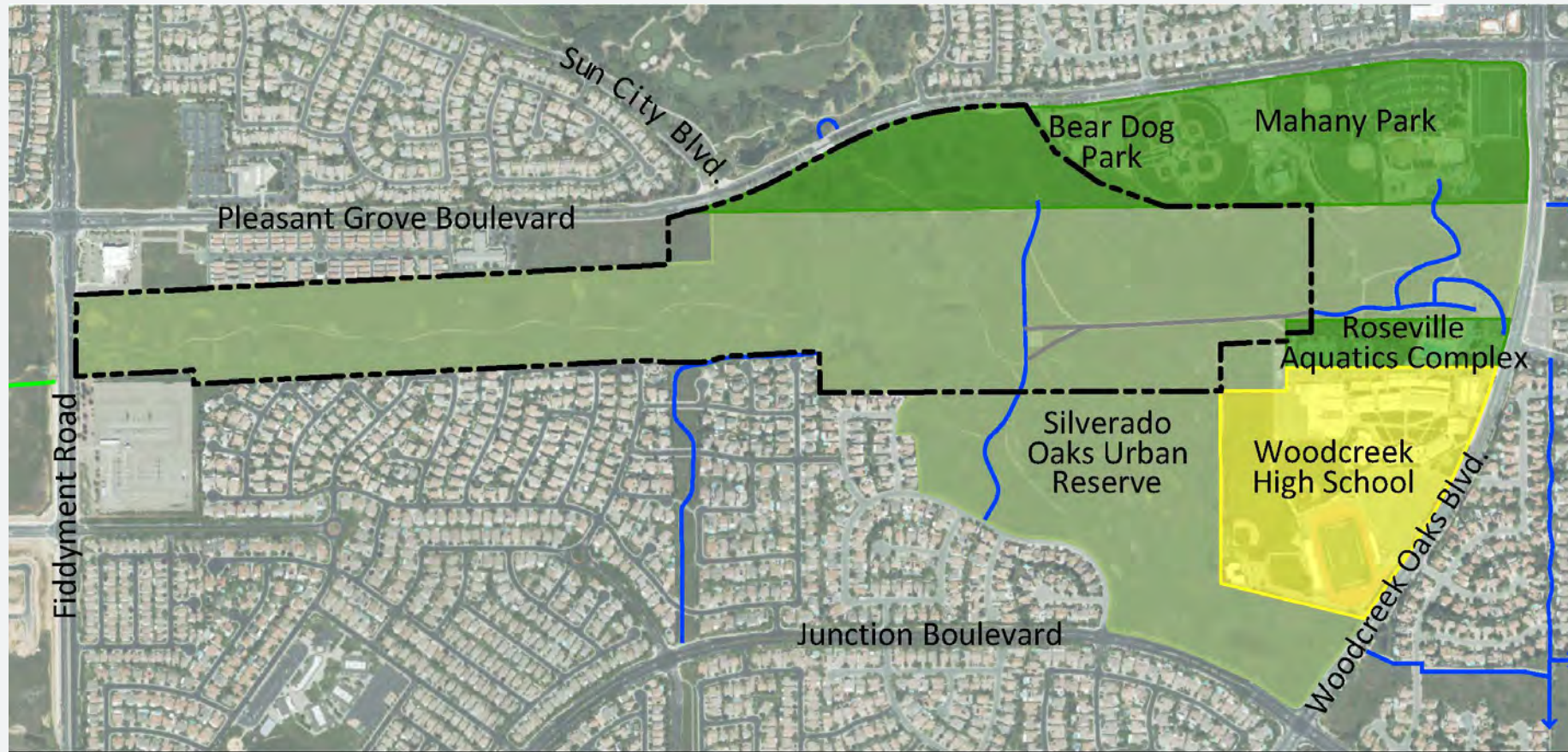


Meredith Branstad, HELIX Environmental Planning

Project Introduction

- Project Introductory Video

Project Location



Legend

- Open Space/Preserve
- Park
- School

- Existing Paved Multi-Use Trail
- Planned Multi-Use Trail
- Maintenance Access Road
- Limit of Study Area

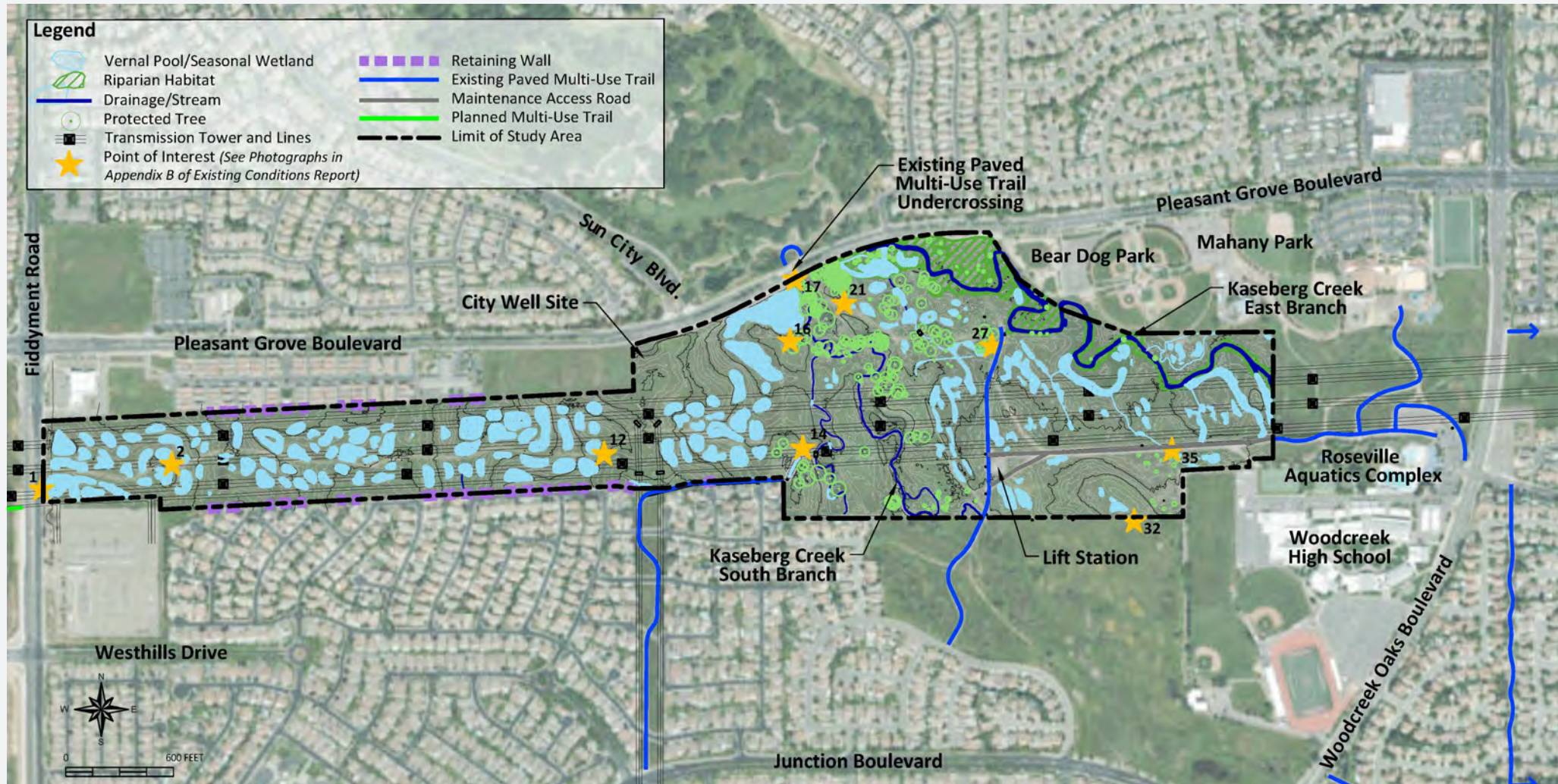


Existing Conditions

- Biological Constraints Assessment
- Opportunities and Constraints Assessment
- Review Existing Planning Documents and Design Standards
- Trail Use Studies
- Regulatory Agency Coordination
- Utility Coordination



Existing Conditions



Public Engagement - Online Survey #1

- May 26 to June 12, 2020
- Asked about current and desired access and use of site
- Publicized through:
 - Direct mailed postcards to 7,500 households
 - E-mail to over 48,000 people
 - Social media resulting in over 27,000 impressions
 - Informational signs placed around site
 - News story on ABC 10
- 1,306 responses



Public Engagement - Online Survey #1



Legend

- Dirt Path - width varies from 1'-8'
- Paved Multi-Use Trail
- Maintenance Access Road
- Proposed Multi-Use Trail
- Limit of Study Area
- Trail Use Count Location
- Most Used Current Access Point
- Most Desired Future Access Point

Public Engagement - Online Survey #2

- October 31 to November 13, 2020
- Presented options for alignments in the east and west half
- Publicized through:
 - E-mail to over 55,000 people
 - Social media resulting in over 15,200 impressions
 - Informational signs placed around site
- 326 responses

Public Engagement - Western Alignment Options



Option A



Option B

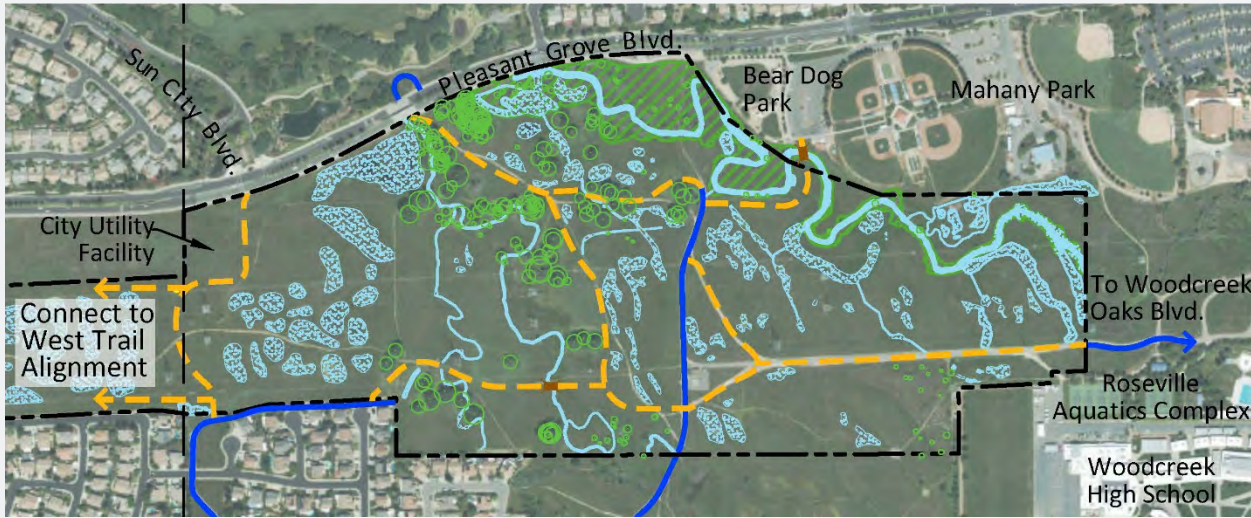


Option C

Legend

- Proposed Paved Multi-Use Trail
- Existing Paved Multi-Use Trail
- Planned Multi-Use Trail
- Vernal Pool/Creek
- Limit of Study Area
- Matchline Between East and West Areas

Public Engagement – Eastern Alignment Options



Option A



Option B

Legend

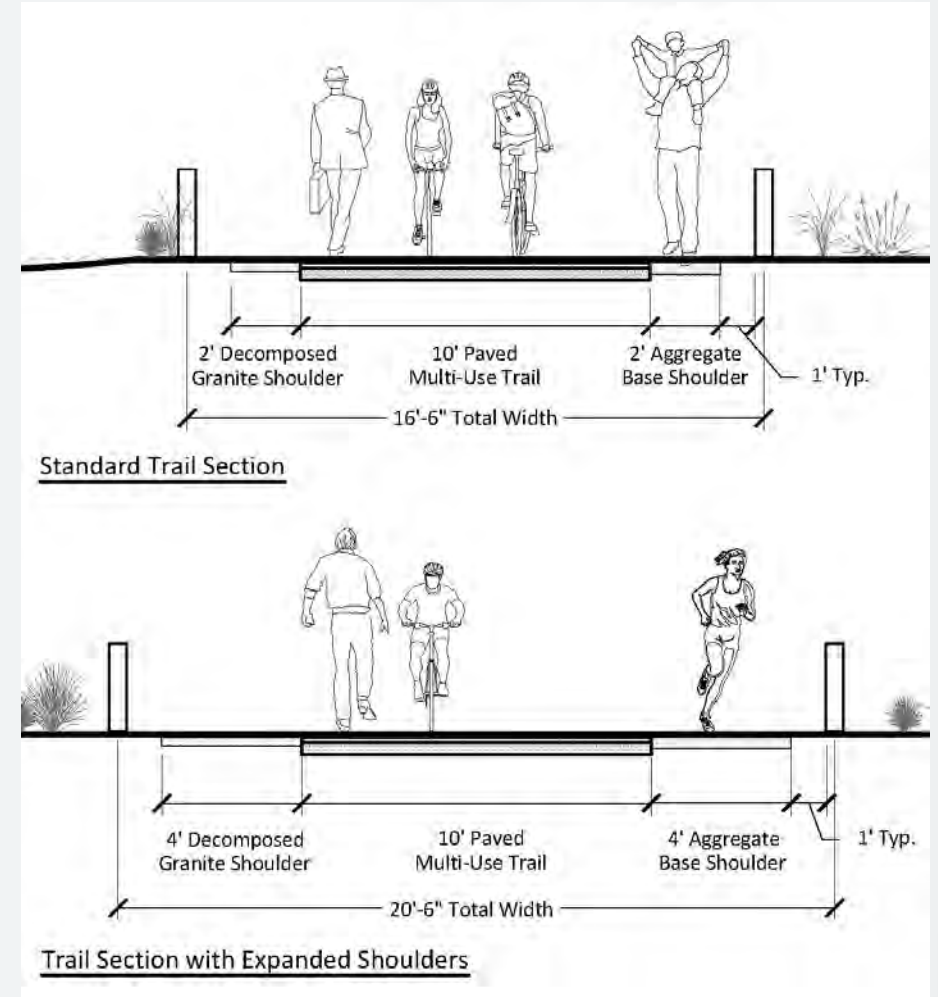
- Proposed Paved Multi-Use Trail
- Bridge
- Existing Paved Multi-Use Trail
- Vernal Pool/Creek
- Riparian Habitat
- Oak Tree
- Limit of Study Area
- Matchline Between East and West Areas

Recommended Alignment



Recommended Trail Features

- 2.4 miles of paved multi-use trails
- Five permanent creek/swale crossings
- Mid-block crossing of Fiddymment Road
- Intersection improvements for bicyclists at two intersections
- Off-street parking will be considered
- Expanded shoulders will be considered
- All paving options will be considered
- Restoration of dirt paths in sensitive areas



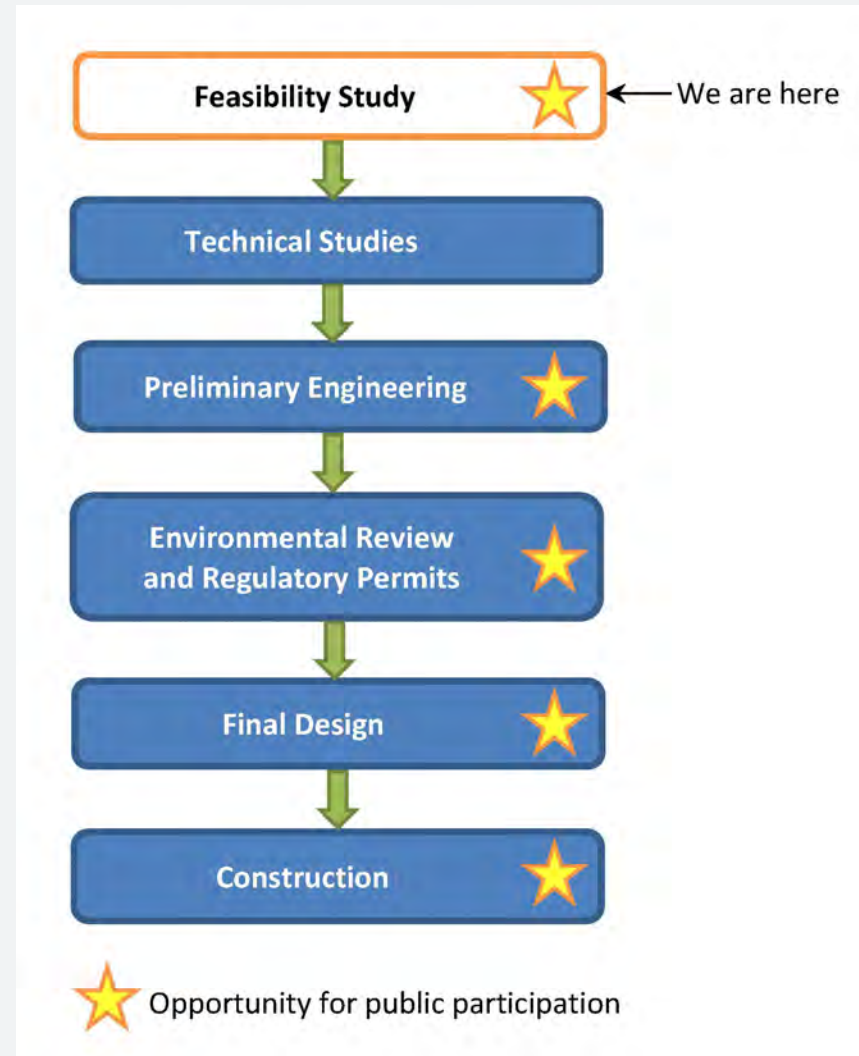
Recommended Trail Amenities

- Benches
- Trash Stations
- Dog Waste Bag Dispensers
- “Share the Trail” Signs and Markings
- Interpretive Signs
- Wayfinding Signs
- Trees or other shade will be considered



Next Steps

- Feasibility Study
 - Park and Recreation Commission
 - Transportation Commission
 - Acceptance by City Council
- Secure Grant Funding
 - (\$4.3 - \$6.7 million)
- Technical Studies, Preliminary Engineering, Environmental Review, Permitting, and Final Design
- Construction



Thank you for your time.

Any Questions?

Appendix A

Existing Conditions Report

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Mahany Park Open Space Trail

Existing Conditions Report

October 2020 | CRS-03

Prepared for:

City of Roseville
311 Vernon Street
Roseville, CA 95678

Prepared by:

HELIX Environmental Planning, Inc.
1677 Eureka Road, Suite 100
Roseville, CA 95661

Mahany Park Open Space Trail

Existing Conditions Report

Prepared for:

City of Roseville
311 Vernon Street
Roseville, CA 95678

Prepared by:

HELIX Environmental Planning, Inc.
1677 Eureka Road, Suite 100
Roseville, CA 95661

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ACRONYMS AND ABBREVIATIONS

Bicycle Master Plan	City of Roseville Bicycle Master Plan
Caltrans	California Department Transportation
CDFW	California Department of Fish and Wildlife
City Standards	City of Roseville Design and Construction Standards
DCJESD	Dry Creek Joint Elementary School District
DWSP	Del Webb Specific Plan
FEMA	Federal Emergency Management Agency
General Plan	City of Roseville General Plan
HELIX	HELIX Environmental Planning, Inc.
MPH	Miles per hour
MUTCD	Manual on Uniform Traffic Control Devices
NOAA	National Oceanic and Atmospheric Administration
NMFS	National Marine Fisheries Service
NRSP	North Roseville Specific Plan
NWRSP	Northwest Roseville Specific Plan
OSPOMP	Open Space Preserve Overarching Management Plan
RCSD	Roseville City School District
RJUHSD	Roseville Joint Unified High School District
Roseville Electric	City of Roseville Electric Utility Department
RWQCB	Regional Water Quality Control Board
SMUD	Sacramento Municipal Utility District
SVSP	Sierra Vista Specific Plan
USACE	U.S. Army Corps of Engineers
USFWS	U.S. Fish and Wildlife Service
WAPA	Western Area Power Administration

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1.0 INTRODUCTION

The purpose of this report is to document the existing conditions of the Mahany Park Open Space (Study Area), document design opportunities and constraints, and provide a summary of applicable design guidelines. This report will inform the development of conceptual alignments of Class I trails and related recreational amenities, which will be documented in the Mahany Park Open Space Trail Feasibility Report. The Study Area is located in western Roseville, California, amidst residential and commercial developments. Its location adjacent to Mahany Park, the Roseville Aquatics Center, and Woodcreek High School make it an important access corridor for students and families. Although existing paved, multi-use trails connect to the site at four locations, there are no complete paved trails through the Study Area. Connections between the paved trails have been created by users over time in the form of dirt paths. These dirt paths often cut through wetlands or drainages and they may be impacting the natural resources that the Open Space was established to protect. Design of improvements within the Study Area must comply with guidelines established in multiple City of Roseville documents, federal and state resource agency regulations, and requirements of the utilities who have established easements and facilities within the Study Area.

The existing conditions of the Study Area were evaluated by a HELIX Environmental Planning, Inc. (HELIX) landscape architect and landscape planner on March 5, 2020. During this site visit, opportunities, such as good views and interesting natural resources, approved improvements, such as utilities, gates, signs, and paved trails, unapproved improvements, such as user-created dirt paths, bridges, and dirt bike jumps, were mapped and photo-documented. This information, combined with applicable design constraints will be used to develop options for trail alignments and other improvements to the Study Area to improve connectivity and safety, and reduce impacts to sensitive natural resources.

2.0 STUDY AREA BACKGROUND

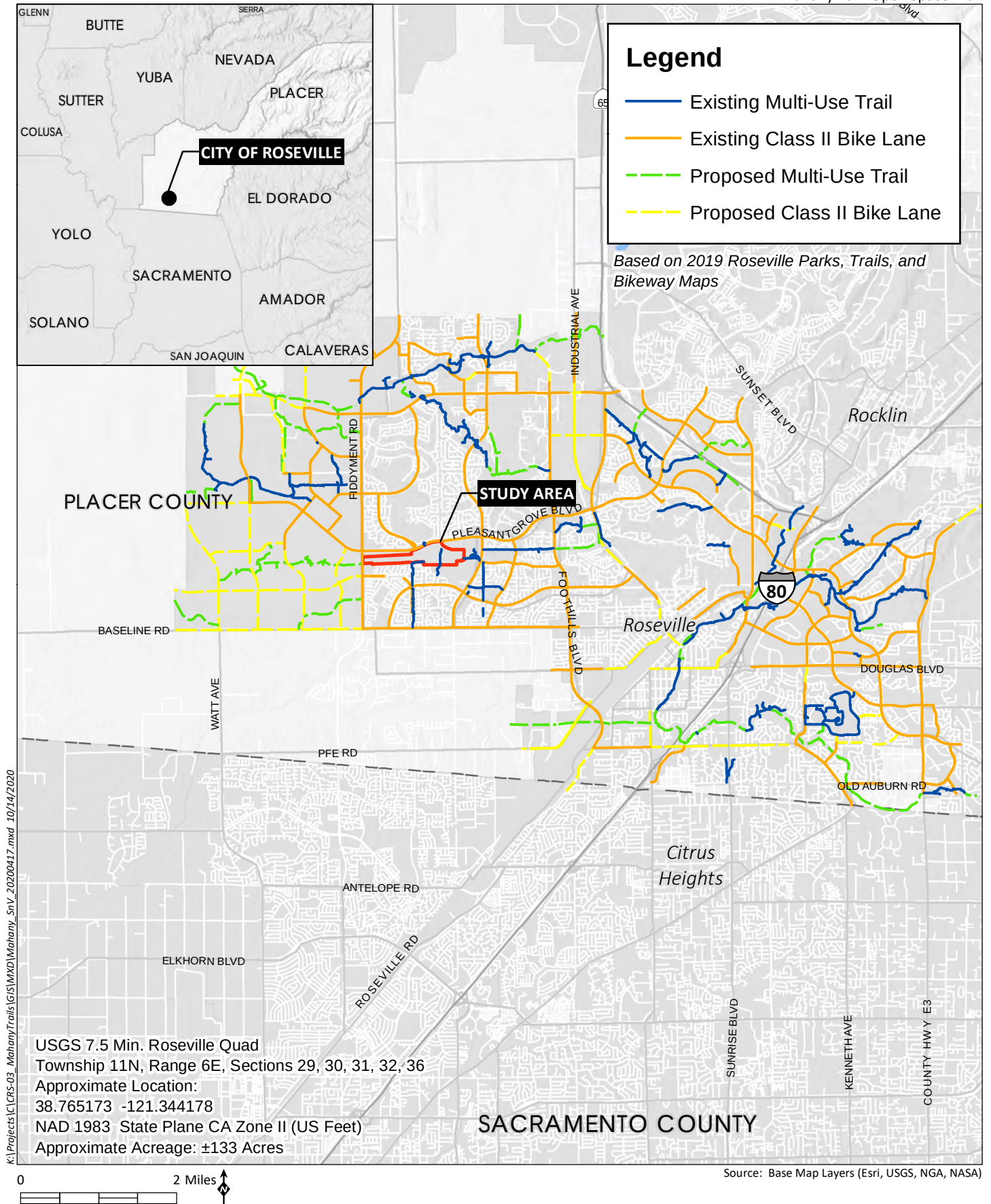
2.1 LOCATION

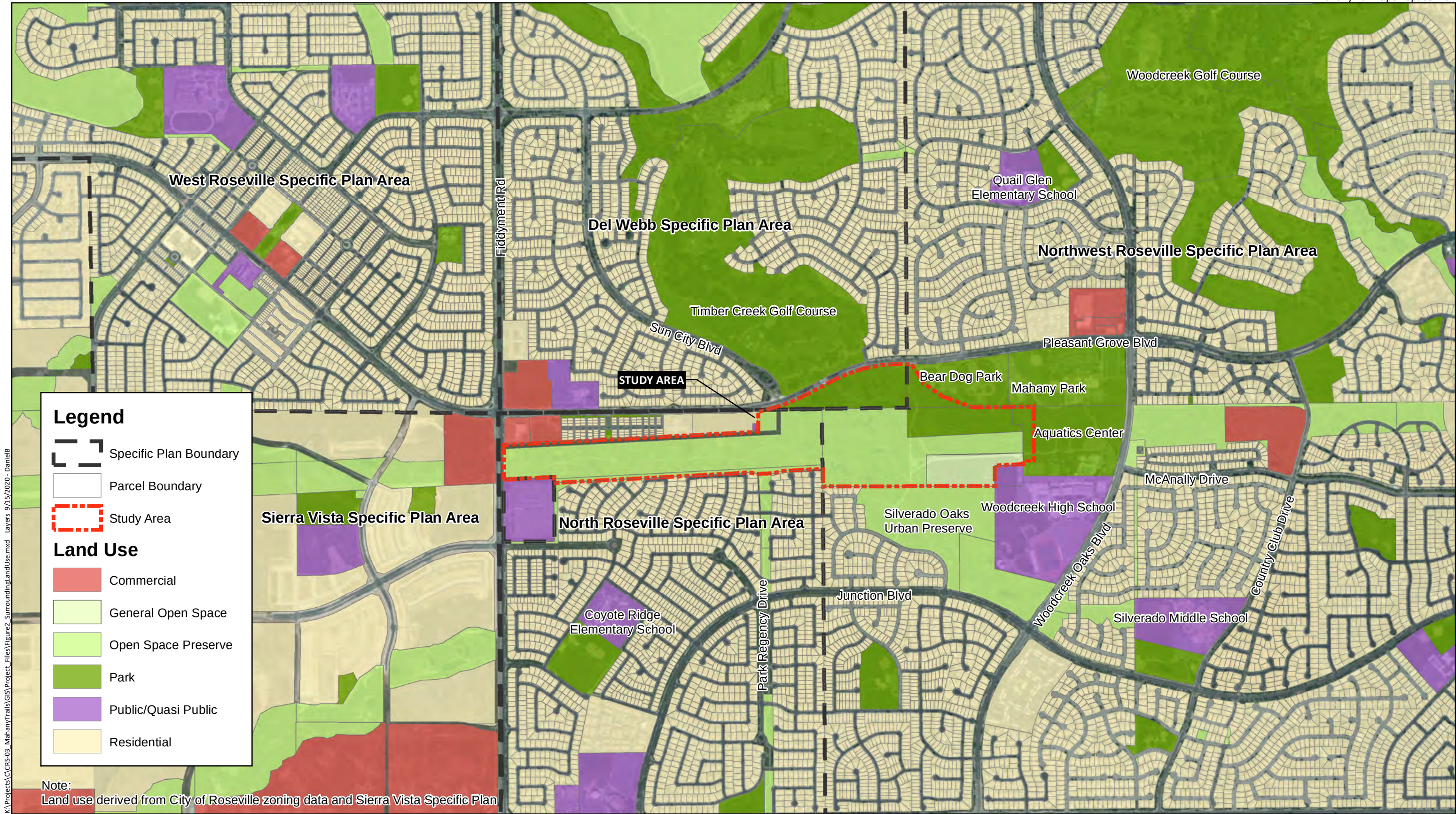
The Study Area is owned by the City of Roseville and encompasses APNs: 017-370-007, 014, 015; 017-162-077, 079, 080; 477-110-005; and the western edge of 017-370-006 (City of Roseville 2020b). It is located in western Roseville between Fiddymment Road and Woodcreek Oaks Boulevard, south of Pleasant Grove Boulevard (Figure 1).

2.2 LAND USE AND ZONING

The majority of the Study Area is zoned as open space and it is more specifically defined as open space preserve in the Roseville Open Space Preserve Overarching Management Plan (OSPOMP). A small area in the southeast corner of the Study Area is general open space. The remainder of the Study Area is zoned as Park and Recreation (City of Roseville 2017). The Study area is split between the North Roseville Specific Plan area, which includes the western half of the site, the Northwest Roseville Specific Plan area on the east, and the Del Webb Specific Plan area to the north. The Sierra Vista Specific Plan is located to the west of the Study Area and the West Roseville Specific Plan Area is located northwest of the Study Area (Figure 2). The site is crossed by multiple utility easements containing both large electrical transmission lines and standard electrical utility poles.

The predominant land use surrounding the Study Area is residential. The Study Area ends at Fiddymment Road on the west, beyond which are planned commercial and residential areas that are currently being developed. Immediately adjacent to the Study Area on the north is commercial development, high-density housing, and a senior assisted-living facility, beyond which is Pleasant Grove Boulevard. Beyond Pleasant Grove Boulevard to the north and northwest are active adult single-family residential communities. To the northeast and east of the project area is Mahany Park, a regional park that includes the Martha Riley Library, the Utility Exploration Center, Bear Dog Park, and the Sports Center; the Roseville Aquatics Complex; and Woodcreek High School, beyond which is Woodcreek Oaks Boulevard. The eastern end of the southern boundary of the Study Area abuts the Silverado Oaks Urban Preserve and the western half is bounded by single family residences.





2.3 PLANNING POLICIES

2.3.1 Roseville Open Space Preserve Overarching Management Plan

The Roseville Open Space Preserve Overarching Management Plan provides a universal approach and specific goals for open space management, maintenance, and monitoring in all City open space and replaces individual management plans written for each open space as they were established. The OSPOMP recognizes the need for maintenance, installation, and replacement of City facilities, including bike trails and maintenance roads, while requiring that the City will protect biological resources from unpermitted impacts. The OSPOMP was approved by the U.S. Army Corps of Engineers (USACE), and the U.S. Fish and Wildlife Service (USFWS). As part of their approval of the document, the USFWS issued a biological opinion that covers limited amounts of direct and indirect impacts to vernal pools as part of allowed maintenance activities. City facility maintenance, replacement, or modification that causes ground disturbance within 250 feet of listed vernal pool invertebrate habitat is considered to be having indirect impacts. Maintenance activities that exceed these limits and installation of new facilities are not covered under the OSPOMP biological opinion and will require additional consultation with the USFWS. Additionally, consultation with wildlife agencies is required if the work is not covered by the OSPOMP biological opinion or the endangered/threatened species habitat is under the jurisdiction of NOAA Fisheries/NMFS.

Chapter 9 of the OSPOMP includes a discussion of bike trails and related amenities, such as benches, signs, and trash cans. Bridges and riparian crossings are not specifically discussed in the OSPOMP. While existing trails were either permitted and installed as part of the development requiring an Open Space Preserve or were permitted separately as their own project within the General Open Space, new trails shall be installed and maintained in accordance with the Bicycle Master plan and the OSPOMP. Conceptual alignments for new trails within the Study Area were included in the OSPOMP, but coordination with the appropriate State and Federal Agencies for approval of the final alignment will be required prior to construction.

The OSPOMP defines the two types of open space management areas: open space preserve and general open space, jointly referred to as open space. Areas designated as open space preserve is land that was required to be set aside as part of a regulatory permitting action and is typically protected by either a conservation easement or declaration of covenants and restrictions. Sensitive biological resources, such as jurisdictional waters or legally-protected species, are typically located in open space preserves. Off-trail public access in open space preserves is prohibited. General open space is the remainder of the City's open space and is not subject to State or Federal permit-related restrictions. As previously described, the majority of the Study Area is classified as open space preserve, with a small area in the southeast corner of the Study Area classified as general open space (Figure 2).

In addition to annual monitoring and maintenance requirements, the OSPOMP provides specific minimization and avoidance measures for restoration or correction of vandalism both inside and outside of vernal pools and bike trail maintenance and replacement. It also includes restoration guidelines for a variety of other conditions, some of which have occurred in the Study Area, including disturbance of grassy upland areas, accidental fill of wetlands/waters of the U.S., restoration of fencing and signage, correction of erosion, removal of graffiti and vandalism, undesignated (social) trails, un-permitted bike jumps/tracks, and landscaping/gardens. Implementing any of these restoration measures would be considered maintenance and are permitted under the existing biological opinion.

The OSPOMP includes recreation goals and accompanying actions that may be related to the installation of trails within the Study Area include. These goals and related actions are detailed below and should be incorporated into the design of improvements within the Study Area:

- Goal 11-1: Encourage appropriate use of the City's Open Space by providing bike trails and overlook points.
 - Action 11-1-1: Provide a connected paved bike trail system through the City's Open Space, avoiding trails through sensitive habitats such as vernal pool grassland.
 - Action 11-1-2: Provide bike trails with adequate width, grade, visual clearance, and surface materials to provide safe passage for anticipated users of all abilities.
 - Action 11-1-3: Provide safe access to designated overlook points in a limited number of appropriate locations.
- Goal 11-2: Install fencing adjacent to trails and overlook points to reduce off-trail traffic and protect visitors.
 - Action 11-2-1: Install fencing adjacent to trails and overlook points where it is not currently in place.
 - Action 11-2-2: Maintain current and future fencing.
 - Action 11-2-3: Reclaim social trails and eliminate access to entry points within Open Space Preserve areas. Within General Open Space, reclaim social trails only if the Open Space Manager determines they are negatively impacting Preserve resources.
 - Action 11-2-4: Monitor/map significant recreational impacts on resources and determine how to avoid continued impacts.
- Goal 11-3: Discourage Vandalism and other unwanted activities by taking a comprehensive approach to enforcement that includes signage, patrols, and a telephone hotline for reporting violations.
 - Action 11-3-1: Regularly patrol the City's Open Space.
 - Action 11-3-2: Install consistent Open Space signage that is constructed out of materials that are not easy to damage.
 - Action 11-3-3: Provide a telephone number where residents can report suspicious or illegal activities.
- Goal 11-4: Enforce restriction on off-trail, off-leash dogs to protect biological resources.
 - Action 11-4-1: Educate residents regarding City leash laws.
 - Action 11-4-2: Enforce leash laws.
- Goal 11-5: Monitor recreation uses within the Open Space.
 - Action 11-5-1: Determine if recreational uses are having an impact on biological resources within the open space.
 - Action 11-5-2: Determine if residents are using the recreation opportunities by conducting formal or informal surveys.

- Goal 11-1 [*sic*]: Encourage safe and appropriate use of the City's Open Space by schools conducting environmental education (City of Roseville 2011).
 - Action 11-1-1: Provide guidance to teachers desiring to utilize the open space for educational purposes.
 - Action 11-1-2: Ensure that educational uses are safe and do not adversely impact biological resources.

2.3.2 City of Roseville General Plan

The relevant sections of the City's General Plan are the Circulation, Open Space and Conservation, and Parks and Recreation elements. These elements focus on the preservation and enhancement of the open space and trail networks and recognizes that there is a balance between habitat protection and public use.

The Circulation element includes goals and policies to develop a balanced transportation system for automobiles, transit, bicycles, and pedestrian. It defines Class I Bike Paths as paths that "that provide a completely separated right-of-way designated for the exclusive use of bicycles and pedestrians with crossflows by motorists minimized. Class I paths often follow natural amenities such as creeks, drainage, or utility line easements, and are used by both commuter and recreational riders." (III-50). Through goals, policies, and implementation measures it encourages a network on bicycle infrastructure and the implementation of the Bicycle Master Plan. Figure III-6 "Bikeway System", which does not differentiate between existing and planned bikeways, identifies the main east-west and north-south informal paths within the Study Area as Class I trails.

The Open Space and Conservation Element states its overall goal to, "preserve a comprehensive interconnecting system of open space, encompassing preservation and enhancement of natural habitat and significant resource areas for the use, appreciation, and enjoyment of the community." (V-2) This element specifically encourages through its goals, policies, and implementation measures the preservation and connection of open spaces and providing public education and access wherever compatible.

The Parks and Recreation Element specifically discusses open space lands and how they have recreational value for both active and passive use. They encourage improvements such as bike trails, signage, and pedestrian pathways. Within open space areas, this Element provides the following criteria:

- Locate improvements consistent with the Open Space Element;
- Provide access to open space areas except those areas sensitive to human presence;
- Provide an interconnecting system of open space corridors consisting of both public and private open space and, where feasible, incorporate bikeways and pedestrian paths, interpretive signage, etc.;
- Highlight unique or special features into the open spaces, such as cultural heritage, historical features, etc. through outreach, educational kiosks, interpretive signs, etc.;
- Consider regional linkages between open space and adjacent communities; and

- Private open space may be required to include public access for purposes of recreation and implementation of the City of Roseville Bicycle Master Plan, Pedestrian Master Plan or other adopted planning documents (City of Roseville 2016).

While the General plan does not provide detailed design guidelines, any proposed improvements in the Study Area must be consistent with the policies established in the General Plan.

2.3.3 City of Roseville Bicycle Master Plan

The Bicycle Master Plan was developed within the context of the Circulation Element of the City's General Plan. It is intended to guide bikeway policies, programs and development standards to make bicycling in Roseville more safe, comfortable, convenient, and enjoyable for all bicyclists. The ultimate goal of this effort is to increase the number of persons who bicycle in Roseville for transportation to work, school, and errands, and for recreation.

The Bicycle Master Plan includes plans for a Class I bike trail system. Consistent with the General Plan, Class I bikeways are intended for use by bicyclists, pedestrians and other non-motorized users. Equestrians are prohibited from using Class I bikeways in Roseville, but Class I bike trails are sometimes used as maintenance and emergency vehicle access within open space. The Bicycle Master Plan encourages the implementation of associated facilities such as bicycle parking, mile markers and destination guide signs, and trail maps at trailheads.

The Bicycle Master Plan identifies four instances of existing Class I bikeways that terminate at or in the Study Area that end with no connection, as described in Section 3.6.2. It proposes an additional 0.71 mile of Class I bikeways within Mahany Park Open Space, consisting of a north-south trail connecting the existing bikeways and an east-west trail from Mahany Park to Fiddymont Road (City of Roseville 2008).

2.3.4 Specific Plan Areas

As shown in Figure 2, the Study Area overlaps three specific plan areas and is directly adjacent to a fourth area currently under development. Although each specific plan document includes design requirements for trails, the current City standards, discussed in Section 4, take precedence.

2.3.4.1 Del Webb Specific Plan

The Del Webb Specific Plan (DWSP) sets forth regulations, conditions, and programs for 1,200 acres to develop an active adult community. Included in the DWSP is the ~14-acre northern parcel of the Study Area which is defined as a City-Wide Park (Figure 2). The DWSP discusses bike and pedestrian paths, showing a planned 10-foot wide bike path from the Pleasant Grove Boulevard undercrossing and extending first south, and then splitting to extend east and west. The east extension is intended to connect the park system and City-wide bike trail system. The west extension is intended to connect the south side of Pleasant Grove Boulevard. Within parks, the DWSP requires the paths be 8 to 10 feet wide; constructed of concrete or asphalt; and aligned to consider topography, landscaping, existing trees and wetlands, street lighting, and adjacent land uses. The DWSP identifies trees and wetlands within the Study Area and recognizes the importance of enhancing and monitoring them (City of Roseville 1993).

2.3.4.2 Northwest Roseville Specific Plan

The Northwest Roseville Specific Plan (NWRSP) guides development in the eastern half of the Study Area. It defines the four eastern parcels of the Study Area as open space and park. The NWRSP discusses bikeways and pedestrian pathways, showing a bikeway traveling through the eastern half of the preserve, but it does not show how the bikeway will terminate or connect to anything to the west of the specific plan area. The NWRSP establishes Class I bikeways shall be a minimum of 8 feet wide and not meander more than the distance of its width over a 100-foot run; not exceed a 5% slope; and shall be constructed of concrete if the bikeway is to double as a pedestrian path.

The NWRSP describes a 375-foot wide power line easement that runs east-west across the plan area and includes the Study Area and specifies that the easement is to include a pedestrian/bike path. The NWRSP also speaks to the importance of protecting and maintaining open space, vernal pools, and oak woodland (City of Roseville 1989).

2.3.4.3 North Roseville Specific Plan

The North Roseville Specific Plan (NRSP) is a comprehensive plan to guide the urbanization of 1,552 acres and complete the land-use and infrastructure planning for the associated area of the City, including Neighborhood D, which contains the western half of the Study Area. The NRSP includes in the land use map the three parcels which make up the western half of the Study Area. The narrow open space parcels along the north and south boundaries of the Study Area are 'Open space - vegetation buffers' while the large parcel through the center is 'Open Space - wetland compensation'. In Section 4.3, the NRSP discusses bike and pedestrian pathways, calling them out as 14' typical, but variable within open spaces. The associated figure shows no bike path within the Study Area but does show the trail stub that currently dead ends at the south side of the Study Area and specifically notes that it be connected to the City-wide trail system.

Included as an appendix to the NRSP is the North Roseville Design Guidelines (NRDG), which specifies open fencing along the open space perimeters and requires that pathways be defined within open spaces unless otherwise required by the wetland permitting authority. According to the design guidelines, open fencing must meet the following requirements: be 4 to 6-feet in height and construction of tubular steel, mesh, or wrought iron; mesh fencing shall be black vinyl-coated, with painted black posts and top rail; open fence or wooden posts with a cable strand connecting them may be used on the street adjacent to the open space (City of Roseville 1997).

2.3.4.4 Sierra Vista Specific Plan

Although the Study Area is not located within the Sierra Vista Specific Plan (SVSP), it is useful to consider this area to help ensure continuity in the trail network. The SVSP establishes a land use and regulatory framework to guide development of the approximately 2,075-acre Plan Area located to the west of Fiddymment Road and north of Baseline Road. The SVSP is immediately west of the Study Area and one of its project objectives is to "provide connections through the community in the east-west direction ...via a system of open space, paseos, and Class IA bikeways." An east-west Class I bikeway is proposed in the Plan Area which stops just across Fiddymment from the southwest corner of the Study Area. The land immediately west of the Study Area, which this bike path is to travel through, is defined as a community commercial/business professional land use. The SVSP establishes the following guidelines for bike paths: the Class I system within an open space may meander to minimize environmental impacts and create

visual interest; bike paths should have 10 feet of pavement with lane striping, plus a 2-foot decomposed granite/gravel shoulder on each side; and barriers will be provided along bike paths to separate the pathways from the open space preserve areas. Barriers can be bollards, rail fence, vertical curbs, post and cable, posts, etc. as long as it complies with the associated Section 404 permit.

There is additional discussion of appropriate at-grade street crossings where Class I path intersects at or near signalized intersections. Recommended traffic control measures for crossing collector or residential streets may include ramps, bolts dots (reflective raised markers), striping, or signage. No specific guidance on crossing Fiddymment Road or connecting to the Study Area is provided in the SVSP (City of Roseville 2010).

2.4 SCHOOLS

There are four public school districts in the vicinity of the Study Area: Roseville Joint Union High School District (RJUHS), Dry Creek Joint Elementary School District (DCJESD), Roseville City School District (RCS) (Figure 3), and Center Unified School District (CUSD). Additionally, a number of private schools and daycare facilities are located in the vicinity but are not further discussed in this document.

Roseville Joint Union High School District has six high schools, including Woodcreek High School, which is adjacent to the Study Area, and West Park High School, located approximately 1.45 miles to the northwest, which is currently under construction. Fiddymment Road is the attendance dividing line between these two high schools; students living east of this road attend Woodcreek High School while students living west of the road will attend West Park High School starting in the 2020-2021 school year. West Park will also serve students living in the north portion of the Sierra Vista Specific Plan Area (City of Roseville 2010). Adjacent to Woodcreek High School is Challenge High School, which provides a therapeutic intervention program to students that would not thrive in a traditional classroom setting and serves the entire District (RJUHS 2020a, 2020b, 2020c, and 2020d).

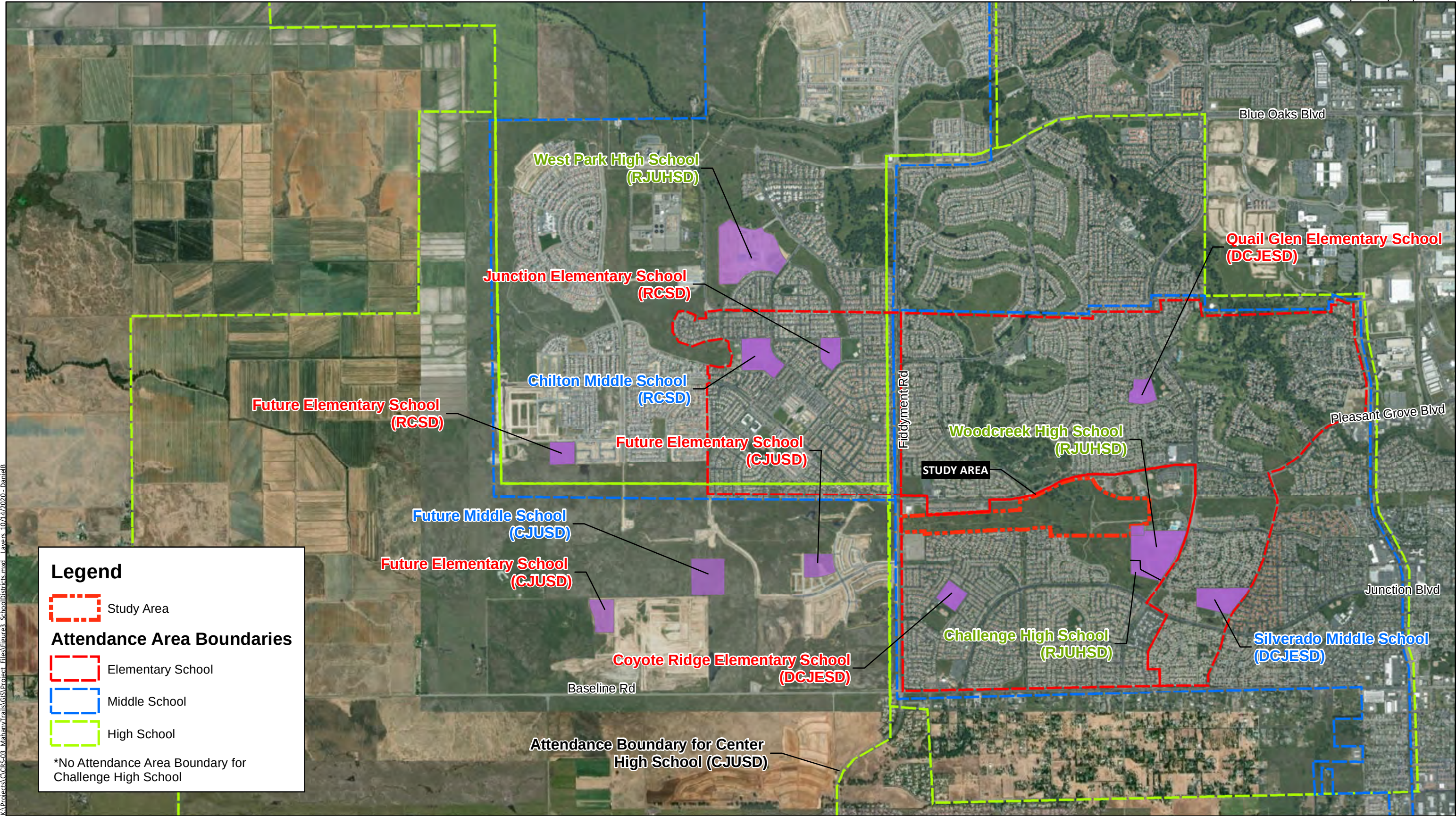
The Study Area and the majority of the surrounding area is located in Dry Creek Joint Elementary School District for middle and elementary schools. Most residents south of Pleasant Grove Boulevard, with the exception of the high-density housing immediately north of the Study Area, attend Coyote Ridge Elementary School, which is located approximately 0.24 mile south of the Study Area. Residents north of Pleasant Grove Boulevard and east of Woodcreek Oaks Boulevard attend Quail Glen Elementary School, which is located approximately 0.44 mile northeast of the Study Area. Both elementary schools serve students from transitional kindergarten through 5th grade. Students from both of these elementary schools attend Silverado Middle School for 6th to 8th grade, which is located approximately 0.42 mile southeast of the Study Area (DCJESD 2020a, 2020b, 2020c, 2020d).

Roseville City School District provides middle and elementary schools for people located northwest of the intersection of Fiddymment Road and Pleasant Grove Boulevard. Residents in this area attend Junction Elementary School, located 0.75 mile northwest of Study Area, for transitional kindergarten through 5th grade. Students then transition to Chilton Middle School, located approximately 0.97 mile northwest of the Study Area, for 6th through 8th grades (MySchoolLocation 2020; RCS 2020a, 2020b). An additional elementary school will be constructed in the northern area of the Sierra Vista Specific Plan Area (City of Roseville 2010). Center Unified School District will provide two elementary schools and one middle school for residents in the majority of the SVSP area. The closest elementary school will be located ~1/3 of a mile west of the Study Area and adjacent to a planned open space and trail corridor that connects to the Study Area. The middle school will be located ~1.0 mile west of the site along the

same open space corridor. Students in this area will currently attend Center High School, located ~3.4 miles southwest of the Study Area. In the future, these students are expected to be served by a future high school located to the west in unincorporated Placer County.

The Study Area may provide an important route to school for some students. As previously discussed, and shown in Figure 3, the service area for Silverado Middle School surrounds the Study Area on three sides and Woodcreek High School and Challenge High School are located adjacent to the Study Area. Therefore, it is likely that students from these schools use the Study Area to travel to and from school. Additionally, Woodcreek High School uses a portion of the Study Area as an educational tool, providing hands-on learning opportunities for High School students and providing tours for elementary school students teaching about nature, vernal pools, and the preserve (RJuHSD 2020c). The Study Area is also used by school sports teams for fitness training and fundraising (see Appendix A).

Due to the service areas and school locations, students from West Park High School, Chilton Middle School, Junction Elementary, Coyote Ridge Elementary, Quail Glen Elementary, and most of the schools in the SCSP area traveling between home to school will not pass through the Study Area and it is unlikely to be used for school activities. However, these students may use the Study Area as a destination or to access extracurricular activities. The Study Area is located within walking distance of Coyote Ridge Elementary and the future elementary school in the SVSP area and could be used for educational activities.

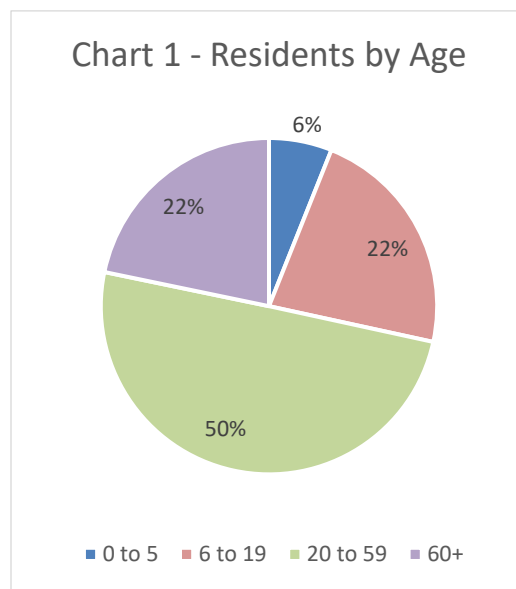


Source: Aerial (SanGIS, 2014); Zoning (SanGIS 10/2016)

2.5 DEMOGRAPHICS

The Study Area is located in Census Tract 06|061|0210. 35. To capture the Study Area and the neighborhoods immediately around it, this demographics analysis was performed on tracts 0210. 35, as well as tracts 0210. 37, 0210. 38, 0210. 40, 0210. 43, 0210. 44, and 0213.22 (Figure 4). The analysis is based on 2018 5-year projections (USCB 2018).

Within these seven tracts are an estimated 47,615 residents, 47% of whom are male and 52% of whom are female in 16,579 households. Approximately 75% (12,470) of the households are families with an average of 3.65 persons/household. The remaining quarter are single-person households, or unrelated roommates. Residents are relatively proportionately divided between adults (age 20 to 59), seniors (60 and over), youth (19 and under) (Chart 1). In this respect the seven tracts surrounding Study Area have a similar age makeup as the City as a whole. Within the vicinity of the Study Area, almost all (95%) of 5 to 19-year-olds are enrolled in school, including preschool through college. Of those enrolled, 96% (~9,700) are attending public schools (USCB 2018). As discussed in this report, because the Study Area is located between residential areas and their assigned schools, it has the potential to be an important route to school. The large senior population in the area also indicates that the Study Area offers an opportunity for daytime use by retired persons.



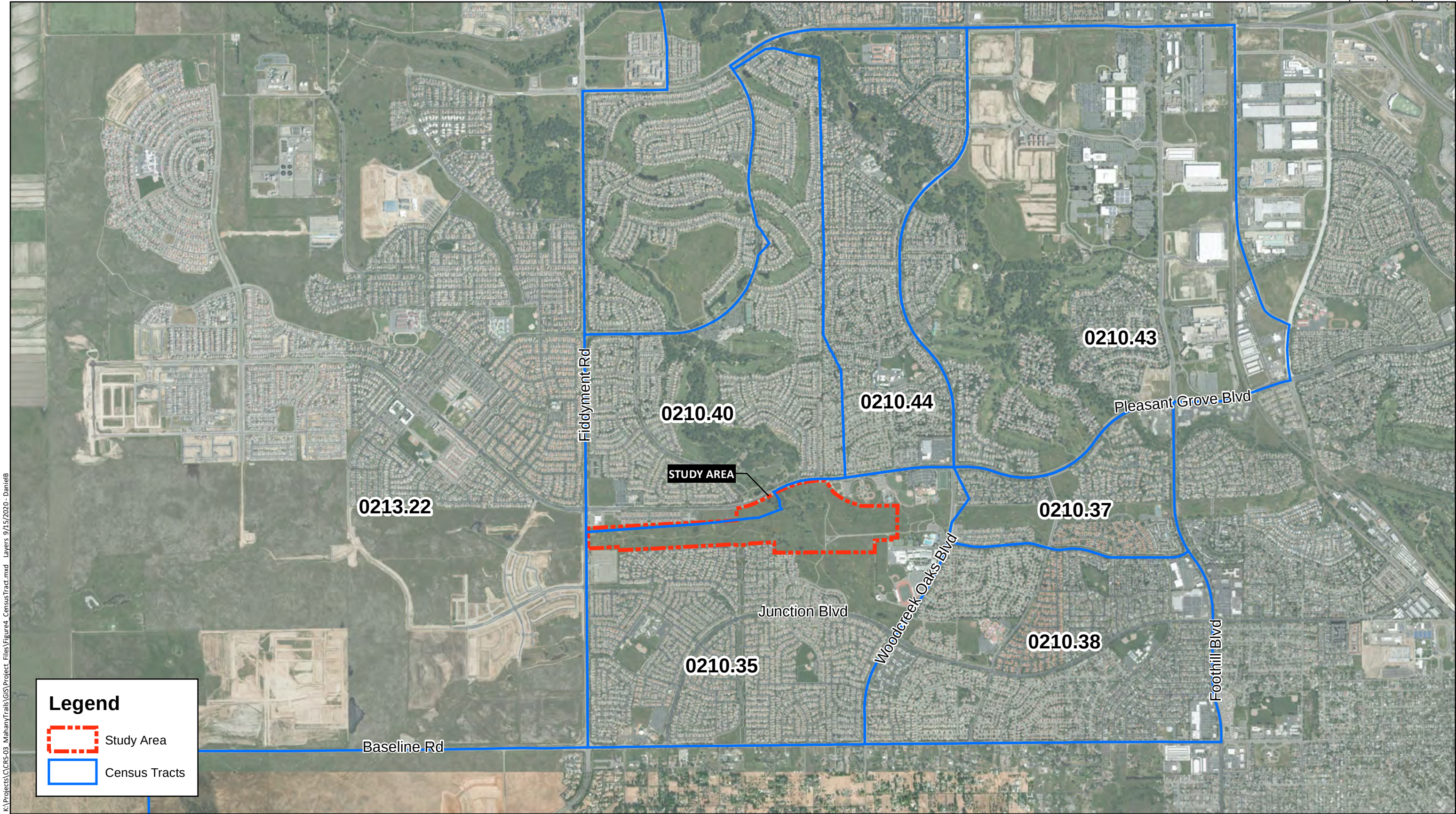
Residents primarily speak English at home. While 18% of residents speak a different language at home and 5% of residents do not speak English very well. Amongst households who do not speak English well, 21% speak Spanish, 28% speak an Indo-European language, and 50% speak an Asian-Pacific Islander language (USCB 2018). The majority of residents speak English well meaning there is an opportunity to communicate to Study Area users via using English-language only signage and programs. If signage in additional languages was an interest of the community, Asian-Pacific Islander language signs present the opportunity to reach the most residents.

California's median household income in 2018 was \$71,228 and median household income in the City of Roseville is \$84,105. Five of the seven census tracts surrounding the Study Area (0210.35, 0210.38, 0210.43, 0210.44, and 0213.22) have a median household income higher than either the state or City, ranging from \$98,167 to \$120,990. The median household income for tract 0210.37 is \$60,927 and for

tract 0210.40 is \$45,865. Since tract 0210.40's median household income is less than 80% of the state's median household income, this community is considered low-income. This tract includes residents in an age-restricted senior community, many of whom are on fixed incomes. Within these seven tracts, 4,105 residents (~9%) are reported to be below poverty level, with 925 of these residents under the age of 18. Poverty level compares family size and composition against income thresholds to determine who falls below the threshold. These thresholds are defined by the Census Bureau, with the poverty threshold for a family of four being \$25,701 in 2018 (USCB 2019). Ensuring that residents below the poverty level and low-income communities have access to and benefit from any improvements within the Study Area is important for the health and wellbeing of these more vulnerable community members.

Residents 16 and older generally have access to vehicles with 82% having access to 2 or more vehicles, 16% having access to one vehicle, and 2% having access to no vehicles (USCB 2018). With this ready access to cars, it is more likely that the site will be used by youth commuting to school or for recreational purposes than as a way for residents to get to work.

Of housed residents within these six tracts, 95% have a computer and broadband internet connection at home, 3% have a computer, but no internet subscription, and 2% have no computer. Within tracts 0201.37 and 0201.40, respectively, only 83% and 84% of housed residents have access to both a computer and broadband internet connection. While the majority of local residents can access information about recreation opportunities or limitations online, additional analog outreach and communication efforts may be needed to reach all community members in the two tracts with lower internet access.



K:\Projects\CBS-03 MahanyTrails\GIS\Project_Files\Figure4 CensusTract.mxd Layers 9/15/2020 - DanielB

0 2,000 Feet

Source: Aerial (SanGIS, 2014); Zoning (SanGIS 10/2016)

3.0 OPPORTUNITIES AND CONSTRAINTS

The existing natural resources, built elements, and extensive informal use of the Study Area present both design opportunities and constraints.

3.1 BIOLOGICAL RESOURCES

The Study Area includes a variety of habitats that are home for many species of wildlife and plants. The majority of the Study Area is annual grassland habitat. Natural and constructed vernal pools and seasonal wetlands occur within the annual grassland habitat. Oak woodland habitat occurs in the eastern to central portion of the Study Area and riparian woodland habitat occurs along Kaseberg Creek in the northeast portion of the Study Area. Smaller seasonal drainages cross the center of the Study Area, flowing from south to the north before joining Kaseberg Creek. The Study Area contains 259 native oak trees protected under the City of Roseville Tree Ordinance and an additional 502 non-protected trees. Special-status species are those that are legally protected under state, Federal, or local codes or that receive consideration during California Environmental Quality Act (CEQA) review. The habitats in the Study Area provide potential habitat for 24 special-status wildlife species and 9 special-status plant species, as well as many more common species. Detailed descriptions of these habitats and species are included under separate cover (HELIX 2020).

Many of the biological resources found in the Study Area are legally protected under Federal, State, or local regulations. As discussed previously in Section 2, the open space was established primarily to protect these resources, specifically the vernal pools, creeks, drainages, other wetlands, riparian habitat, and protected oak trees (Figure 5). Vernal pools are wetlands that hold water in the winter and spring. They are a unique habitat and home to many endemic species that are found only in California's Central Valley, including a number of species on the Federal and State endangered species lists. Creeks, drainages, and other wetlands are protected by both Federal and State laws regulating water quality. Riparian habitat is protected by the State of California under the Fish and Game Code. Although oak woodlands as a whole do not merit special legal protections in the City, individual oak trees with a trunk diameter of 6-inches or greater are protected by the City of Roseville Tree Ordinance. Additionally, special-status species are protected regardless of the habitat in which they are found. Before disturbing any of these protected resources, a permit and coordination with the appropriate agency may be required. Failure to obtain approvals prior to disturbance can result in fines or even jail time, depending on the severity of the impact.

The legal requirements to protect these features constrain where trails and associated amenities can be located and limit where users should be allowed access. These habitats also present an opportunity for education and passive recreation which can be fostered through interpretive signage and placement of benches and rest points to encourage observation. The trees also provide shade in an otherwise exposed area, which, based on the many user-created trails along and through the shaded areas, is desirable to users. Design recommendations to protect the sensitive biological resources are summarized in Table 1 below (HELIX 2020).

Table 1
SUMMARY OF BIOLOGICAL RESOURCE AVOIDANCE RECOMMENDATIONS

Sensitive Resource	Avoidance Measures During Design	Regulating Agency*
Habitat		
Vernal Pool Habitat	Avoid direct impacts and minimize impacts to watershed.	USACE, RWQCB
Riparian Woodland Habitat	Avoid or minimize direct impacts to habitat.	CDFW
Protected Trees	Avoid or minimize development within the tree protection zone.	City of Roseville
Jurisdictional Waters	Avoid or minimize impacts to jurisdictional waters.	USACE, RWQCB
Special Status Species		
Special-Status Plants	Avoid or minimize direct impacts to vernal pools and Kaseberg Creek.	CDFW
Burrowing Owl	Minimize impacts to annual grassland habitat.	CDFW
Swainson's Hawk	Avoid or minimize removal of mature trees from oak woodland and riparian woodland. Minimize impacts to annual grassland habitat.	CDFW
Raptor Nests and Other Nesting Birds	Avoid or minimize impacts within 50 feet of known active nests.	CDFW
Pallid Bat	Preserve dead trees or trees with hollows to the greatest extent feasible.	CDFW
Western Pond Turtle	Avoid or minimize impacts to Kaseberg Creek and within 500 feet of Kaseberg Creek.	CDFW
Western Spadefoot Toad	Avoid direct impacts to and minimize impacts within 800 feet of vernal pools and seasonal wetlands.	CDFW
Vernal Pool Invertebrate	Avoid direct impacts to vernal pools. Minimize impacts to vernal pool watersheds or construction within 250 feet of pools.	CDFW, USFWS
Valley Elderberry Longhorn Beetle	Maintain minimum 20-foot setback from riparian areas that could not be surveyed.	CDFW, USFWS
Andrenid Bee	Minimize impacts to annual grassland habitat.	CDFW

*CDFW – California Department of Fish and Wildlife

RWQCB – Regional Water Quality Control Board

USACE – U.S. Army Corps of Engineers

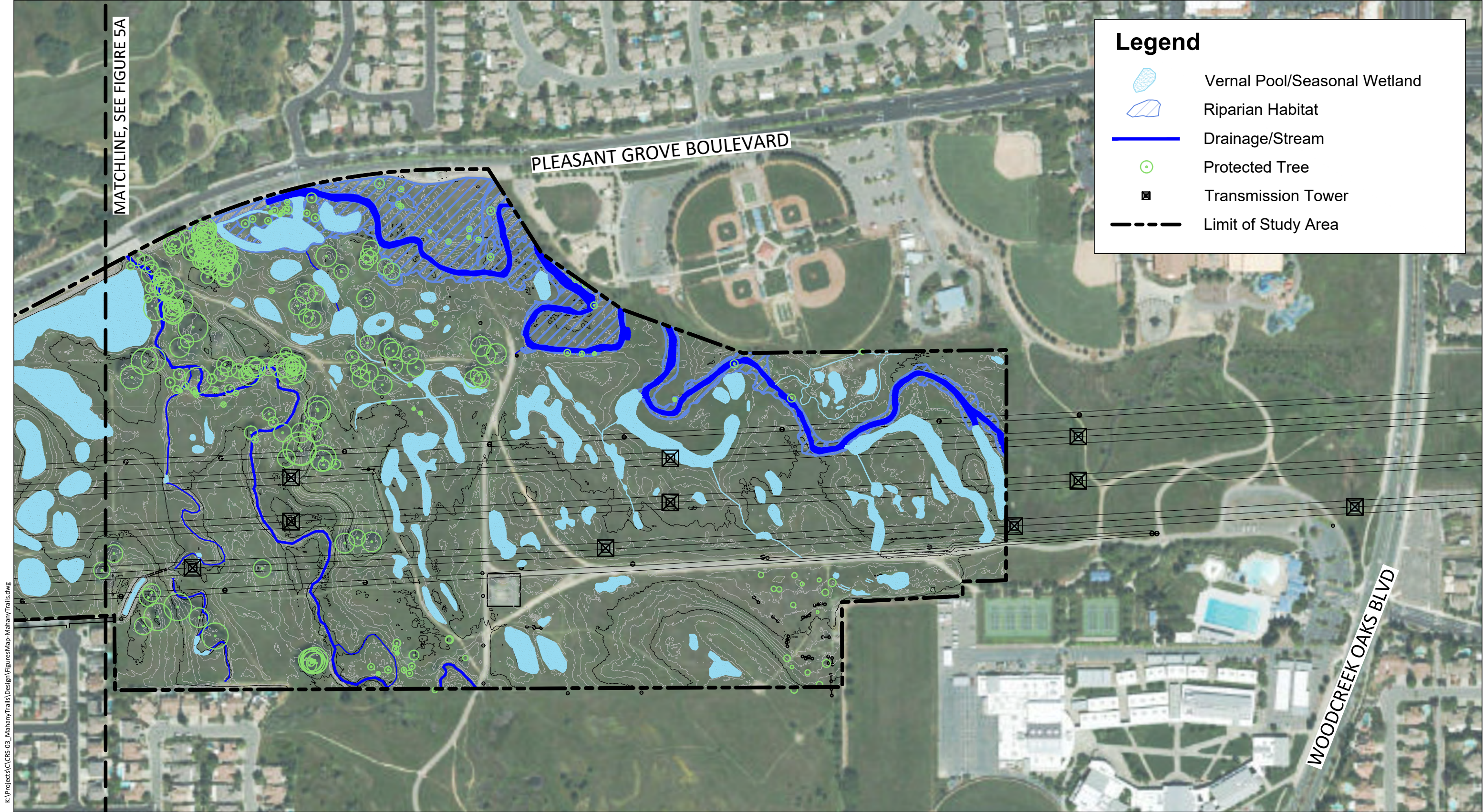
USFWS – U.S. Fish and Wildlife Service



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Source: Aerial (Microsoft, Maxar 9/15/2020).

3.2 TOPOGRAPHY AND FLOODPLAIN

The general topography of Study Area consists of rolling and moderately sloped areas, with elevations that range from approximately 116 to 137 feet (35 to 41 meters) above mean sea level (MSL). Variations in the terrain offer just enough rise to allow for views across much of the Study Area. The rolling topography results in multiple high points in the Study Area, some immediately adjacent to Fiddymment Road and others approximately 750' east of Fiddymment Road, shortly before the first set of transmission towers. From here, the land slopes down in terraces to the seasonal drainages or streams that flow from north to south through the center of the Study Area. The eastern half of the Study Area slopes gently down to these seasonal drainages or directly to Kaseberg Creek, which cuts across the northeast corner of the Study Area. Steep slopes, particularly along the north boundary of the site where the grade comes up to meet Pleasant Grove Boulevard, limit access. The far western complex of vernal pools flows towards Fiddymment Road. There are no culverts under Fiddymment Road, so water collects behind the existing sidewalk. Although an area of 100-year floodplain was mapped along Kaseberg Creek and one of the seasonal streams in the General Plan (City of Roseville 2016), the entire Study Area is outside of the 100-year floodplain according to the most recent Federal mapping (FEMA 2018). While this means that proposed improvements are not subject to approval by outside flood control agencies, care should still be taken to avoid designs that might negatively impact the capacity of the creeks and drainages in the Study Area.

3.3 CULTURAL RESOURCES

Archaeological surveys of the Study Area were conducted approximately 40 years ago as part of the development of the surrounding area. One historic site and several prehistoric and historic isolated artifacts were identified within the general vicinity, but none of the artifacts were recommended as potentially unique resources and important cultural resources are not known to occur in the Study Area (Maniery and Maniery 1986). However, since cultural records are constantly being updated, a new cultural records search and archaeological survey should be conducted prior to construction. Additionally, consultation with local tribes should be conducted in accordance with AB 52 or current guidelines.

3.4 USE AND TRAFFIC PATTERNS

In addition to mapping the informal paths, traffic patterns in the Study Area were observed during two formal trail use counts. During each trail use count period observations were made from two locations: at the west end of the Study Area next to Fiddymment Road and at the existing lift station at the eastern end of the Study Area (Figure 6). Trail use was observed on Tuesday, June 2 from 5:00 to 7:00 p.m. and Saturday, June 6 from 7:30 to 9:30 a.m. A total of 84 people were observed using the trails in the Study Area on Tuesday evening and 99 people were observed on Saturday morning. Overall, there was a relatively even mix of pedestrians and bicyclists observed, although 80% of the users were pedestrians on Saturday morning. A total of 15% of pedestrians were accompanied by dogs on Tuesday evening and 30% of pedestrians were accompanied by dogs on Saturday morning. The full results of the trail use counts are included in Appendix C.

An online survey was conducted between Tuesday, May 26, 2020 and Friday, June 12, 2020 to gather information on how people currently access and use the Study Area, what improvements they wish to see, and what concerns they have about creating paved trails. 1,306 people responded to the survey. The access points most frequently used currently are the existing gravel access road on the east and the

west dirt path at Fiddymment Road. Other access points used by more than 15% of respondents include Mahany Park's parking lot, Silverado Oaks Urban Reserve on the south, Pleasant Grove Boulevard underpass, and Pleasant Grove Boulevard by Bear Dog Park. The most desired access points are the existing access road on the east, the outlet at Fiddymment Road, and Bear Dog Park. Other popular access points, desired by more than 15% of respondents, include Mahany Park, the Roseville Aquatics Complex, Woodcreek High School, Silverado Oaks Urban Reserve, the greenbelt bike path at Roadrunner Court, at the end of Bottlebrush Circle, at the intersection of Sun City Boulevard and Pleasant Grove Boulevard, and at the Pleasant Grove Boulevard underpass (Figure 6). The online survey results are included in Appendix D.

A preliminary traffic study was prepared examining turning movements and collisions at major intersections surrounding the Study Area. This study categorizes Pleasant Grove Boulevard and Fiddymment Road as 4+ lane roads with raised medians, speed limits of 45 and 50 miles per hour (MPH) respectively, and vehicle average daily traffic exceeds 15,000. Woodcreek Oaks Boulevard is categorized as 4+ lanes with a raised median and a speed limit of 40 MPH and vehicle average daily traffic between 9,000 and 15,000. The study recommends if at-grade crossings across any of these roads are considered, they include high-visibility crosswalk markings, adequate nighttime lighting levels, crossing warning signs, Advance Yield Here To (Stop Here For) Pedestrians sign and yield (Stop) line, and Pedestrian Hybrid Beacon (PHB) or pedestrian signals. A pedestrian over crossing or tunnel may be an appropriate solution depending on the future connections and development of the trail network. Three collisions involving a pedestrian or bicycle were identified between 2015 and 2019, one near the Fiddymment Road – Westhills Drive intersection, and two near the Pleasant Grove Boulevard – Woodcreek Oaks Boulevard intersection. Since the accident at Fiddymment Road – Westhills Drive, the intersection has been signalized. Vehicle collisions from 2015 to 2019 are more broadly analyzed, showing the most frequently reported factor in collisions was unsafe speed on study roadways and the most frequently reported collision types were rear-end and broadside collisions (Fehr and Peers 2020).

Based on the results of these studies, most people are traversing the site from Fiddymment Road in the east to Mahany Park in the west and from the end of the existing paved multi-use trail in the south to the Pleasant Grove Boulevard undercrossing (Figure 6). There is high demand for access from Mahany Park, indicating that the Study Area may be providing a City or regional amenity with many users driving to the site from elsewhere to use the existing paths, rather than accessing it strictly from local neighborhoods. Also of note, is the strong preference in the online survey for access near Bear Dog Park, which is reflected in the significant number of dogs observed during the trail use counts.



Source: Aerial (Microsoft, Maxar 9/15/2020).



3.5 POINTS OF INTEREST

Points of interest, locations within the Study Area with good views or that provide unique educational opportunities, are shown on Figure 7. The viewshed within the Study Area is broad, with relatively flat topography allowing views in most directions until built structures such as fences, walls, and houses or other buildings obstruct the sightline. Present within almost any view in the open space are the electrical towers, poles, and power lines that run the length of the site. In addition to their visual presence the high-voltage transmission lines (owned by SMUD and WAPA) emit a low humming/buzzing sound which is audible when walking the Open Space. The views onsite also include broad expanses of vernal pools surrounded by annual grassland to the west and woodland through the center and to the north. To the east more grassland and vernal pools are visible as well at Mahany Park and the perimeter of Woodcreek High School. The clear views of the vernal pools and woodlands create educational opportunities.

The Study Area provides opportunities for both passive and active education about a myriad of topics. The presence of many natural resources can inspire education about the species and habitats found in the Study Area or the importance of environmental stewardship. The many utility features in the Study Area and proximity to the Utility Exploration Center create an opportunity to incorporate utility-related interpretive signage along the proposed Bike Trail to encourage users to think about how their actions at home influence their City. Passive education may take the form of interpretive signs, digital or paper nature trails, or similar activities that can be used at will by visitors to the Study Area. Some active education is already underway in the form of tours for local elementary schools by the Woodcreek High Nature Area class (Appendix A). Additional tours for the general public or clean-up days are examples of active education activities.

3.6 CONSTRUCTED FEATURES

There are many constructed improvements in the Study Area, both formal and informal. Formal improvements include a paved multi-use trail connecting to Silverado Oaks Urban Preserve to the south; gravel maintenance access road connecting the sewer lift station to Mahany Park to the east; perimeter post and cable fence, gates, retaining walls, and soundwalls; utilities; and preserve signs. Informal improvements consist of user-created paths, bike jumps, fairy gardens, and makeshift bridges, typically of plywood, scrap lumber, or branches. Historically, the City has removed informal bridges due to safety concerns and because they were not approved by regulatory agencies through the proper permit processes. Interventions show areas where users have intervened in the landscape for example by repairing an informal path or digging a hole. Conflicts highlight locations where user needs are in direct conflict with the site, for example where informal paths cross fences or creeks. Constructed features are shown on Figure 6 and photographs of representative features are shown in Appendix B.

3.6.1 Informal Paths

The Study Area has many informal paths crossing the site (Figure 7). These paths range from 1-foot wide tracks where the foliage is flattened or sparse to well-defined bare dirt paths up to 8-feet wide. One of the two largest paths run east to west across the site beginning on the west side at Fiddymont and merging into the gravel maintenance access road on the east side. The other large path runs northwest to southeast from the Pleasant Grove Boulevard underpass to the existing bike path just north of the bridge. Smaller paths cut in from the cul-de-sacs of the surrounding neighborhoods, connecting to the main east-west path. There are also smaller paths connecting Mahany Park and Bear Dog Park and a few

other meandering paths, primarily in the north-central portion of the site. These paths cross the creeks in multiple locations. At these locations there are signs that users have been frequently crossing the creek including muddy bicycle tracks and footprints, debris such as plywood, sticks, and rocks to create stepping stones or temporary bridges, and signs of informal bridges which have been removed. These paths are both directly and indirectly impacting the sensitive biological resources, although they are generally routed away from vernal pools and the creek. While these paths are useful to the design process because they clearly show how users wish to access the site, they are in conflict with the City's goals and environmental regulations to protect natural resources.

3.6.2 Connections to Existing Trails

There are four existing paved multi-use trails that enter the Study Area and connect it to the larger City-wide trail system. Just east of the Roadrunner Court cul-de-sac, a paved multi-use trail ends at the southern boundary of the Study Area. Paved multi-use trails in Mahany Park on east boundary of the Study Area end in a gravel maintenance access road leading to the existing sewer lift station. The third multi-use trail extends from Silverado Oaks Urban Preserve in the south, runs north past the sewer lift station, and ends south of Kaseberg Creek. An undercrossing on the northern boundary where Kaseberg Creek flows under Pleasant Grove Boulevard connects the existing bike trails to the north with the Study Area. All of these terminated trails continue with user-created paths, indicating a desire to have them connect to each other, the larger site, and other destinations. Connecting to these existing trails provides an opportunity for greater connectivity.

3.6.3 Utilities

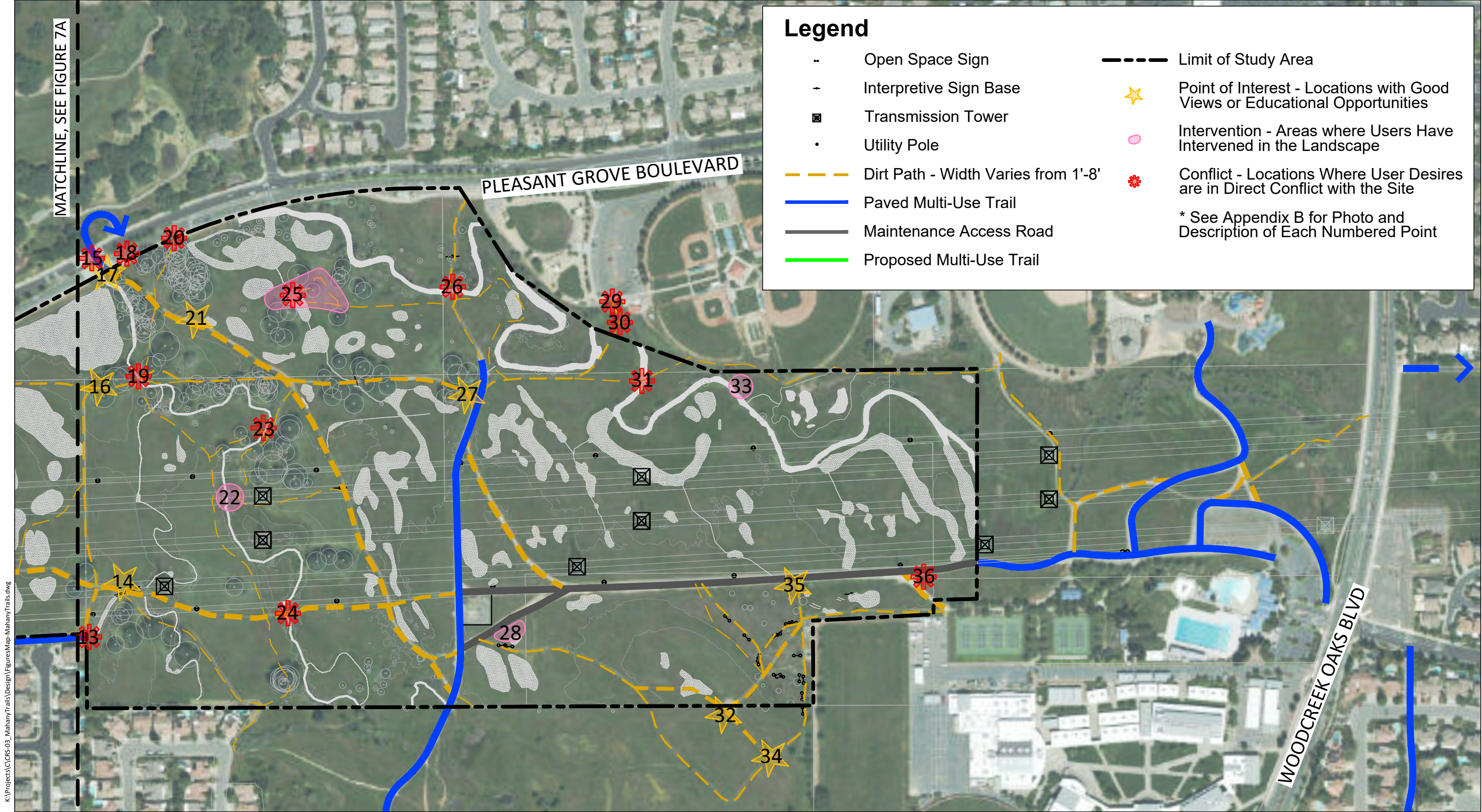
Extensive overhead and underground utilities run through the Study Area (Figure 8). The City of Roseville Electric Utility Department (Roseville Electric) has two sets of power lines on wood poles within easements within Mahany Open Space. Sacramento Municipal Utility District (SMUD) has one set of high voltage transmission lines on transmission towers within an easement within Mahany Open Space. Western Area Power Administration (WAPA) has two sets of high-voltage transmission lines, each on their own set of transmission towers within an easement within Mahany Open Space. A sewer trunk line crosses the eastern half of the site from north to south. A sewer lift station is associated with a sewer force main which extends east from the sewer lift station under the gravel maintenance access road.

Legend

-  Interpretive Sign Base
 -  Transmission Tower
 -  Utility Pole
 -  Dirt Path - Width Varies from 1'-8'
 -  Paved Multi-Use Trail
 -  Proposed Multi-Use Trail
 -  Retaining Wall
 -  Limit of Study Area
 -  Point of Interest - Locations with Good Views or Educational Opportunities
 -  Intervention - Areas where Users Have Intervened in the Landscape
 -  Conflict - Locations Where User Desires are in Direct Conflict with the Site
- * See Appendix B for Photo and Description of Each Numbered Point



Source: Aerial (Microsoft, Maxar 9/15/2020).



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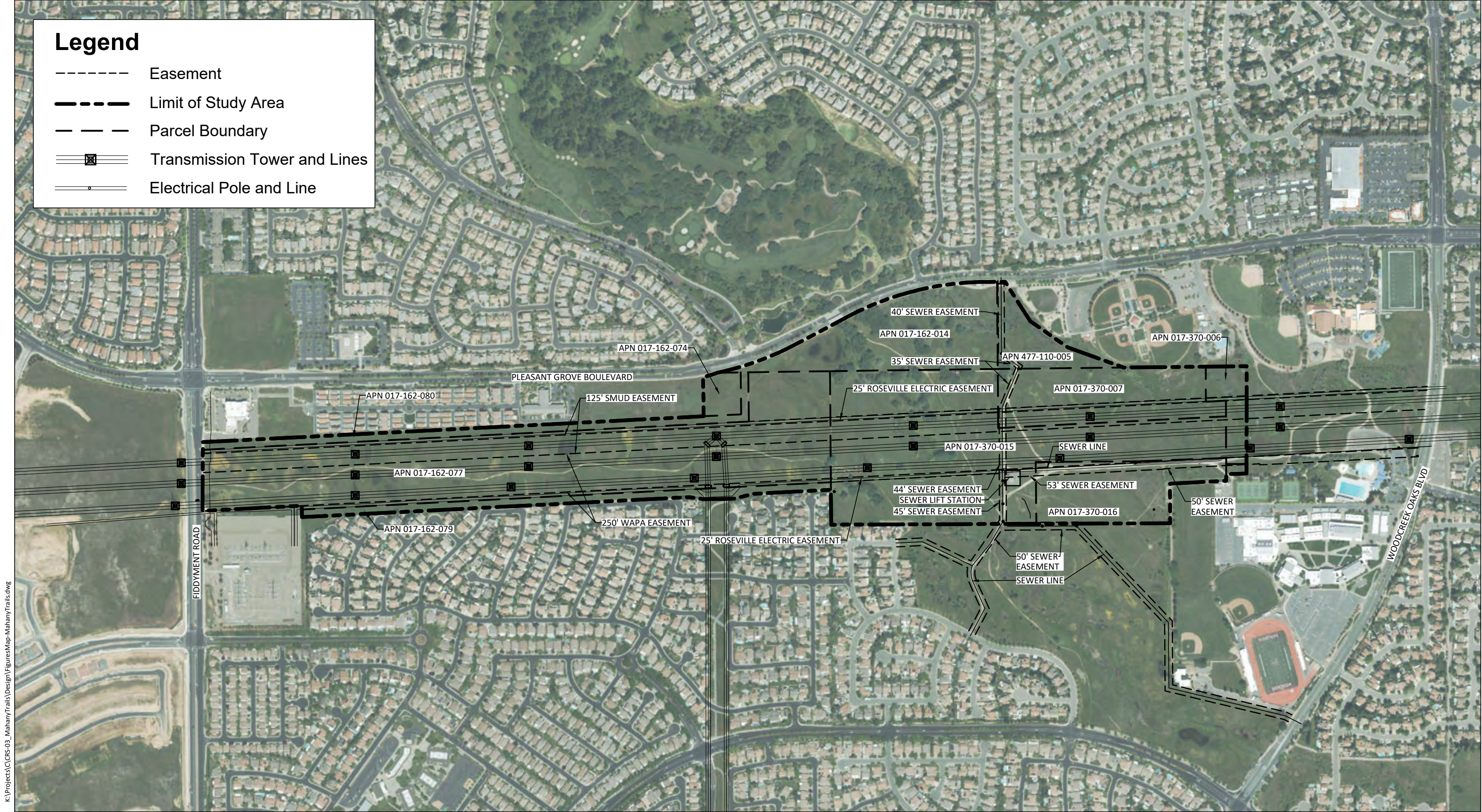
Source: Aerial (Microsoft, Maxar 9/15/2020).

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HELIX
Environmental Planning

Opportunities and Constraints

Figure 7B



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Source: Aerial (Microsoft, Maxar 9/15/2020).

4.0 TRAIL DESIGN GUIDELINES

A number of documents provide guidelines for trail design and development in the City of Roseville. Additionally, the Study Area includes Open Space Preserves established to protect sensitive natural resources and which are therefore subject to additional restrictions, as well as extensive utility infrastructure. Applicable design guidelines are discussed in the sections below and summarized in Table 2.

4.1 OPEN SPACE PRESERVE OVERARCHING MANAGEMENT PLAN

As discussed in Section 2, the OSPOMP provides guidelines for restoration of various habitats. These guidelines should be integrated into the final project to restore areas impacted by informal dirt trails, user interventions, and other disturbances to the open space preserve. Applicable restoration measures in the OSOMP include:

- The restoration of grassy upland areas includes seeding, temporary erosion control measures, and invasive plant removal. These guidelines apply to damaged areas of grassland habitat.
- The restoration of accidental fill of wetlands of the U.S. includes notifying the USACE and USFWS, removal of fill, minor regrading, and revegetation. These guidelines may apply where dirt paths cross or veer into wetlands.
- The restoration of fencing and signage includes fixing, upgrading, or replacing the section of fencing or the sign which was damaged to its original specifications. These guidelines apply to damaged or graffitied signs or fences.
- The restoration of erosion can include minor grading and reseeding with native seeds to stabilize exposed soil, use of straw wattles, or the installation of turf reinforcement mat/erosion control blanketing, or other erosion control methods approved by the city engineer in consultation with the open space manager. These guidelines apply to areas eroded by repeated pedestrian or bicycle use.
- The restoration of undesignated trails includes adding signage, repairing fencing, ripping soil and spreading native seed mix, and distributing flyers to residents near the Open Space. These guidelines apply to the dirt paths throughout the Study Area.
- The restoration of un-permitted bike jumps/trails includes dismantling jumps in upland areas using shovel or small equipment. No loose soil is to be put in the wetlands unless the soil was removed from the wetlands resulting in a hole. If the construction of bike jumps impacted the wetlands, the Open Space manager will notify the USACE and USFWS. These guidelines apply wherever there are un-permitted bike jumps.
- The restoration of landscaping or gardens includes notifying the party responsible, requesting corrective action, and then requiring payment if the City has to correct the problem. This protocol would apply to the fairy garden established near the sewer lift station.

Additional design requirements in the OSPOMP include:

- Where fencing along roadway and bike trails is required by an Agency permit, fencing will be post and cable, four-foot black vinyl covered chain link, four-foot tubular steel, guard rail, or concrete rail fencing.
- Bollards are to be placed in locations where trails enter the Open Space to prevent unauthorized vehicle access. Gates are currently installed to allow access for maintenance crews, emergency vehicles, and/or monitoring staff.
- The City may install additional open space preserve signs as needed. The City may also install interpretive signs near the various native communities which educate the public about native communities, their conservation, common species, and which encourage respect. Included in the appendix of the OSPOMP are guidelines for the design open space preserve and interpretive signs and sign examples.

4.2 CITY OF ROSEVILLE DESIGN AND CONSTRUCTION STANDARDS

The City of Roseville Design and Construction Standards (City Standards) are requirements for the design and construction of civil improvement projects within the City of Roseville. Section 13 – Bikeways provide standards to ensure that transportation and recreational bikeways are constructed in a manner that provide a safe and comfortable use by both bicycles and pedestrians. These standards are illustrated in standard details BK-1 through BK-5. Bikeways must be designed to meet the following requirements:

- The minimum paved width for a two-way bike path shall be 10 feet and have a minimum of 2-foot wide graded shoulders adjacent to the pavement.
- If the bike path is located adjacent to a creek, ditch, or downslope greater than 3:1, a minimum shoulder width of 5 feet from edge of pavement to top of slope is required.
- One shoulder shall consist of Class 2 Aggregate Base and the other shall consist of decomposed granite. Where profile grades are 4% or more, the decomposed granite may be stabilized with lime/fly ash or cement treatment or be replaced with Class 2 Aggregate Base.
- A minimum of 3 feet of horizontal clearance to obstructions, including post and cable fencing shall be provided adjacent to pavement where downgrades are less than 4% and a minimum of 5 feet from the edge of pavement where downgrades exceed 4%.
- Maximum recommended grade is 5% but can be 5-6% for up to 800 feet, 7% for up to 400 feet, or 8% for up to 200 feet and signed appropriately as required.
- The vertical clearance required is a minimum of 12 feet when Fire Department access is required, otherwise 9 feet.
- When a bike path is to be located in the City's Floodplain, the path shall be designed to be no more than one foot below the 10-year storm event water surface elevation. The minimum

elevation of the bike path constructed in a floodplain shall coincide with the 2-year water surface elevation.

- Bike bridges shall conform to requirements for pedestrian and bicycle bridges within Caltrans Bridge Design Specifications. Bridge shall have minimum width of 12 feet where Fire Department access is required, or 10 feet where it is not.
- Pavement markings shall be per Caltrans Standard Section 84-3 and California MUTCD Section 9C. 03 and signs per Section 9B. 01.
- Guide signs to roadways, and other points of interest shall be provided at trail junctions and as determined by City Engineer.
- Entry points to bike paths shall be designed to prevent unauthorized vehicle entry, which may include signage (City of Roseville 2020a).

4.3 UTILITIES

As discussed in Section 3 and shown on Figure 7, a number of utility easements cross the Study Area and the entire western half of the Study Area largely occurs within utility easements. While some design guidelines for the various utilities apply only to the areas within their easements, shared improvements, such as gates and access roads should be designed to meet the most stringent requirements.

4.3.1 Roseville Electric

Roseville Electric reviews plans as part of the City's standard process for electronic plan review (Roseville Electric 2020a). Relevant Roseville Electric design requirements include:

- No grading within 10 feet of electrical poles without notification (Roseville Electric 2020a).
- Maintenance roads must be minimum three-inch-thick asphalt over eight-inch-thick aggregate base (Roseville Electric 2020b).

4.3.2 SMUD

SMUD's Guide for Transmission Encroachment considers 'passive recreational parks', including trails, as acceptable secondary uses within transmission easements so long as they do not impact SMUD's ability to enjoy its full rights within its easements (SMUD 2013). SMUD requires an application and improvement plans be submitted to their Land Specialist within their Real Estate Services Department for internal review and approval (SMUD 2020). Relevant SMUD specific design requirements include:

- No excavation within 10 feet of any structure shall be allowed (SMUD 2008).
- Grading must maintain safe clearances (15' for wood pole or anchor, 25' for steel lattice tower and steel pole) and any fill shall be compacted to 90% maximum dry density (SMUD 2013).

- Joint use of public facilities is not allowed, and existing access road may not be impacted by installation of a trail. Access roads must be provided if current access road is impacted (SMUD 2013).
- Where a fence or wall restricts access to a SMUD right of way, gates are required. Gates must have a minimum of 15' opening and be provisioned for a SMUD standard lock (SMUD 2013).
- Any metal structures within the right of way are to be properly grounded (SMUD 2008).
- Any vertical structure shall not exceed 15 feet in height (SMUD 2013).
- Construction activities within 25 feet of transmission towers will require the presence of a SMUD inspector onsite prior to the beginning of any work in that area (SMUD 2013).

4.3.3 WAPA

WAPA requires all improvement plans be submitted to their Reality Specialist for internal review and approval (WAPA 2020a). Relevant WAPA specific design requirements include:

- Thirty feet of unobstructed access is required around towers. If trails do not restrict maintenance equipment access, they may be allowed within 30 feet of the transmission line structure, particularly if they double as a maintenance road (WAPA 2020a).
- No ground elevation changes are allowed within 20 feet of a transmission line structure. (WAPA 2020b).
- A 14-foot wide gate is required on any fence which restricts access to their equipment. (WAPA 2020b).

4.3.4 Sewer

The City of Roseville operates and maintains the sewer system. Sewer reviews plans as part of the City's standard process for electronic plan review (City of Roseville 2020d). Although the existing sewer trunk line and lift station are not located in a separate easement, the City of Roseville Design and Construction Standards provide the following guidance for development around sewer lines:

- Easement width must be minimum of 15 feet centered on sewer line and their minimum width must be equal to the trench width plus two additional feet for every one foot of depth of pipe.
- No trees or permanent structures are allowed within easement.
- A minimum 12-inch clearance from top of pipe to any other utility or improvement.
- Load on pipe must not exceed that allowed by pipe rigidity, as determined by Marston's formula (City of Roseville 2020a).
- The sewer force main and lift station may be utilized for future wastewater and recycled water projects, so access for construction and operation and maintenance vehicles and personnel to these sites must be maintained.

- In order to accommodate future projects within the sewer lift station, a staging area of approximately 10,000 square feet adjacent to the sewer lift station will be required. Construction of a multi-use trail must not interfere with this staging area (City of Roseville 2020c).
- Where existing sewer force main runs under the gravel maintenance access road, any future paving must not damage the sewer force main.
- Any new paving along the gravel maintenance access road must be able to withstand access by a vector truck (a large, 3 axeled, vacuum tractor truck). A standard City bike lane is an adequate width (City of Roseville 2020d).

Table 2
SUMMARY OF DESIGN GUIDELINES

Source	General Trail Design	Trail Width	Fencing and Trail Access	Gates	Setbacks	Signage and Educational Opportunities	Approval Requirements
Open Space Preserve Overarching Management Plan (OSPOMP) 2011	Paved bike trails to have adequate width, grade, visual clearance, and surface materials to provide safe passage for anticipated users of all abilities. Within Open Space Preserve, reclaim social trails and eliminate access to entry points. Within General Open Space, reclaim social trails only if the Open Space Manager determines they are negatively impacting Preserve resources.		Install fencing adjacent to trails and overlook points. Fencing will be post and cable, four-foot black vinyl covered chain link, four-foot tubular steel, guard rail, or concrete rail fencing. Bollards are placed in locations where trails enter into the Open Space to prevent unauthorized vehicle access.	Gates are currently installed to allow access for maintenance crews, emergency vehicles, and/or monitoring staff.	Avoid trails through sensitive habitats such as vernal pool grassland.	Install additional open space preserve signs as needed. The City may also install interpretive signs near the various native communities which education the public about native communities, their conservation, common species, and which encourage respect. Discourage Vandalism and other unwanted activities by taking a comprehensive approach to enforcement that includes signage, patrols, and a telephone hotline for reporting violations. Install consistent Open Space signage that is constructed out of materials that are not easy to damage. Educate residents regarding City leash laws. Encourage safe and appropriate use of the City's Open Space by schools conducting environmental education. (Sample open space and interpretative signage provided in OSPOMP.)	Existing trails were either permitted and installed as part of the development requiring an Open Space Preserve or were permitted separately as their own project within the General Open Space. When plans are developed, the Project Proponent will coordinate with the appropriate State and Federal Agencies from approval of all required permits including Section 7 or 10 consultation with the USFWS.
City of Roseville Bicycle Master Plan 2008	Estimated 0.77 miles of trail in Project Area at cost of \$1.3 million a mile.					Recommend installation of bike parking, mile markers and destination guide signs, and trail maps at trailheads.	
City of Roseville Design/Construction Standards	Trail shall be minimum 2" asphalt over 4" aggregate base. Base must be greater if vehicular or emergency access is required. One shoulder shall be decomposed granite paving and the other should be Class 2 aggregate base. Sections over 4% can have Class 2 aggregate base on both sides or decomposed granite paving may be stabilized with lime/fly ash or cement treatment. Design speed for 20 mph. If downgrade exceeds 4%, minimum design speed shall be 30 mph. Maximum grade recommended is 5% and 2% cross slope.	Minimum width to be 10' for two-way trail and 5' for one-way. Trail shall have a 2' shoulder on both sides of pavement. Clear width on structures between railings shall not be less than 12'. When fire access is required, 12' clear width required.	Post and cable fencing to be a minimum 3' clearance from adjacent pavement. Design trail access to prevent unauthorized vehicular entry.	Access points with a width of 20' shall be placed at intervals of 750' and cable must be coated with yellow to designate access and padlock provided on both ends	Minimum 3' clearance to permanent obstructions where downgrades are less than 4%, 5' when over 4%. If trail is adjacent to a continuous fixed object, a 4" white edge line, 2' away from the fixed object is required. 5' minimum from top of slope if adjacent to creek, ditch, or downslope greater than 3:1.	See California Manual on Uniform Traffic Control Devices Section 9B.01. Shared-use paths shall conform to 9B-1 for Class I trails. Trail junctions shall have guide signs and as determined by City Engineer. Entrances shall have entry signs with regulatory sign prohibiting motor vehicle entry. Trail segments greater than 5% slope shall be posted with appropriate warning sign.	Bike bridges to support gross pounds but shall include maintenance vehicle traffic loading with approval of Fire Department and City Engineer. vehicular weight of less than 30,000 Letter of Map Revision may need to be submitted to FEMA for approval as determined by public works for bridges in floodplains. Bikeway improvement plans must be accepted by Development Services Engineering Division and meet requirements of Section 3 "Plan Sheet Requirements".

Table 2 (cont.)
SUMMARY OF DESIGN GUIDELINES

Source	General Trail Design	Trail Width	Fencing and Trail Access	Gates	Setbacks	Signage and Educational Opportunities	Approval Requirements
City of Roseville Design/Construction Standards (cont.)	Bikeway design must conform to “Guide for Development of Bicycle Facilities”, Caltrans “Bikeway Planning and Design”, CA Manual on Uniform Traffic Control Devices for Streets and Highways”, and any relevant Specific Plan. Stopping site distances per Section 7-12 and figure 1003.1D of Caltrans Highway Design Manual. Lateral clearance and horizontal curves shall conform to 1003.1F from Caltrans.						
SMUD	SMUD’s Guide for Transmission Encroachment considers features they term ‘passive recreational parks’ which includes trails, as acceptable secondary uses within transmission easements so as not to impact SMUD’s ability to enjoy its full rights within its easements. Joint use of public facilities is not allowed, and existing access roads may not be impacted by installation of a trail. Access roads must be provided if current access road is impacted.		Metal structures within ROW must be properly grounded. Vertical structures cannot be more than 15’ high.	15’ gates are required where wall or fence restricts access.	No grading within 15’ of wood poles and 25’ from steel structures. Construction activities within 25’ of structures require presence of SMUD inspector onsite prior to work beginning. No excavation within 10’ of any structure.		Plans must be submitted to their land specialist within Real Estate Services department for approval.
WAPA	No maintenance road guidance provided.			14’ gate needed on any proposed fence that restricts access to equipment	30’ unobstructed access around towers. Trails can be within 30’ buffer if they do not restrict maintenance equipment access or double as maintenance road. No ground elevation changes allowed within 20’ of structures.		Need improvement plans submitted to their Reality Specialist for approval.
Roseville Electric	Maintenance roads must be minimum three-inch-thick asphalt over eight-inch-thick aggregate base.				No grading within 10’ of electrical poles without notification.		Roseville Electric reviews plans as part of the City’s standard process for electronic plan review.

Table 2 (cont.)
SUMMARY OF DESIGN GUIDELINES

Source	General Trail Design	Trail Width	Fencing and Trail Access	Gates	Setbacks	Signage and Educational Opportunities	Approval Requirements
Roseville Sewer	Where sewer line is present, the sewer easement width is a minimum 15' centered on sewer line and their minimum width must be equal to the trench width plus two additional feet for every one foot of depth of pipe. The sewer force main and lift station may be utilized for future wastewater and recycled water projects, so access for construction and operation and maintenance vehicles and personnel to these sites must be maintained. In order to accommodate future projects within the sewer lift station, a staging area of approximately 10,000 square feet adjacent to the sewer lift station will be required. Construction of a multi-use trail must not interfere with this staging area.		Any new paving along the gravel maintenance access road must be able to withstand access by a vactor truck (a large, 3 axle, vacuum tractor truck). A standard City bike lane is an adequate width		Where existing sewer force main runs under the gravel maintenance access road, any future paving must not damage the sewer force main. Within a sewer easement: -No trees or permanent structures are allowed. - A minimum of 12" clearance required from top of pipe to any other utility or improvement. - Load on pipe must not exceed that allowed by pipe rigidity.		Sewer reviews plans as part of the City's standard process for electronic plan review.
U.S. Fish and Wildlife Service					Avoid direct impacts to vernal pools. Evaluation of Indirect impacts will be based on impact to pool microwatersheds. Development downhill/ downstream from pools will have less impact.		Section 7 or 10 consultation prior to construction. Possible Incidental Take Permit, depending on project footprint and sensitive resources.
California Department of Fish and Wildlife					Avoid direct impacts to riparian vegetation and creek channels.		Submit 1600 Permit application prior to construction. Possible Incidental Take Permit, depending on project footprint and sensitive resources.
U.S. Army Corps of Engineers					Avoid direct impacts to waters of the U.S.		No involvement unless direct impacts to jurisdictional waters of the U.S., in which case Section 404 permit is needed prior to construction.

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Appendix A

Stakeholder Interviews

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Mahany Park and Open Space Trail Feasibility Study

Stakeholder Questions

Name: Guru Niyam K.

Contact: woodcreekoaksna@gmail.com (e-mail preferred). (707) 718-5526

Date of Interview: 5/15/2020

Interviewed by: JLL

Position: Secretary for Woodcreek Oaks Neighborhood Association.

Ensure they are familiar with the project boundary (website is Roseville.ca.us/mahanytrail)

1. How do you currently use the site?

Personally enjoys going out and walking through the open space. A few years ago there was a makeshift bridge then it was removed. Ever since bridge removed haven't gone on west side of the open space. Before that used to run all the time. Now will take the kids out to enjoy the spring flowers and vernal pools (used the wrong word – vernal pool). Stays pretty close to the high school now. Really enjoy walking on the dirt trails and reading signs in the nature area.

2. Do you have any concerns about the site as it is currently?

No bridge. Not exactly a concern, but don't really like walking on the gravel path. Not a lot of shade, so need to plan accordingly.

3. Would you like to use the site differently? If so, what amenities would you like to see?

Bridge/crossing to allow use of full site.

4. If a multi-use trail was added to the site would you use it? If yes, how?

Having a bike path has real perks, but also likes dirt trail. Kids and her bike often, but not within preserve because of the dirt. Would bike on it with family if paved. Tries to avoid streets, so would be nice to have more off-street path. There is a balance between wildness of site (which she loves) and the trail, so wants to retain natural feel. Loves how there are fallen trees, wildlife at different times of year.

5. In your opinion, what are the benefits of adding a multi-use trail to the site?

More off-street bike trail is great. Used to go to dry creek to ride. 1.5 mile each way with playground at end was great there. A multi-use trail presents so much opportunity for younger kids/families. There is a ton of trail on other side of town with miner's ravine, would like more on this side.

6. Do you have concerns about adding a multi-use trail to the site?

Retain natural feel. Don't want eyesore. People love walking their dogs through there. Some trash cans and signage about picking up after dogs would be great. Maybe more trees/shade. It is nice to have dirt trails to run on too. Maybe keep dirt trails?

7. Are you aware that the site is a preserve put in place to protect the vernal pools and the endangered species they contain?

Did notice behind the high school the nature area had signs and explained about it. Knew that there were areas to preserve/protect right around nature area (which she was calling Silverado Oaks Preserve, but only actually referencing nature area). Didn't realize the rest of the site was a preserve.

Follow up questions, would you like to see more interpretative signage: Likes the informational signs. Gives kids a way to connect to the space and helps to let her answer questions/prompt discussion. Really likes the idea of having spread out interpretative signage so people don't take it for granted. That's what we get to enjoy about it.

8. Do you have anything you would like to add?

There is a bike trail that pops out onto Woodcreek oaks. Then you can cross Woodcreek oaks then get onto trail behind the pool which would ultimately take you into Mahany preserve. One thing that could be an issue is people coming from east and want to cross Woodcreek oaks midblock (not at crossing). Trail continues directly on other side of street, this is safety concern. Educate people to go to traffic light. There is a little bridge, keep or remove to deter people? It would be so nice to have a safe midblock crossing. Add signs?
Would love to connect to the greenbelt to the south.

Mahany Park and Open Space Trail Feasibility Study

Stakeholder Questions

Name: Kendra Grinsell

Contact: 916-624-6405

Date of Interview: 5/13/2020

Interviewed by: JLL

Position: Woodcreek High School Nature Center Coordinator and Science Teacher

Ensure they are familiar with the project boundary (website is Roseville.ca.us/mahanytrail)

1. How do you currently use the site?

Sit down shows at the two bench areas out there (30 min) then kids hike the trails (down toward bridge then up to bike trail by sub station then through oak grove then down gravel road)
Group size for tour normally 6-12 plus 4-6 parents that follow. Up to 20 people, typical 15. 2 side by side or single file.

2. Do you have any concerns about the site as it is currently?

The oak grove area will get paint ballers and pellet gun kids. Dirt bike ramps and forts. Broken branches for 'bunkers' and digging. Less common now. The trail through middle of oak grove overrun with thistle. Now go down under powerlines and have to walk further. Used to turn at oak tree line (by open space sign which leads to digging) now have to go farther west to most exposed area.

3. Would you like to use the site differently? If so, what amenities would you like to see?

Add trail through oak grove. When first started added native garden – gone now because rodents ate through drip, then drought. Repaired leak and marsh went away. Hoped for post and cabling along trail. Discussed permeant sign, but lots of vandalism of benches and signs. Kids will drink, smoke, start fires by benches. Clean every Monday. Because there are no lights, people can't see youth sitting out there. Will graffiti out there.
Follow up question: Would you like if trails were paved? Like that its dirt because it feels natural, but kids with disabilities have trouble navigating through mud.

4. If a multi-use trail was added to the site would you use it? If yes, how?

Would use if they paved gravel road. Will keep their general route regardless of what we do. Have access to only one vernal pool. Left most of the two if looking at signs from gravel road. Permission to dip/look into.
Follow up question: Do you want water access? Not for nature center program. There is another nature program that isn't realize used yet, but if it takes off, freshman do nature projects and would be helpful to have water access. Kids get access to river between bridges toward Mahany.

5. In your opinion, what are the benefits of adding a multi-use trail to the site?

More people staying on the paved trail and not wander into grass lands. Access for people with disabilities. More cyclists too.

6. Do you have concerns about adding a multi-use trail to the site?

Worried about bringing more people to the site. Big problem is dogs off leash, chasing wildlife.

7. Are you aware that the site is a preserve put in place to protect the vernal pools and the endangered species they contain?

Yes aware.

Follow up: do you feel this is commonly known? No. We try to educate other people out there. Nobody knows what a vernal pools is. Treated like free open space where you can do whatever you want. Need to be monitored more.

8. Do you have anything you would like to add?

Kendra asked if the City was looking into more educational pieces. I explained yes, looking into signage.

9. Would you be ok with us asking follow up questions? Would you like to join next weeks education conversation?

Sure and yes.

Mahany Park and Open Space Trail Feasibility Study

Stakeholder Questions

Name: Scott Corey

Contact: (916) 257-1147

Date of Interview: 5/12/2020

Interviewed by: JLL

Position: Cycling Team (club) Coach

Ensure they are familiar with the project boundary (website is Roseville.ca.us/mahanytrail)

1. How do you currently use the site?
Team currently uses area. Big event is ride-a-thon 1.25 mile course along trail and they complete multiple laps to raise money.
2. Do you have any concerns about the site as it is currently?
Not necessarily. Main thing is want to have multi-use environment. Haven't seen any misuse. The ground gets soft/muddy.
3. Would you like to use the site differently? If so, what amenities would you like to see?
Want to maintain dirt trails. Would like to be able to have training areas for team and potentially for high schools in area. Obstacles and tight turns in areas that are not heavily used. This is something that has been brought up by the league as well (short course racery). Team would be willing to maintain these trails.
4. If a multi-use trail was added to the site would you use it? If yes, how?
A paved trail would be used by team as well, because we do some training with road bikes, but it will mostly to get from the school to Fiddymont, no actual training on site.
5. In your opinion, what are the benefits of adding a multi-use trail to the site?
Would benefit the school a lot, adding additional running paths, more open for community. Roseville prides itself on paved multi use trails. Love that trails reinforce the community aspect.
6. Do you have concerns about adding a multi-use trail to the site?
Don't want to lose all the dirt trails.
Follow up question - Does gravel or DG provide same benefits as dirt?
No gravel is really hard to ride on. Hard on tires and can throw rocks up at other riders, slide out on turns. DG is better, but not as good as dirt.
7. Are you aware that the site is a preserve put in place to protect the vernal pools and the endangered species they contain?
No, only aware of electrical easements. Think interpretative signage and map of boundaries and messaging to tread lightly and learn about purpose would be useful. No one on team knows this.
8. Do you have anything you would like to add?
Glad to see work is being done. Would like to see stuff for bikers – love informal trails. Do need to watch out for creek. To help protect creek suggest a bridge. Mountain bike team is interested in helping – volunteer days (40 kids, 10-20 adults), same for cross country team. Cross country team runs there too.

Mahany Park and Open Space Trail Feasibility Study

Stakeholder Questions

Name: Gregg Bates

Contact: valleyfoothill@gmail.com; 916-773-6575

Date of Interview: 7/9/2020

Interviewed by: Meredith Branstad

Position: Dry Creek Conservancy/ Valley Foothill Watersheds Collaborative

1. How do you currently use the site?

Group does not have current projects active on site. In the past, they worked with the Roseville UEC previously for restoration and maintenance projects along Kaseberg Creek. Installed riparian planting (oaks, wild rose, monkeyflower, other riparian species) and drip irrigation lines, between Woodcreek Oaks Blvd and the existing footbridge especially on north side. Did a second project in the area behind the Mahany Park batting cages. Group installed plants and did spring and fall maintenance. The projects had some Eagle Scout involvement.

City also did restoration near Pleasant Grove Blvd crossing.

Used to do trash clean-up site relatively routinely in conjunction with City's Celebrate the Earth event. Haven't been doing it since event was cancelled. City has taken over most of maintenance of the area.

Also have done invasive species removal along the creek; Callery pears were a particular problem in the past.

2. Do you have concerns about adding a multi-use trail to the site?

The less asphalt the better to reduce runoff and water quality. Think it's a good thing to have one major asphalt path and dirt/ permeable paths for rest.

3. Do you have anything you would like to add?

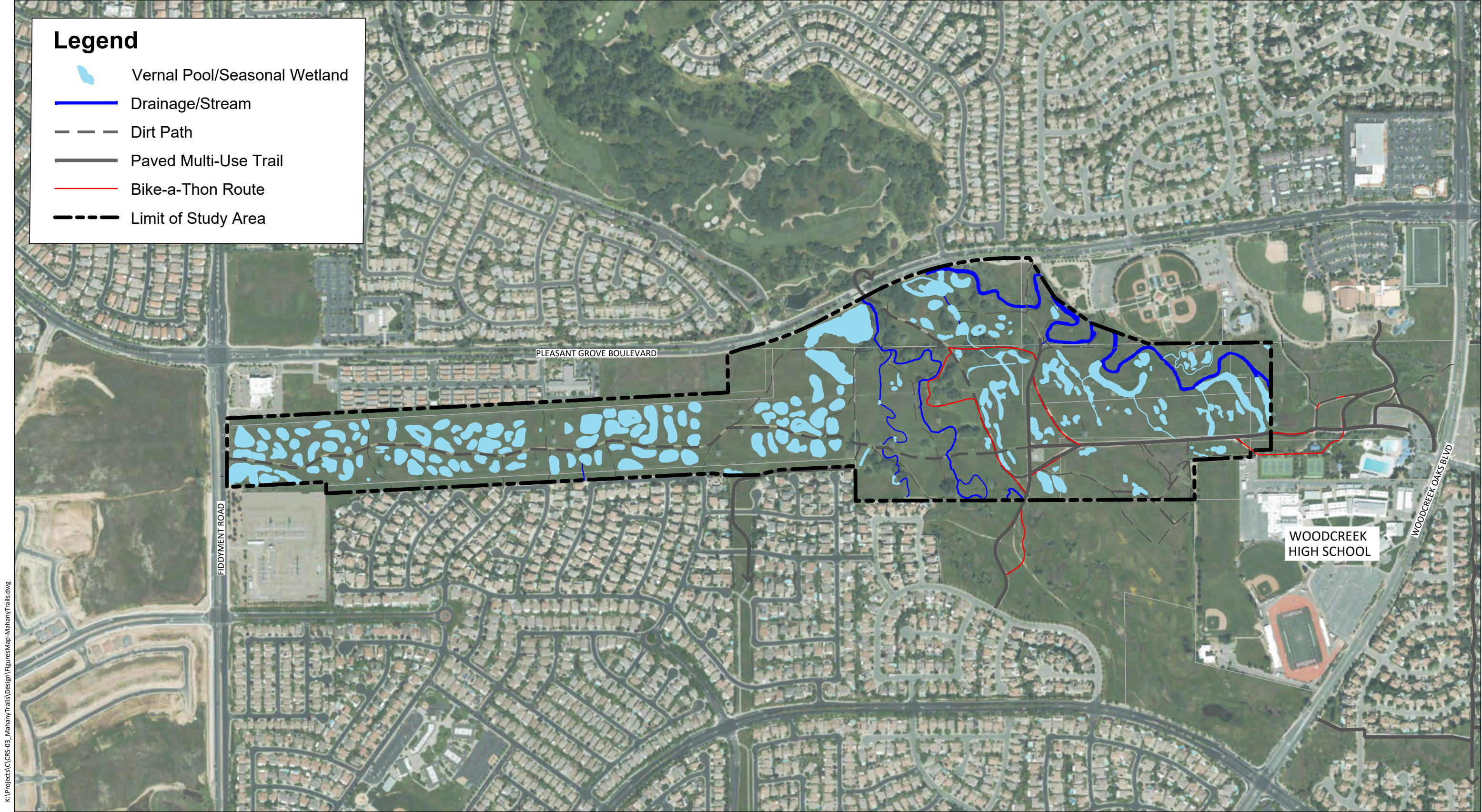
Interpretive sign ideas:

- Explain the planting projects done along the creek – UEC could provide more information.
- Benefits to water quality, wildlife benefits of restoring urban streams. Holistic ecosystem of private residential landscape with urban streams.
- Don't release your pets - invasive snake in lakes downstream (Pete Balfour from ECORP studied it)/ red-eared sliders/ feral cats.
- Oak grove and wildlife (hawks, woodpeckers).
- Natural fire regime and how to manage it now in urban setting – grazing management strategy.

Opportunities to do perennial grassland restoration – but would need to protect from goat grazing.

Drainage under Woodcreek Oaks has been an erosion issue and sediment backing up creek and causing flooding. Maybe opportunities for revegetation on creek east of project site to reduce erosion.





Appendix B

Opportunities and Constraints Table

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Within the Study Area are distinct site conditions where the natural features, formal improvements, and/or informal improvements interact. These site conditions are noted in the representative site photos table, below. Three types of points are identified:

- Points of Interest – Locations where the combination of formal and informal improvements, in conjunction with the natural features, creates a notable condition.
- Interventions - Locations where users have informally intervened in the landscape.
- Conflicts - Locations where user needs are in direct conflict with the site.

This appendix supports the discussion of constructed features in section 3.6 of this report.

Point Number	Point Type	Description	Photo
1	Point of Interest	Crossing opportunity where Mahany Open Space aligns with existing maintenance road/future bike trail on the other side of Fiddymment while avoiding electrical towers.	
2	Point of Interest	This slight rise offers views looking west of well-defined vernal pools.	
3	Intervention	Large hole in ground presents possible hazard to site users and indicates homeowner use of Preserve.	
4	Conflict	Undesignated path from the adjacent neighborhood has the potential to cause disturbance to the site's sensitive resources. Path entrance requires users to go around plants.	

Point Number	Point Type	Description	Photo
5	Conflict	Undesignated path from the adjacent neighborhood has the potential to cause disturbance to the site's sensitive resources. Path entrance requires users to go over or around post and cable fence.	
6	Conflict	Undesignated path from the adjacent neighborhood has the potential to cause disturbance to the site's sensitive resources. Path entrance requires users to go in between and around shrubs.	
7	Intervention	Evidence of attempted trail widening and repair by site users.	
8	Conflict	Undesignated path from the adjacent neighborhood has the potential to cause disturbance to the site's sensitive resources. Path entrance requires users to go over or around post and cable fence.	
9	Conflict	Undesignated path from the adjacent neighborhood has the potential to cause disturbance to the site's sensitive resources. Path entrance requires users to go over or around post and cable fence.	

Point Number	Point Type	Description	Photo
10	Conflict	Undesignated path from the adjacent neighborhood has the potential to cause disturbance to the site's sensitive resources. Path entrance requires users to go over or around post and cable fence.	
11	Conflict	Undesignated path from the adjacent neighborhood has the potential to cause disturbance to the site's sensitive resources. Path entrance requires users to go over or around post and cable fence.	
12	Point of Interest	View looking west presents opportunity to view several well-defined vernal pools.	
13	Conflict	The bike path terminates with no obvious connection for bike riders.	
14	Point of Interest	Culvert under user created trail. Could allow for formalized trail crossing.	
15	Conflict	Debris has been laid down to allow users to cross over the creek.	

Point Number	Point Type	Description	Photo
16	Point of Interest	A shaded location offers a view looking north of a large, well-defined vernal pool.	
17	Point of Interest	This location offers safe north-south passage under the road and connects to existing bike path north of Preserve.	
18	Conflict	Undesignated path from Pleasant Grove Blvd. requires users to go over or around post and cable fence and up/down steep slope. Path is causing erosion.	
19	Conflict	Signs of user-built creek crossing which has been removed.	
20	Conflict	Undesignated path from Pleasant Grove Blvd. requires users to go over or around post and cable fence and through oak woodland.	

Point Number	Point Type	Description	Photo
21	Point of Interest	Smaller well-defined vernal pool very close to path presents education opportunity.	
22	Intervention	Large recently dug hole in ground with intentional seeming square shape, vertical edges, and stepped interior. Tools and trash present indicate ongoing project.	
23	Conflict	Creek and path crossing showing signs of pedestrian and bicycle users crossing through creek in this location.	
24	Conflict	Creek and path crossing showing signs of pedestrian and bicycle users crossing through creek in this location.	
25	Intervention	Large user-constructed bike jump area located within and adjacent to several vernal pools.	
26	Conflict	Debris has been laid down to facilitate creek-crossing.	

Point Number	Point Type	Description	Photo
27	Point of Interest	Ample shade and beautiful view is provided by a grove of oak trees adjacent to existing bike path. Opportunity for oak tree education.	
28	Conflict	User-constructed bike jumps border the existing gravel path.	
29	Conflict	Undesignated path from Bear Dog Park requires users to go up/down steep slope. Path is causing erosion.	
30	Conflict	Debris and pallets have been laid down to facilitate creek crossing.	
31	Conflict	Debris and plywood have been laid down to facilitate creek crossing.	
32	Point of Interest	The outdoor classroom is used and maintained by Woodcreek High School for their education program	

Point Number	Point Type	Description	Photo
33	Intervention	Piles of seemingly landscape materials debris indicate unauthorized disposal of material in Open Space.	
34	Point of Interest	The outdoor classroom is used and maintained by Woodcreek High School for their education program	
35	Point of Interest	Bench located along path with views of Woodcreek High Schools education area.	
36	Conflict	User-created path cuts between parking lot and gravel maintenance access road. Tire tracks indicate it is used by vehicles, but vehicles were not observed so reasons for driving into area are not known.	

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Appendix C

Trail Use Counts

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**Mahany Park Open Space Trail Feasibility Study
Trail Use Count Data Sheet**

Date: 6/2/2020

Observer's Name: Daniel Blair

Location: Intersection of existing dirt path and Fiddymment Road at west end of Study Area

Start Time: 5:00 pm

End Time: 7:00 pm

Weather: Sunny, 95 degrees

Other Notes:

People who entered the count area and then turned to travel in another direction were counted only once in the direction of travel from which they entered the Study Area. People entering from Fiddymment Road are included in the eastbound count.

People who made a round trip during the trail count period were counted traveling in both directions.

1 person was initially traveling south on Fiddymment then turned east.

3 people were initially traveling north on Fiddymment then turned east.

4 people were initially traveling west then turned south.

2 people were initially traveling west then turned north.

1 person was traveling west then turned east, roundtrip.

People observed traveling along Fiddymment but not entering the Study Area included: 1 pedestrian going north, 6 bicyclists headed north, and 2 bicyclists headed south.

Direction of Travel: East on Path

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15		1			
15-:30					
30-:45					
45-1:00		1			
1:00-1:15					
1:15-1:30		1			
1:30-1:45					
1:45-2:00	2			2	
Total	2	3		2	

Direction of Travel: West on Path

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15	1	1		1	
15-:30		1			
30-:45		1			
45-1:00					
1:00-1:15					
1:15-1:30					
1:30-1:45	3			2	
1:45-2:00					
Total	4	3		3	

**Mahany Park Open Space Trail Feasibility Study
Trail Use Count Data Sheet**

Date: 6/2/2020

Observer's Name: Carolyn Hagele

Location: Lift Station on eastern end of Study Area

Start Time: 5:00 pm

End Time: 7:00 pm

Weather: Sunny, 95 degrees

Other Notes:

People who entered the count area and then turned to travel in another direction were counted only once in the direction of travel from which they entered the Study Area.

People who made a round trip during the trail count period were counted traveling in both directions.

8 people were initially traveling north then turned east.

7 people were traveling north then turned west.

5 people were traveling south then turned west.

1 person made a roundtrip on the east-west path.

Direction of Travel East

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15	1	2		1	
15-:30					
30-:45	3	2		3	
45-1:00	3			1	
1:00-1:15		2			
1:15-1:30		1			1
1:30-1:45	2				
1:45-2:00		1			
Total	9	8		5	1

Direction of Travel: West

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15		1			
15-:30		2			1
30-:45	6			1	
45-1:00	4		1 stroller		
1:00-1:15					
1:15-1:30					
1:30-1:45	2				
1:45-2:00		2			
Total	12	5	1	1	1

Direction of Travel: North

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15		2			
15-:30		1			1
30-:45	3	4		3	
45-1:00	4			4	
1:00-1:15		2			1
1:15-1:30					
1:30-1:45	6			4	
1:45-2:00	2	3		2	1
Total	15	12		13	3

Direction of Travel: South

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15					
15-:30					
30-:45	5	2		5	
45-1:00					
1:00-1:15					
1:15-1:30					
1:30-1:45	3				
1:45-2:00					
Total	8	2		5	

**Mahany Park Open Space Trail Feasibility Study
Trail Use Count Data Sheet**

Date: 6/6/2020

Observer's Name: Carolyn Hagele

Location: Intersection of existing dirt path and Fiddymment Road at west end of Study Area

Start Time: 7:30 am

End Time: 9:30 am

Weather: Overcast then sunny, 55 to 60 degrees

Other Notes:

People who entered the count area and then turned to travel in another direction were counted only once in the direction of travel from which they entered the Study Area. People entering from Fiddymment Road are included in the eastbound count.

People who made a round trip during the trail count period were counted traveling in both directions.

2 people were initially traveling south on Fiddymment then turned east.

5 people were initially traveling west then turned south.

3 people were initially traveling west then turned north.

2 people were traveling west then turned east, roundtrip.

People observed traveling along Fiddymment but not entering the Study Area included: 4 pedestrians going north, 5 going south, 2 bicyclists headed north, and 3 bicyclists headed south.

Direction of Travel: West on Path

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15		2			1
15-:30		2			
30-:45					
45-1:00					
1:00-1:15					
1:15-1:30		2			
1:30-1:45	4			4	
1:45-2:00					
Total	4	6		4	1

Direction of Travel: East on Path

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15					
15-:30		2			
30-:45					
45-1:00					
1:00-1:15		2			
1:15-1:30					
1:30-1:45					
1:45-2:00					
Total		4			

**Mahany Park Open Space Trail Feasibility Study
Trail Use Count Data Sheets**

Date: 6/6/2020

Observer's Name: Daniel Blair

Location: Lift Station on eastern end of Study Area

Start Time: 7:30 am

End Time: 9:30 am

Weather: Overcast/late sunny, 55-61 degrees

Other Notes:

People who entered the count area and then turned to travel in another direction were counted only once in the direction of travel from which they entered the Study Area.

People who made a round trip during the trail count period were counted traveling in both directions.

4 people were initially traveling east then turned south

2 people were initially traveling east then turned north

8 people were initially traveling west then turned south

18 people were initially traveling west then turned north

10 people were initially traveling north then turned east.

2 people were initially traveling north then turned west.

1 person was initially traveling south then turned west.

1 person made a round trip along east-west path.

Direction of Travel: East

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15		2			
15-:30					
30-:45		2			1
45-1:00					
1:00-1:15					
1:15-1:30		1			
1:30-1:45		1			
1:45-2:00	2	2			
Total	2	8			1

Direction of Travel: West

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15		10			3
15-:30		8			5
30-:45		4			
45-1:00		1			
1:00-1:15	3	3			1
1:15-1:30	4	3			1
1:30-1:45		4			2
1:45-2:00		6			1
Total	7	39			13

Direction of Travel: North

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15					
15-:30		5			2
30-:45		1			1
45-1:00		4			2
1:00-1:15		3			1
1:15-1:30		3			
1:30-1:45	2	2			
1:45-2:00	1	4			3
Total	3	22			9

Direction of Travel: South

Time Block	Bike	Pedestrian	Other (Skateboard, Scooter, Stroller, etc.)	Wearing Helmet?	Dog?
00-:15					
15-:30					
30-:45					
45-1:00		1			
1:00-1:15					
1:15-1:30		1			1
1:30-1:45		1			
1:45-2:00		1			
Total		4			1

Appendix D

Survey Results

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Introduction

The City of Roseville is studying the feasibility of developing a paved multi-use trail within Mahany Park open space which will ultimately connect with existing and proposed paved trails nearby. Part of the Mahany Park open space project area is a public park, but most of the area is considered an open space preserve. Currently, when visitors walk or bike through the area, they create dirt paths that can damage the endangered plants and wildlife within the open space preserve. The study will evaluate factors such as creeks, sensitive habitats and wildlife, topography, safety, aesthetics, and land use impacts. The open space has use limitations and trail suggestions will be considered within those constraints.



Map of the Mahany Park open space study area

The City of Roseville implemented a two and a half-week online community survey for the Mahany Park Open Space Trail Project to understand how Roseville residents and Mahany Park visitors currently use informal trails, how they access these trails, what types of future amenities they would like as a part of a paved trail, and any potential concerns with creating a paved multi-use trail. The online community survey was available from Tuesday, May 26, 2020 to Friday, June 12, 2020. The project team received more than 1,300 responses from community members. Due to the recent COVID-19 health emergency, this online survey is taking place in lieu of an in-person public workshop.

Methodology

The online informational video and community survey provided participants an opportunity to learn more about the feasibility study and provide their thoughts at the early phase of the study.

The project team received 1,306 submissions from community members. A full list of the comments submitted is available in the Appendix.

The online survey consisted of eleven (11) questions on:

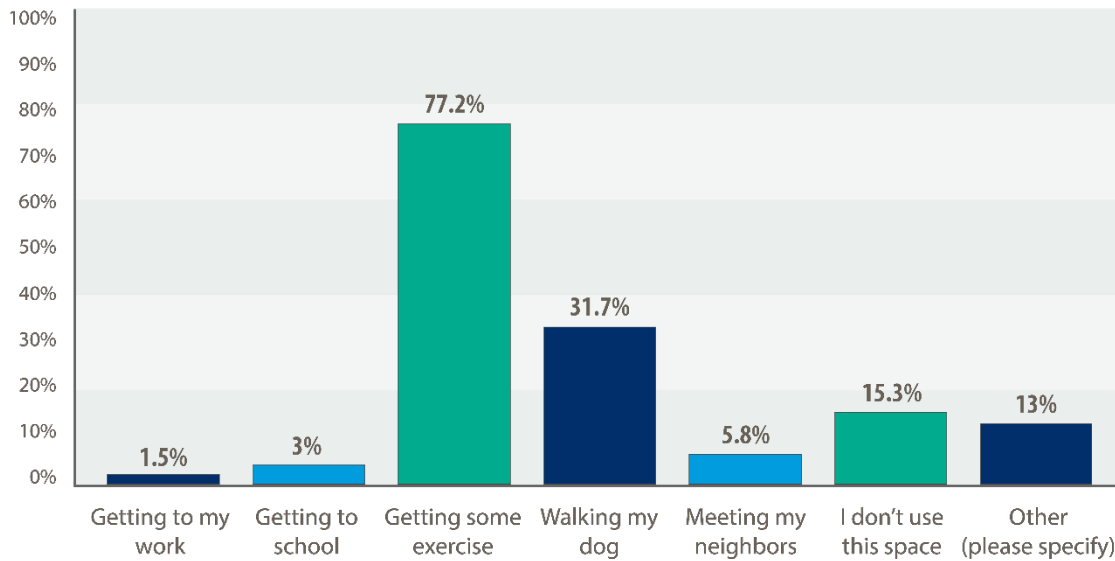
- Why Mahany park visitor travel through the open space
- Mode of transportation typically used
- Existing and suggested open space access points
- Future trail amenities
- Benefits or opportunities of a paved multi-use trail at Mahany open space
- Potential concerns of a paved multi-use trail



Aerial view of Mahany Park open space from the informational video

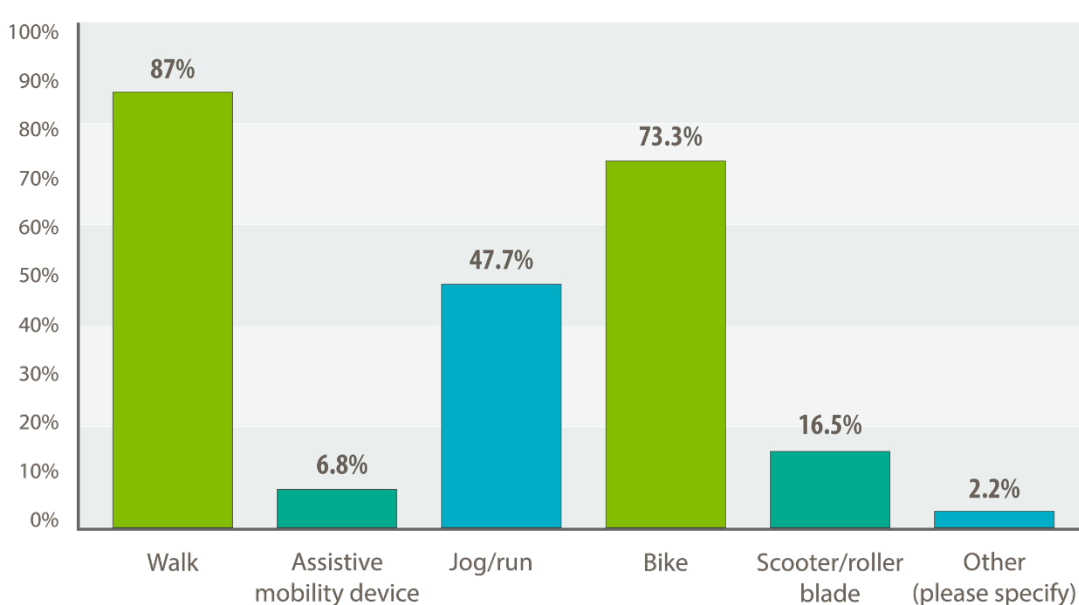
Overview of Results

1. Why do you typically travel through Mahany Park open space? (select all that apply)



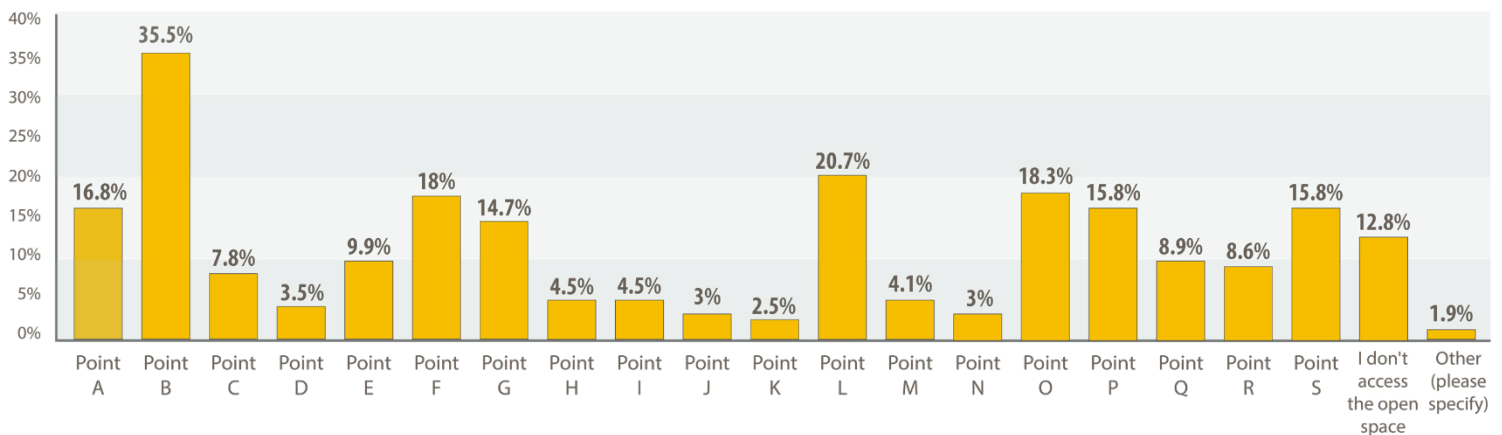
For the “Other” category, participants wrote in that they enjoying traveling through the open space to view wildlife or enjoy nature (30.5% of “Other” responses), go for a bike ride (16.5% of “Other” responses), run errands or go shopping at nearby stores (13.5% of “Other” responses), spend time with their friends or family (9.4% of “Other” responses), and getting to the library (8.8% of “Other” responses).

2. What mode of transportation would you want to use on future trails? (select all that apply)



For the “Other” category, participants wrote in that they would want to use their skateboard (54% of “Other” responses) or a baby stroller (46% of “Other” responses).

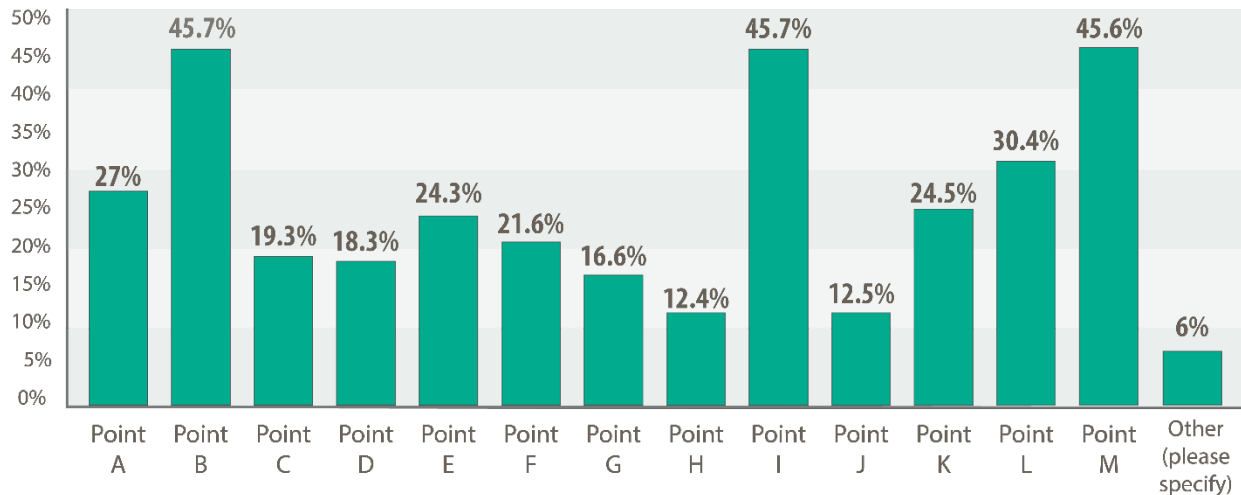
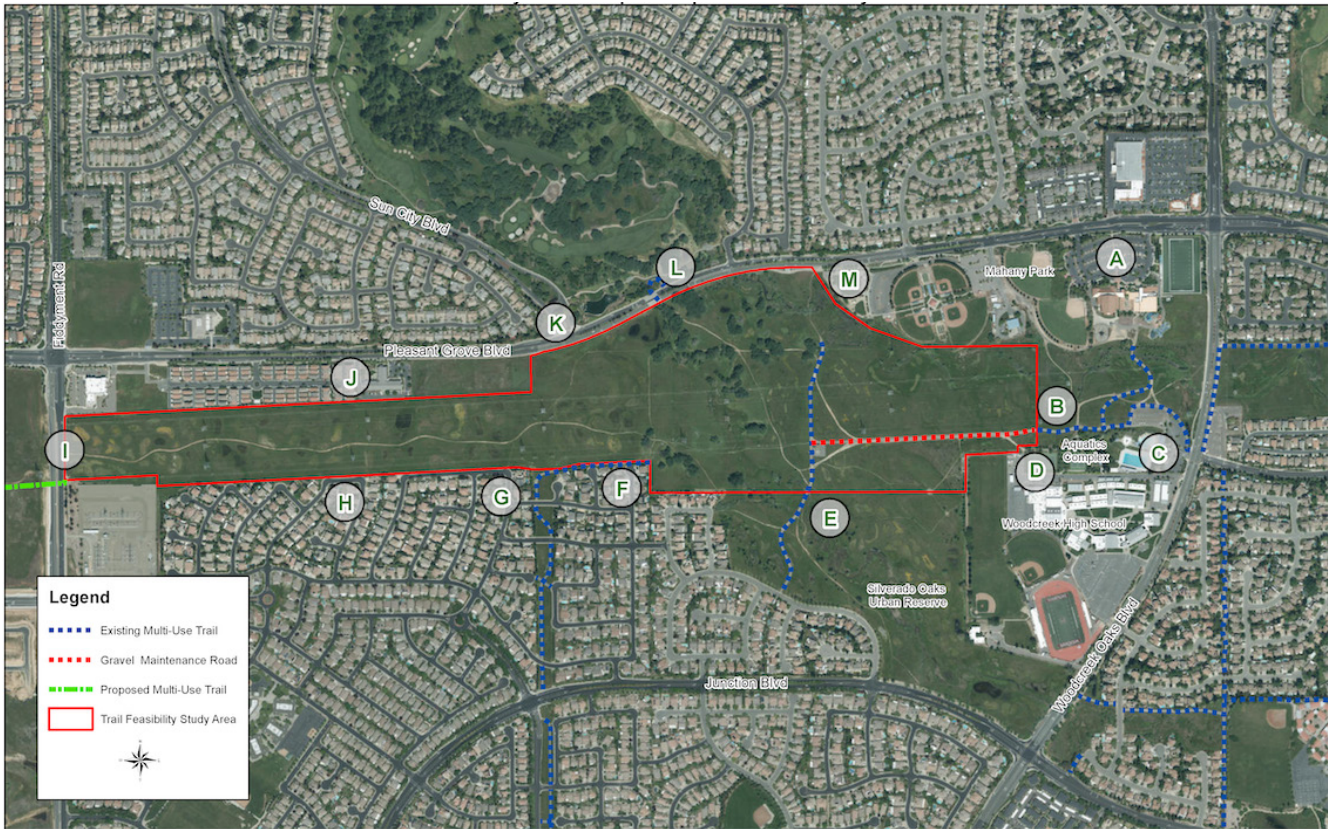
3. Where do you typically access Mahany Park open space? Using the above map as a reference, select the access point(s) closest to where you typically access the area. Select all that apply.



For the "Other" category, respondents wrote the below answers:

- All points (2)
- Between F and D
- Between F and G
- Dirt trail off of Woodcreek Oaks between Pleasant Grove and the Aquatic Center
- Glastonbury circle, past the fence
- On Junction at the first street west of Woodcreek oaks
- Woodcreek Blvd. and Junction
- Woodcreek Blvd
- The dirt trail off Woodcreek in between Point A and Point C. But we use every single spot.
- Typically from a side trail off Junction Blvd.
- Walk from parking areas
- We go through Sun City Boulevard under Pleasant Grove
- By the all-weather field and the Aquatic Complex

4. If the City were to construct a paved trail at Mahany Park open space, where would you want to locate public access points? Select all that apply.

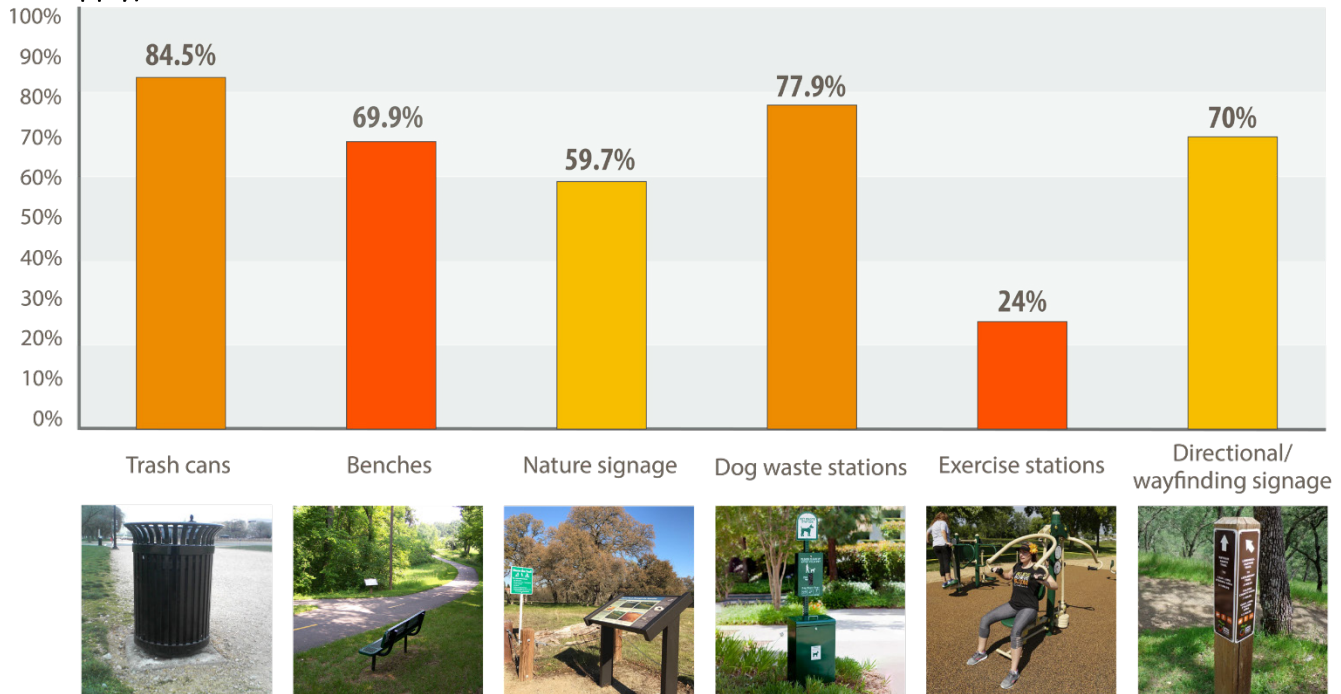


For the “Other” category, respondents wrote the below answers:

- None (13)
- No paving (13)
- All (2)
- An access point with adequate/convenient auto and bicycle parking, and handicap accessibility
- Anywhere there is sufficient parking

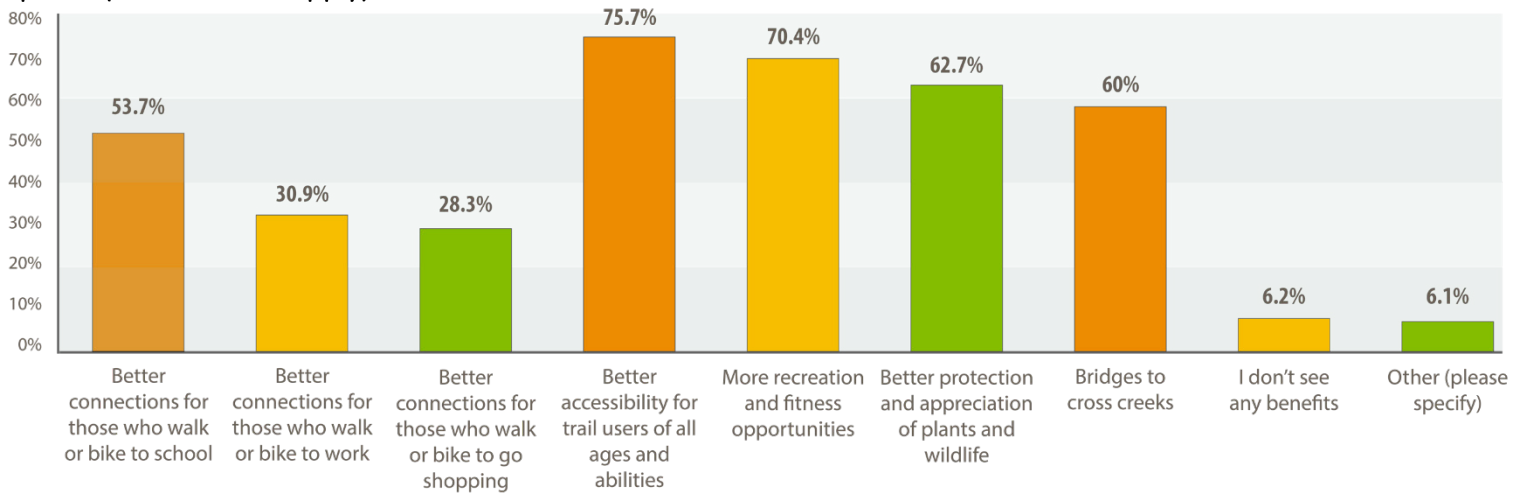
- As many as feasible
- Can you also work on Point M from the existing access points?
- Connect to the trail on Country Club
- Connect to trail from Sun City Blvd. or surrounding area
- Connect with Pleasant Grove Creek Trail
- Connecting from Riverside/Darling
- Corner of Woodcreek and Country Club
- Crosswalk connecting to Woodcreek
- It would be so nice to access from Fiddymont, there are so many walkers and runners
- Mark trail heads and access points where there is parking
- More is better
- Not sure, parking is a consideration. Dog park lot already congested.
- Off Woodcreek Oaks in the field between the pool and soccer field
- Pave Point B to Point E for those in need, but I prefer the dirt trail and run on the side of the pavement anyway
- Please don't put it by H, G, F and E. We live in this neighborhood and don't want to see increased traffic down our streets for people at access the entrances or extra parking on our streets
- We love riding the dirt trails! M is the toughest area to access
- Whatever is most accessible for most people
- Where ever there's parking
- Woodcreek Blvd.

5. Which amenities would you like to see along a paved multi-use trail in Mahany Park open space? (select all that apply)



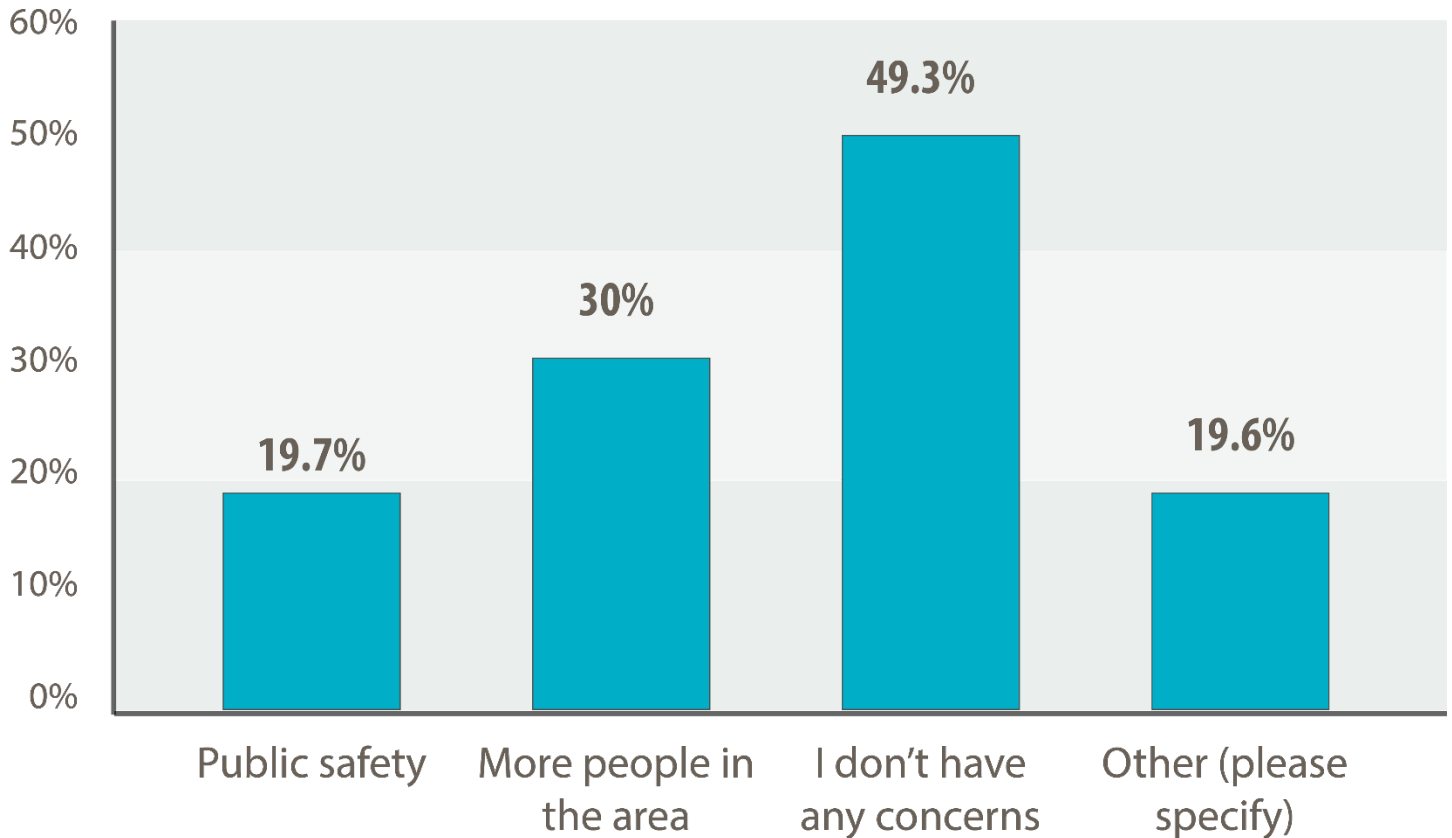
For the “Other” category, participants most often wrote about wanting more water fountains or water refill stations along the paved trail (23% of “Other” responses), restrooms or port-a-pottys (17.3% of “Other” responses), more trees or structures to create shaded areas (16.8% of “Other” responses), bridges for stream crossing (9.8% of “Other” responses), some dirt paths specifically for mountain bikes (5.8% of “Other” responses), lighting (4.6% of “Other” responses), and bicycle repair or pump stations (4.6% of “Other” responses).

6. What do you think are the benefits or opportunities in creating a paved multi-use trail in Mahany Park open space? (select all that apply)



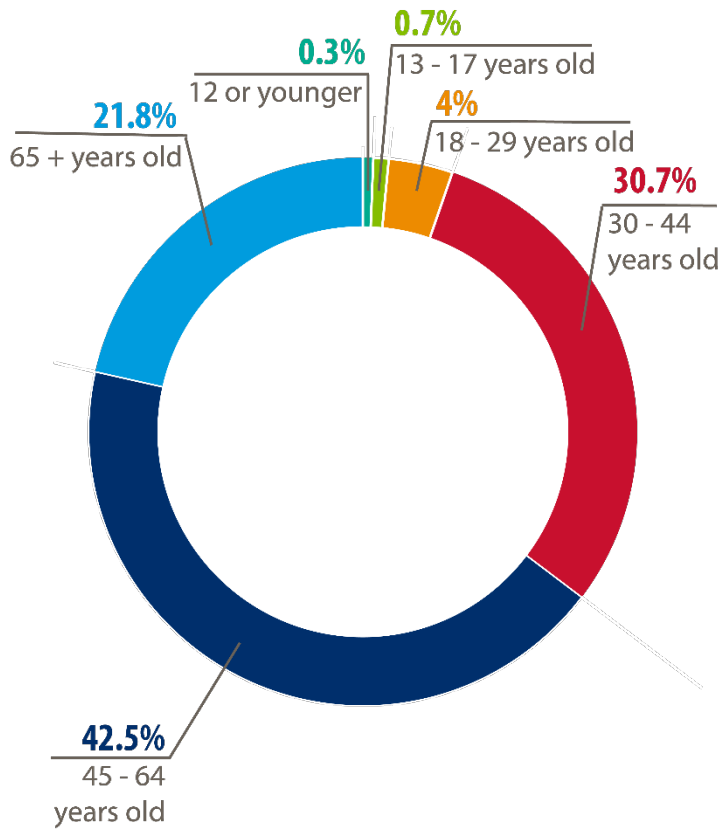
For the “Other” category, respondents most often wrote about how a paved trail would provide a safe area for cyclists, pedestrians and runners to travel not next to motor vehicles (28% of “Other” responses), provide a better opportunity to enjoy the open space in a natural setting (16% of “Other” responses), provide connections to other trails in the area (16% of “Other” responses), more opportunities for people to walk their dogs (12% of “Other” responses), better opportunities to meet and connect with their community (12% of “Other” responses), better connections for those who walk or bike to the library (8% of “Other” responses), and better ADA accessibility (8% of “Other” responses).

7. What are some concerns you may have about creating a paved multi-use trail in Mahany Park open space?
(Select all that apply)

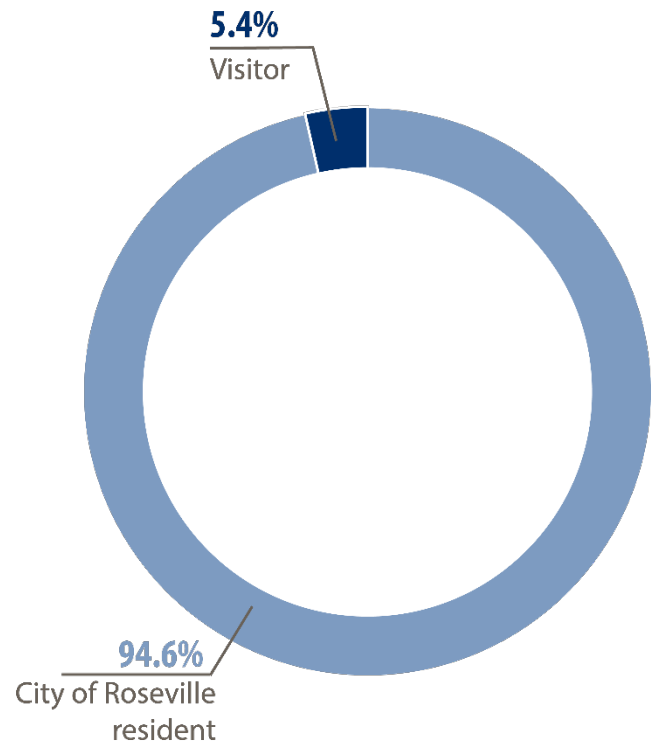


For the “Other” category, respondents most often wrote about concerns over whether or not a paved multi-use trail would disturb or damage nearby plants and wildlife (**24.4% of “Other” responses**). Respondents also noted that a paved multi-use trail looks less natural and might take away from the aesthetic of the open space (**18.4% of “Other” responses**), how the increase in traffic might lead to more litter and waste (**7.6% of “Other” responses**), the potential for more homeless encampments (**7.6% of “Other” responses**), that the cost and maintenance of the paved trail might be too high (**7.6% of “Other” responses**), potential conflict between cyclists and pedestrians using the paved trail (**6.8% of “Other” responses**), and that some people have personal preference to run or cycle on a dirt path (**6.4% of “Other” responses**).

The survey gave respondents the option to leave information about their age and where they live. Below are the data:



What is your age?



Are you a Mahany Park visitor or Roseville resident?

If people answered that they were a Mahany Park visitor, they were also asked to write what city they are from. Below are the answers:

- | | | |
|----------------------|-----------------------|-----------------------|
| • Rocklin (29) | • Folsom (2) | • Penryn (1) |
| • Citrus Heights (6) | • Loomis (2) | • Pinole (1) |
| • Lincoln (6) | • North Highlands (2) | • Placer County (1) |
| • Antelope (4) | • Colfax (1) | • Pleasant Grove (1) |
| • Granite Bay (4) | • Davis (1) | • West Sacramento (1) |
| • Auburn (3) | • Fair Oaks (1) | |
| • Sacramento (3) | • Los Angeles (1) | |

Notification

The City of Roseville posted the online community survey on the Mahany Park Open Space Trail Project website, roseville.ca.us/MahanyTrail.

Several email notifications were distributed to a database of more than 48,000 recipients, which included residents, businesses, and community groups.

Social media messages were posted on Facebook, Twitter, Instagram and Nextdoor resulting in more than 27,000 impressions.

A direct mail postcard was sent to more than 7,500 households in the neighborhood surrounding the Mahany Park area. Residents were notified of the project and survey opportunity.

Informational H-stake signs were also placed around the Mahany Park open space.

The City shared the informational video via their YouTube channel, website, email and social media.

Additionally, ABC10 aired a news story on the project and online survey.



Informational signage posted around the open space



Postcard mailed to residents notifying them of the survey

Appendix

- List of community member comments

Community Member Comments

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Why do you typically travel through Mahany Park open space? (Other)

- Enjoying some nature and peace away from traffic
- Going to Library
- Bike riding
- Getting to and from the sports center on my bicycle
- Wildlife/nature viewing
- Ride bike with family
- Exercise while waiting to get daughter's from school, library, or sport activity
- Visiting family
- Walking while my kids place sports
- Enjoying nature
- Wildlife viewing
- Fresh air, exercise and wildlife spotting
- Enjoying nature and wildlife
- Walk to park, library, bank, shopping
- Going to the Riley's grocery store and Starbucks from my house
- Visiting
- Go to the pool and the dog park
- Going to the Aquatics Complex
- Biking
- Going bus stop, store, and Mahany Park, as well as bike rides
- Finding jumps and pump tracks with friends
- Enjoying the peaceful atmosphere
- Going to CVS or dog park
- Going to Raley's and/or Starbucks shopping center
- Mountain bike ride
- Running errands
- Going to the park
- Riding bike
- I used to work cleaning open space
- Walking to Starbucks or riding my bike
- Bicycle
- Cross country team running
- Rarely use it
- Walking to stores
- Riding dirt bikes with family
- Leisure walk with kids
- Cycling
- Enjoying out door nature
- See the creeks and ponds
- I live near Maidu Park and frequently enjoy the paved trails there and can see the benefits for Mahany Park

- Birding
- When my kids have activities nearby
- Getting to pool and library
- Ride bike
- Bike riding
- Nature viewing
- Enjoy nature
- Relaxing walk after playing tennis at Mahany
- Observe nature
- Bicycling
- Photography
- Bicycle route to stay off of Pleasant Grove
- Observe nature
- Family time, traveling to gym or cafe
- I enjoy seeing the nature. Birds, hares, etc.
- Taking my son to preschool
- Running
- Bird watching
- I bike through here all the time to get out of the house
- I would use the area if there were a paved trail
- Birding
- The only place in Roseville that isn't paved and gives a sense of being out in nature. So peaceful to walk out there for de-stressing and mental health
- Peace and quiet and to find exciting critters
- Just seeing some nature
- Enjoy the outdoors and nature
- Enjoy nature, oak trees, open space
- Photography
- Natural area/oak trees
- Bird watching, photography
- Birding
- Wildlife surveying
- Spend time outdoors, in nature
- Taking kid to grandma's house
- Getting to shopping and library
- Outdoor exercise like walking, running, picnics, nature walks
- A beautiful way to get to the library or enjoy an evening stroll with friends
- School field trip/nature walks, Mahany Park facilities
- Walking to the library and/or Raley's/Starbucks
- Family outing
- Enjoying the wetlands
- Getting to library

- Mostly to access swim complex on bike
- Natural beauty nearby
- Going to stores
- Daily walk
- Cross country and track training the dirt is good for our legs
- Overflow parking for the Roseville Aquatics Complex
- Enjoy nature
- Exploration
- Biking with family
- Enjoying the peace of nature
- We live in Quail Glen, and it's one of our two go-to spots for cycling and family time.
- Outdoor education field trips
- Spending time with our family just out in nature
- Enjoying the beautiful open space with vernal pools and oak woodlands
- See the sights
- Biking
- Birding
- To view wildlife
- Photography & bird watching
- Woodcreek mountain bike team ride-a-thon
- See the spring flowers and be out in nature.
- Enjoying nature or crossing from the library to the water park
- Escaping the City congestion
- Access to Woodcreek library
- Observe wildlife
- Getting groceries
- Going to the Aquatics center, the library, and the Raley's shopping center
- Nature walk/bike
- Walking to shopping/coffee
- Enjoying outdoors
- Getting to the commuter bus stop
- Bicycle
- I wasn't too aware of this space, but I greatly desire more connect trails like Miners Ravine
- Play with my kids
- Getting to stores
- Kids playing
- Birding
- Go to the tennis courts, go to the library, play with RC cars
- Specifically, Woodcreek cross country uses the space to train.
- Biking
- Bird watching
- Run it for Woodcreek Cross Country

- I'd like to see it connected to Westpark
- Exploring nature with my children
- Nature walks and mountain bike rides, we enjoy the dirt trails
- Running
- Kids walk to school or the library on the path
- Getting to ball games at Mahany
- Getting to the library
- Bike riding with the family
- Just a place to "get away from it all for a while"
- Getting to nearby stores
- Getting to my commuter bus
- Biking
- Taking the kids to get them outside
- Bike to stores
- Would use it for exercise if it had paved trails
- Enjoy the space not next to the traffic/roads
- Walks/bike rides
- Not yet; maybe once it's paved
- Library, ballfield
- Errands, library, groceries, etc.
- Walk to shopping
- Hangout after school
- Bike riding
- Get fresh air, reduce stress
- Playgrounds
- To enjoy & partake if the natural beauty & wildlife
- Enjoying and respecting the wildlife and jogging
- Viewing wildlife
- Biking
- Playing Pokémon Go
- Walking to the CVS
- Going to kids playground or library
- View nature
- Exploring the area and beautiful nature
- Ride my recumbent trike
- Dog park
- Map shown is extremely hard to read
- Exercise
- Going to the bank and grocery store
- Riding bicycles
- For fun/recreation
- Going to the Library

- To enjoy the outdoors
- Casual/relaxing walk
- Visiting the library and park with kids; we park at library
- I've only used it twice and that was to walk to the library with my grandchildren

What mode of transportation would you want to use on future trails? (Other)

- Electric scooter
- Skateboard
- Electric assist bicycle
- Skateboard
- Stroller
- Skateboard
- Long board and rip stick
- Skateboard
- Skateboard
- E-bikes
- I pedal a recumbent trike (two front wheels)
- Adult tricycle
- All
- Skateboard
- Stroller
- Stroller
- Stroller
- Group tours
- Stroller
- Baby stroller
- Electric motorcycle (kids)
- Mountain bike

Where do you typically access Mahany Park open space? Using the above map as a reference, select the access point(s) closest to where you typically access the area. (Other)

- Go through Sun City under Pleasant Grove.
- I access from all points
- Typically from a side trail off Junction Blvd. is our favorite entrance
- All over
- I would like to use
- Woodcreek and junction , right off junction dirt entry before F
- On Junction at the first street west of Woodcreek oaks Blvd.
- Closest access is Point J
- Glastonbury circle, there's a path past the fence
- Walk from parking areas

- Our primary access point is the dirt trail off Woodcreek in between A & C. But we use every single spot.
- Trail heads are not marked. Parking is not provided for most access points
- Between F and G
- Woodcreek Blvd
- Dirt trail off of Woodcreek Oaks between Pleasant Grove and the Aquatic Center
- Between F and D
- I didn't access because I use Miners Ravine .
- We walk on a dirt path between the all-weather field and the Aquatic Complex.

If the City were to construct a paved trail at Mahany Park open space, where would you want to locate public access points? (Other)

- Don't care for paved access points as the ones currently available are adequate
- Connect to trail from Sun City or surrounding area.
- Connecting from Riverside/Darling
- None
- Living in Westpark, Point I is the most critical access point for my family
- Not sure, parking is a consideration. Dog park lot already congested.
- Leave it as it is, just protect the trees and wildlife
- More is better
- None, I like that it hasn't been paved over.
- None of the above.
- Crosswalk connecting to existing bike trail near Woodcreek
- I would prefer to leave the trail unpaved
- Please don't pave any if it
- Do not pave
- None
- Due to it being a natural area, I am concerned about the impact of adding paved trails
- Do not support the new trail as it would create more vandalism and fires
- I'm against paved path
- I do not want a paved trail
- Can you connect to existing paths?
- Can you guys also work on Point M from the existing access points please
- I enjoy walking on natural surfaces
- No paved trail
- No more pavement please
- The only spot that I would like to be paved is the gravel maintenance road
- Whatever is most accessible for most people
- Don't construct it
- None
- An access point with adequate/convenient auto and bicycle parking, and handicap accessibility
- I am not for a paved path

- Please don't put it by H, G, F and E. We live in this neighborhood and don't want to see increased traffic down our streets for people at access the entrances or extra parking on our streets
- As many as feasible
- None. Don't need any more access points
- Pave Point B to Point E for those in need, but I prefer the dirt trail and run on the side of the pavement anyway
- We love riding the dirt trails! M is the toughest are to access
- It would be so nice to access from Fiddymment, there are so many walkers and runners, CVS, etc. there are no stores for food in the west park area, so it's so helpful to access from walking trails
- Any
- Should not pave
- Anywhere there is sufficient parking
- Connect with Pleasant Grove Creek Trail
- We don't need more access points
- Mark trail heads, access points where there is parking.
- None
- Corner of Woodcreek and Country Club
- Please don't pave the trails. I don't want to bring more people to the area or have people parking in our neighborhood to access the trail.
- Mostly H because that is where I live
- I would like it to stay a dirt trail
- Woodcreek
- All marked
- Where ever there's parking
- All
- None
- None
- None
- Let what nature we have be left alone
- Connect to the trail on Country Club
- Not by the dog park. Parking is limited there as is.
- Off Woodcreek Oaks in the field between the pool and soccer field
- None

Which amenities would you like to see along a paved multi-use trail in Mahany Park open space? (Other)

- Benches with shade
- Picnic tables
- Trees planted near benches
- Tree cover/shade
- Signage on the bath way for walkers directions with arrows and bikers direction with arrows
- Picnic tables, bridges across drainage/creek on interior near access point O (permanent to replace non-compliant ones removed)

- Drinking water fountain
- Plant more trees for shade and possibly lights?
- Grass for picnic and movie in park: skateboard area
- Shade for benches or rest stops
- Roller blade areas
- Port-a-potty
- It should be well lit at night, with cameras. That's if it will be available to use at night.
- More markings for bikes right, pedestrian left
- Shade trees
- Some dedicated dirt trails/dirt features for bikes. There are quite a few parents that use this area to teach mountain biking basics to 4-8 years old. These features have been a great feature for Covid-19 PE class for both of my kids. It would probably be significantly cheaper to study how to create these features in areas that do not do harm to plants/animals instead of paving over the area. Building a pump track where the current paved trail and the main dirt trail meet would be of great community benefit and prevent the current dirt trails that causing problems in sensitive area to diminish.
- None
- A sign showing how far major cities are from that point (ex. SAN FRANCISCO - 100 Miles, TOKYO - 2,000 Miles, etc.)
- Restroom
- Shade structures or more trees, footbridges to cross creeks, lighting for evening use
- An updated map of Roseville trails, bike rack/lock areas near bathroom, trees/shade, water, clear direction for which side of the path to walk or bike on
- Parks and playgrounds
- Planted trees along the trail
- "Stay On The Path" signage. Shade stations.
- Tiny BMX tracks
- No amenities
- Benches, please don't encourage more dogs
- Covered structure over benches for hot days, signs for pet owners to keep dogs on leash
- I'm a casual mountain biker so prefer the dirt trails that are already there. They are great for walkers and bikers provided you don't have a street bike.
- Plant additional trees for future shade
- Bridges across the creeks, more trees/shade, drinking water
- Rebuild bridge over creek, it's rather rickety
- Garbage cans
- Bathrooms and drinking fountains
- Rebuild bridges over water ways
- Bike tool rack and drinking water fountain
- Water resources
- I see signage regarding pet waste, but no trash cans. They would be the priority.
- Lighting, emergency phones, trail loop distance markers, and bike speed limit signage

- Please don't take all the dirt trails away. It is easier to walk on for the body than pavement.
- Mileage reference markers
- Don't pave it and no exercise stations - keep it as a natural preserve to the fullest extent possible; with least intrusions. Even if paved path, people will still go off and it will encourage bad use of motorcycles, skaters, golf carts, etc.
- Shade trees near the trail
- Picnic table at the top of the hill to watch the sunset
- Source of water/solar fountain for wildlife drinking during hot days of summer
- Just trails only
- Appear to be vernal pools and wetlands. Is there potential for educational and scenic viewpoints.
- Shade
- Bridges across streams
- Please don't ruin this space by paving.
- A simple exercise circuit as you walk or run. Bike tire pump and repair stations like on UC Davis Campus
- Bike ramps for kids, fairy garden
- Creek crossings
- I like it the way it is. I like the natural open space.
- Hills for training high school cross country runners and public exercise, rolling hills turns not just a flat paved road
- Water fountains
- Emergency pulls/phone, picnic benches, bathrooms (closed at dark), repair under bridge access point ('O') and thank you for considering. Similar to the Stevens Creek trail in Mt. View/Palo Alto
- Picnic areas, parking
- Restroom
- Need a permanent bridge across creek
- Sanitizing stations
- Water
- Bathrooms, drinking fountains, solar lights, shade where it doesn't exist, bike part tool stops
- Drinking fountain for people and pets; covered rest area
- Directional arrows and partial mile markers (steps)
- Let's not go overboard, less clutter is better
- Don't construct it.
- Restrooms
- Please protect the oak trees and vernal ponds
- The less the better. Keep it natural.
- Designated unpaved trail (2 to 3 feet wide) adjacent to the new designated paved trail to provide dirt jogging (easier on joints and part of why I go there to run) over other trails in the city
- Bathrooms
- Accessible bathrooms, secure bike parking stands, potable water faucet/drinking fountains, shade/trees, lighting at night, mile/distance markers, inconspicuous exercise stations, grassy areas to sit and exercise/stretch/rest, drought resistant plantings/wildflowers

- Water fountain to add water to your bottles
- Trail volunteer group
- Water filling stations or fountains
- Water fountain, restrooms
- I walk these trails almost every day. The dirt trails are well used and most walkers/runners/bikes do not go off them. One area I have a concern for is the creek crossing in the large oak grove. A few years ago a bridge was in place to cross. The city removed this bridge. Since I have seen alternate paths made to circumvent that spot. I have also seen the Woodcreek High School track team crossing that spot (when it's dry) with a few galls and stumbles. I would suggest the city places a path through the grove with a well-designed environmentally friendly bridge there
- Bridges keep people and dogs on the trail. Lack of bridges and people create their own no matter how many times your staff removes them.
- Kids play structure
- Bike skills park
- Photo opportunity spaces
- Keep some dirt trails to provide variety for bikes and joggers
- I love the idea of nature signage but find it becomes hard to read after a while. Perhaps too much sun? Seems a waste of time and resources.
- Restrooms, water fountains
- Bridges for creek crossings would be great. Also, the gravel path on the side of the paved path is fantastic for older runners! Lastly, a bathroom and water faucet would be incredible at the west end of the land down by Fiddymont.
- Water access
- Shade
- Dirt jogging path next to paved trail
- Newly planted oak trees and other native species
- Restrooms
- Restrooms, water refill stations
- Restrooms or ADA port-a-pottys
- Mile markers; decorative/aesthetic bridges or crossings; photography spots
- Pull outs for hikers and bikers to rest, without stopping traffic or damaging sensitive terrain
- None
- Food. It's like a dry desert out in west park for kids whose parents work full time
- Water fountains
- Shade
- Water, creek, pond, bridge, use to be so nice
- Restroom/water fountain
- Trees for more shade. The trail itself is to exposed for summertime activities.
- I want the space left natural
- Create shade! Plant trees. Install shade structures. Add water stations for people and dogs.
- signage pointing to water and restrooms close to the trail
- Trees for more shade

- Put a divided line on the paths one side for walkers only other side for faster movement, joggers, bikes skaters etc. and they stay in that lane coming and going, they don't switch lanes depending on direction of travel. Roseville needs to fix all the paths that are throughout the city like this, too many close calls or accidents with the switching of lanes based on your direction. The current method doesn't work, very dangerous!
- Keep it natural
- Lighting
- Quality trail bridges
- Safe drinking water
- Mileage on trails
- Off road, dirt mountain bike course
- Trees. It's too hot for the humans and animals not to have covered pathways
- Shaded areas with trees or other for the benches.
- Water
- Shade trees, water fountain
- Signs for runners bikers
- None
- Lights
- Maintain dirt trails in addition to paved trails
- Replace the bridge that was removed by the city
- Restrooms
- All of the above complete take the nature out of this area. It's enjoyable to have a dirt area to enjoy.
- 10-12 ft pathways
- Bridges over the creeks
- Bike racks, water
- Plant more trees along the path
- Hydration station, also please don't remove the fairy garden.
- Water fountain, shades
- Some shade trees
- Water fountains/bathrooms
- Keep it minimalist so it still feels like a preserve
- Water station for people and pets
- Right of signage
- Drinking water
- Children play areas
- Restrooms, water bottle refill station
- Playground
- Water fountains, bathrooms
- Bathrooms of some kind
- Restrooms
- Bike/walk directions. Bike fix it stations, air pump
- Restrooms

- Water fountain
- Water fountains, doggie water fountains
- Water refill stations
- Perhaps a water fountain for thirsty walkers
- More doggie pots
- Bike tool station
- Some kind of toilet system
- Nothing but walkers so wildlife can continue to prosper
- Picnic areas and less ditches
- Sundial, right away signage
- Emergency phones; distance readings on the different directional posts (1 Mile, 2 Miles, etc).
- Bridge over the creek
- Water fountain, nearby public restroom
- Bike repair station(s)
- Shady areas
- Lots of signs reminding people dogs are to be on leashes
- Bathrooms, solar powered LED trail lights, bike tool stations
- Bathrooms. Runners and cyclists need them along the trails.
- Water fountains
- Bathroom please
- Restrooms
- Natural surface trails with erosion control
- Water fountains
- Hopscotch, simple play structures, picnic tables, bathroom
- I love Roseville's trails and parks.
- Bike park, we have very few in Roseville

What do you think are the benefits or opportunities in creating a paved multi-use trail in Mahany Park open space? (Other)

- I enjoy how much of Roseville you can cover without going on the main streets
- Safe place without traffic to bike/walk
- Opportunities to enjoy open spaces rather than being next to traffic
- Social opportunities within the community
- Neighborhood morale and comradery. Less traffic as more opportunities to bike. Increase the beauty and respect for others and their community. Increases safety in the area by having more accessibility for others to be involved and helpful in cases of suspicious activity. Less opportunity for mischief by those foraging through open areas.
- Joy of picnics and movies in park; potential live bands with food trucks
- I avoid area in summer, too many bull horn thorns
- Community interaction is facilitated on the trail rather than car
- I love the nature. The paved trails are not necessary.
- I can ride my bike to the pool or library

- Better connections for those who walk or bike to the library and aquatics complex
- Expansion of biking trails to connect with other biking trails
- I feel like what makes the Mahany trails is having the dirt paths to go exploring or make jumps to have fun with on your bike
- Better connections to walk dogs, ride bikes locally without being on busy road
- Benches are the only improvement, the rest create ugliness in a beautiful natural setting
- A paved multi use trail will bring more people to the area and more disturbance to the nature preserve.
- I love riding my bike and running on the dirt trails, so I am somewhat hoping to keep some trails unpaved. But I do see the possibilities for improving access for kids riding to school, or even adults riding to the store for groceries/shopping.
- It could help reduce the amount of dogs walking through the baseball complex, and reduce the risk of concern for a child or adult getting bit.
- I like it the way it is. Natural looking trails. Keeps traffic down. The paved bike trails, and sidewalks are taken up by non-courteous walkers and bikers
- Picnic tables
- Bikes and motor bikes can be a danger
- Paving a bad idea. It is a preserve, so it should be kept as natural as possible with limited use by all.
- Cycling
- Connecting to other Roseville paths would be great for biking through and enjoying more what Roseville has to offer
- I hope it will result in better protection for wildlife
- Beautiful natural space. Conserve it but somehow make it more accessible.
- Larger connected multi use trails
- Disability access, but otherwise detracts from nature feel
- Connect to existential trails throughout the area so you can bike long distances safely not just within one park. Make the parks connected and think outside of just this park. Think about making it safe to bike to Sacramento or Folsom or Rocklin
- I like it the way it is, but a bridge to cross the creek would be nice
- Maybe one very simple bridge across the creek near the pleasant grove overpass near Sun City entrance
- Elementary field trips, middle school and high school athletes and teams can have practice and train daily
- Increase dog walking areas, Safety as the trail is already used but more safety would be better, less chance of hurting yourself with a paved road.
- Reduces natural setting, becomes urban
- Beatification of the area
- Love the trails but don't understand why everything needs to be paved
- Fun
- I think what makes this park special, is when walking on the dirt paths, you feel a deeper connection to nature and greater appreciation for the plants and animals. It feels set apart from regular parks, it's not overly maintained and that's what makes it special
- Adds to attract more families and people to live and recreate in Roseville
- I am for improvements but just not paving the paths. I love to go jogging there and the reason I go is because it is one of the only places left

where I can run on a natural surface (dirt). If I want to run on cement or a road I have every street in Roseville. This space should be improved but left as natural as possible

- I see a number of folks with strollers
- I would not want any paved trail over existing bridges or creeks
- I enjoy being on the trails that exist without paved roads. The ones that exist just get graffiti on them.
- Meandering dirt paths are a pleasure. Paving will remove that pleasure. Please do not install barriers to dirt paths.
- I enjoy the feel of the blue oaks trail system- mixed of nature/ dirt trails and the paved trail system. Replacing the gravel trail and having an entrance by the dog park would help.
- It's safer to ride on the trails than on Fiddymment, Pleasant Grove or Blue Oaks
- Overall connectivity throughout the city
- Dog walking
- Shade trees
- Places for families and dogs to just play
- Safer options to ride bike, walk, etc.
- Outdoor quality of life is why we love Roseville
- Access to library and sports areas
- Please connect all trails. West Roseville had a few and they are not connected. Driver's do not respect bikers
- None
- Less goat heads in my bike tires
- Easier areas for Geo caching
- Wheelchair bound usage
- Walk baby stroller/paved vs gravel
- Reduced traffic congestion from driving cars.
- Safe place for joggers to use away from vehicle traffic
- Will all trails eventually connect?
- The dirt trails are fun the way they are
- Again, leave it alone. It's absolutely perfect in this natural state.
- I have lived here for 12 years and have seen what people have done to this entire area. You removed a once viable bridge and forced people to destroy it even more by forging new trails. Off road and gas vehicle have been used within the area and vernal pools and habitat will be destroyed, not preserved as you state.
- Safe location to exercise away from the dangers of city streets and traffic
- Restrooms
- This project has the potential to transform the open space preserve from a barrier to active transportation to a veritable hub of it.
- Better access for kids to get to school without damaging local wildlife
- Right now people just do whatever they want, wherever they want in the open space. I know because my apartment faces the preserve and I see it every day, all day long

- It would be great if, eventually all the trails tied together somehow. Maybe a break here or there logistically but overall having one cohesive trail makes sense.
- I would prefer it to remain unpaved, it's significantly better for joints to keep it an unpaved trail

What are some concerns you may have about creating a paved multi-use trail in Mahany Park open space? (Other)

- Pavement is hot, we need more trees
- I would prefer unpaved
- Cost to tax payers
- None, it is an underutilized space with a lot of potential
- Not enough access points so people will stray from path. Maybe add minimum barriers on each side and signage to protect wildlife/vegetation.
- More people generally means more litter and disregard for natural areas. Dog waste and drink containers seem to be prevalent in other areas of town.
- Litter in the open space if not enough receptacles
- Maintaining Woodcreek High School nature docent program that educates younger kids; possible negative environmental impact
- Proper use of trails
- Trash and traffic may cause more damage than noted today.
- Nature preservation
- I don't think that the current path is an issue.
- Maybe a walking path separate from the biking path to avoid collisions.
- That the costs of the trail were not already paid for using regional park fees the several specific plans in this area.
- Fire safety during summer months. Also using goats for brush clearance must continue.
- It would disrupt the nature and animals more if there are more people that use the trail
- People still not staying on trails and still causing damage to wild area.
- It's open space, natural and open. More people means more trash, dog poop etc.
- More use more litter
- Mountain biking isn't the same on pavement
- Loose dogs from the dog park concern me.
- Costs
- Potential for more people to go off the path and damage the ecosystem.
- Cost and maintenance. Seems like Roseville is already concerned about revenue.
- fencing on trails that limits access and creates congestion
- Destruction of wildlife
- Don't need a hangout space of any kind
- More paving over. More unnecessary and ugly improvements
- I can access the area from my back yard, and I don't want more people within sight of my yard.
- Destruction of natural habitats
- I am older and still jog every other day in Mahaney Park since it opened in the early 1990s. I cannot jog on pavement anymore, must have dirt or the gravel road. I want that to continue somehow.
- More trash.

- How it affects wildlife in the area. How waste is controlled.
- Would there be crushed gravel shoulders for runners?
- Protection of land and animals
- Please keep some dirt trails, pavement gets hot
- Decrease of nature there
- I don't want to see this area paved over.
- Toxicity of pavement, increased traffic, less observance of nature but instead a focus on speed of getting thru the area, and if there will be a budget to continue to maintain the trails.
- Prefer dirt for mountain bike use
- Homeless camps
- NIMBY pushback by local residents adjacent to proposed paved multi-use trail and complaints from same group if/when paved trail exists
- Dogs and bikes don't mix very well. The dog could get hurt and/or the cyclist could crash and be severely injured.
- Damage to wetlands, nature preserve
- I don't think we need a trail in Mahany Park. I think a skatepark would be a better choice to build.
- Creating a paved road through the wild life area concerns me greatly. I absolutely love the natural paths that are already in place. It is absolutely possible to bike through the paths as they are. My least favorite part of the existing paths is the rocky trail going from the aquatic center. I wish it were more of a dirt trail.
- Make bridges rated for fire apparatus
- Loss of dirt paths that make it feel more connected with nature
- It won't be used if not properly connected
- Environmental concerns such as what the pavement and amenities would do to wildlife.
- Dogs not on leashes on the trail, width of trail, and litter
- That you will ruin its natural beauty by paving it
- More people, more chaos with skaters, bikers; more vehicle traffic drawn to the area. Roseville is getting over run as it is.
- Bicycle riders taking over.
- I think keeping the open space as natural as possible without any pavement, etc. is very important
- Taking a mostly native open space preserve and turning it into a paved and manicured greenbelt
- Impact on wildlife.
- Clear signs indicating trail use etiquette
- Teens already use motorized scooters, the problem will be worse if on a paved path.
- Litter/pollution in creeks
- Dirt/gravel is easier on the feet/knees for walking/running
- People confusing open space with a park.
- Too much paved space that doesn't retail natural open space look/feel
- Unintended damage to wetlands
- Impact on the natural ecosystem
- Still having non paved paths - would like to have this option
- Fires and vandalism to the existing trees and habitats, problems with people riding dirt bikes also.

- Fires during the summer, area is overgrown
- One more area we lose to cement. Roseville is becoming less and less green. There are plenty of sidewalks areas, very few natural paths.
- High cost for implementation
- Open space preservation
- Taking away other current trails
- It takes away from the nature and is not necessary
- Destruction of the natural ecosystem
- I like it the way it is . I like the relaxed open space and the ability to wander wherever I want to go . If you put a paved ride into it then all the cyclists will claim it and change the whole feeling if it. I say that as an avid cyclist. It will turn out like the one from foothills to Fiddymont just a boring paved road. Please don't change it .
- Plants and wildlife
- Trash
- Disturbing the wildlife that lives there.
- I think that one straight paved path from Woodcreek to Fiddymont is perfect and all other trails should be left as is
- Leash law signage
- Increase in the homeless staying there
- That it will no longer feel like a natural space. It is so difficult to escape this concrete jungle. It will feel more like a park.
- Impact on wildlife by making it more accessible by people and associated litter problems
- Homeless gatherings, hangout for kids late night parting, bad people destroy the nature but the benefits far outweigh these points.
- Reduces natural setting, becomes urban
- Dogs off leash
- It will ruin the atmosphere of a wilderness area. It will make it seem more modern, and many people enjoy the sense of adventure when going through the wilderness area, and with a paved path, it will ruin the sense of adventure.
- Concern about it looking like a road, with fast bikers, etc. Prefer it to be a smaller natural trail
- Protection of bird habitat
- Why can't we have some elements in this city (concrete jungle) that are natural?
- The current dirt paths have a more nature feel to my walks and jogs.
- Wildlife and habitats of animals plus I enjoy the rustic nature feel about it. It's an escape.
- Who will pay to build and maintain it? More taxes?
- Crowding out animal inhabitants
- Small paths that don't provide even space for social distancing.
- Property taxes to pay for path, maintenance and police
- Bikes are a hazard for hikers. Bikers are usually clueless about the risk for injury to pedestrians
- I'm concerned that Roseville is not focusing on the needs of citizens in West Roseville who have been waiting more than 7 years for essential services like grocery, retail and gas stations.
- Habitat disruption

- People need to know the rules of the road.
- The wild life will leave
- Loss of wild space. Putting a trail in will rob the area of its natural, raw feel.
- The oak trees and vernal ponds
- Environmental Damage
- Concern for wildlife and plant preservation
- Open space is the only accessible dirt trails nearby; I don't want to lose the only place to go bike casually on dirt.
- Traffic increase during construction.
- Graffiti
- Environment
- Avoid damage to Oak Tree root systems
- Environmental. It's not a pristine area but is functional, maintaining that function during construction would be a concern
- Cost - can the city afford this?
- Cyclists speeding and not observing posted speed limits.
- Damaging to the existing nature in the preserve
- Loss of aesthetic and authenticity
- Adequate parking and handicap accessibility
- Currently these dirt and rock trails are perfect as is, quiet and relatively unknown, and a nice place to walk and hike in the little hills. I fear that adding a paved path will take away from this as it will become much more used by bikes who tend to go much more fast on paved trails vs the dirt and rock that is there. I don't want it to lose its serenity. I also don't want to see increased traffic down our quiet streets or extra cars parking on our roads.
- Dogs off leashes is a common issue
- I enjoy trail riding so would not want to see many paved trails
- Graffiti/ trash. We enjoy the open space because there are less paths. We use it every day and why we moved here. Don't want it to be a formal recreation area
- Safety of wildlife during construction
- I think the area may lose some appeal as a natural/undeveloped area. I enjoy the packed dirt trails and the way they are part of the land. I'd love to see some bridges over the creeks/ditches, and perhaps paving of the wide, straight roads. However, I don't want the place to become just another city park.
- Costs
- Disturbing wildlife
- Destroyed environment
- Keeping the open space vibe
- I enjoy the natural feel of the trails the way they are.
- Potential accidents if bikers and pedestrians use same path
- Cost. We are suffering a pandemic and loss of wages and jobs. Some people cannot afford food and you want to spend this money on a trail? More space for homeless in Roseville.
- Barriers between pavement and dirt paths. Keep dirt paths accessible.

- Balancing water retention and plant habitats
- Would clearly defined dirt trails be ok? Would help keep a more natural feel, retain less heat and perhaps less long term maintenance expense.
- My initial concern would be that it would remove/ reduce the amount of dirt/ nature trails.
- Vandalism to man-made or natural habitats
- Losing unpaved trail access and use
- Accidents. Cyclists go fast. Kids on scooters are all over the place. Dogs on long leads. Slow walking vs fast. There is just a lot of potential for conflict.
- I see this as a benefit
- Protection of habitats
- Pavement is hot in summer months and can burn the feet of dogs. Leave it alone.
- Educating walkers and bikers on right of way and courtesy. It appears that students and senior citizens might frequent the trail. Perhaps a bike speed limit would be needed. Directional arrows as on the Pleasant Grove trail for walkers and bikers would be a must.
- Disruption of wildlife and native plants
- Wildlife safety
- Taking away from the natural dirt trails that runners/bikers like to have access to
- How construction will affect existing wildlife.
- Unleashed dogs
- Easier access for homeless
- Shrinking nature's footprint
- Cost unnecessary
- Ruining natural splendor
- Wildlife
- Why must every park be developed?
- High speed bicycles. Vandalism
- Nothing wrong with it now.
- First a paved surface in the summer heat of Roseville would be DANGEROUS for dogs! Bicycle riders would dominate the path also endangering the people walking their dogs. Bikers go too fast; many bikers don't indicate they are passing and many bikers expect walkers to move off the paths to make way for the bikes.
- Wildlife safety
- Misuse by those who don't care
- May not be used as much and can ruin the feel of nature
- Dollars spent when they are scarce.
- Unleashed dogs and amount of trash and dog waste.
- Cost
- Losing the nature feel of the trail
- See my concern above about path directions on safety.
- The same dirt trails have been there for years. People like exploring the little dirt trails and I think that keeps them from randomly making new trails.
- Maintaining a protected open space for plants and wildlife
- Ruining the cool natural trails there now

- Animal safety and preserving nature
- Bathroom
- Homeless camps
- I am concerned that it is pointless.
- Less dirt trails
- Having to read and listen to NIMBY neighbors.
- Homeless camps
- Likely runners and dog owners will still utilize dirt path next to black top as it is less impact for runners and not as hot as black top for dog paws
- Industrializing nature areas
- Removing access to all dirt trails. It's better to run on dirt.
- Loss of suburban cross-country bike trails
- To be honest, I enjoy feeling as if I'm more connected with nature while running on a dirt trail, and I'm afraid that the paved road would take away that aspect. Especially because paved roads are large and unnaturally colored. It would also smell like asphalt for a while.
- Habitat protection
- Restroom access
- Paving the area. We often see wildlife on the dirt trails. I don't see a reason to introduce more pavement to gravel to their environment.
- Trash
- Homeless attraction
- Homeless
- Disruption of wild life and landscape of the open space
- Negative impact on nature; one of the best things about walking along there is that it is more like hiking than walking on a sidewalk.
- Would like to see park rangers
- There are many paper trails and not many dirt trails I would like to see this day a dirt trail
- Takes away from the natural feel of the area
- Encampments
- That we protect the wild life - plants and critters
- Homeless people-safety issues
- Keeping clean, no trash
- I would use the paved trail, but we also enjoy the use of single track trails. They add an extra experience to recreation in the city.
- Lose the sense of wildness
- Losing the wild feel/nature
- Preservation of the flora and fauna
- Trail bikes running over walkers
- Environmental impact
- Social distancing
- Increased trash

- I enjoy that the area is natural and undeveloped. It is so much cooler to get away from all the houses and pavement in the summertime. Too many paved trails would ruin the area.
- criminals tend to hide in these types of "off the beaten road" trails. Female Jogger/walker safety is a concern.
- I prefer dirt trails.
- Too much traffic that might negatively impact wildlife
- Environmental preservation and prevention of damage to habitat due to increased ease of access to sensitive areas.
- More trash
- Homeless
- Allows access for new homeless encampments
- Asphalt, runners and road bikes going 25 mph don't mix
- The dirt trails are fine the way they are, it is nice to not always be on pavement when running or biking
- Not a good use of City money right now
- Bicyclists are dangerous and do not share the road. Let me use the existing bike lanes we as taxpayers already paid for.
- Ruining a fragile ecosystem with more concrete and people.
- Attracting homeless camps
- Litter management
- Waste human trash and dog poop/bags
- Homeless encampments
- Homeless and drug users
- Less extensive trails and access than currently exists
- Unsafe crossing areas
- Homeless camping out
- Natural habits getting destroyed
- More concrete, the more heat the surface retains particularly in the hot months.
- Trail width. When trail are busy it can create safety issues. Minimize impact to natural resources, while creating opportunities to view and learn about natural aspects.
- If adequate connections are not provided, the existing issues with volunteer trails will continue as the new path becomes more of a magnet for users. Maximizing connectivity is critical.
- Natural surface trails are important to protect. I don't think a paved trail is needed.
- I like the dirt trails
- Cost
- Well there are coyotes out there we see them at night outside the dog park area fence. Other problems I would see teens vandalizing stuff. Homeless camps and drug use will become a problem
- Littering - having trash cans and dog bag stations is must
- Creating a trail without public bathrooms
- More people without some sort of enforcement to rules could do more harm than good
- I ride mountain bike there as does the Woodcreek high school mountain bike team. Pave only what you must and do not close access to the dirt trails.

- Whether paving will disturb wildlife habitats more than walking on the dirt
- This may reduce numerous alternative paths created throughout the area
- Loss of natural surface trails
- We love that there are currently several dirt trails that are fun to bike on. It would be great to keep some of the trails as dirt.
- Homeless camps and increased trash
- Cost, is this an appropriate use of funds during Covid?
- Unpaved trails are significantly better for joint health and connection to the outdoors
- Where does this money come from?
- Disruption and destruction of environment

If you are a visitor, what city are you from?

- Pinole
- Rocklin
- North highlands
- Rocklin
- Rocklin
- Rocklin
- Folsom
- Lincoln
- Rocklin
- Rocklin
- Granite Bay
- Rocklin
- Pleasant Grove
- Rocklin
- Granite Bay
- Rocklin
- Citrus Heights
- Antelope
- Rocklin
- Rocklin
- Rocklin
- Loomis
- Rocklin
- North Highlands
- Penryn
- Citrus Heights
- Rocklin
- Rocklin
- Lincoln
- Rocklin

- Citrus heights
- Antelope
- Rocklin
- Rocklin
- Lincoln
- Rocklin
- Citrus heights
- Rocklin
- Antelope
- Citrus Heights
- Rocklin
- Rocklin
- Rocklin
- Granite Bay
- Antelope
- Rocklin
- Colfax
- West Sacramento
- Lincoln
- Fair Oaks
- Sacramento
- Rocklin
- Lincoln
- Rocklin
- Los Angeles
- Loomis
- Sacramento
- Placer County
- Citrus Heights
- Sacramento
- Folsom
- Auburn
- Rocklin
- Lincoln
- Davis
- Auburn
- Rocklin
- Rocklin
- Granite Bay
- Auburn

Do you have any other comments or questions about the Mahany Park Open Space Trail Project?

- Thank you for providing an opportunity for our input. I would like to see the city implement as much uninterrupted bike trails as possible. Stopping at a major intersection and riding on busy streets keeps me from biking locally. My wife and I prefer taking our bikes to the ARBT. Question above regarding if safety was a concern - our concern is for wide enough trails for bikers and walkers. Thank you again.
- Please plant more trees and stop cutting down adult trees. We need more shade and greenery in Roseville
- A trail would be so helpful for residents to get to the Roseville Sports Center, Riley Library, and the Aquatics Complex without getting in the car!
- Overall I actually like the space as is
- I really enjoy riding through this space with the kids on adventures, and it did strike me as odd when we started using it that there are random trails that end in nothing or in creeks. It would be great to focus on a paved system that protected the creeks and kept people from randomly exploring more sensitive areas of the space.
- Please make sure to add signage to indicate directions for walkers/joggers and bicyclists along entire route-either by painting on the path or signs.
- Plant more plants/trees, otherwise I appreciate this park
- Having at least one restroom/port-a-potty in the area would be so helpful. Not everybody has a home nearby when the need arises.
- I believe we can have a good balance of preserving nature and having people be out in nature so that they can both enjoy and appreciate it. Also, we have had Scout nature walks there. I learned a lot and I would like school children to have that opportunity. That is also why I like the idea of nature signs.
- Please make this trail happen. It is so unsafe currently to have to walk, jog or bike along the busy fast paced roads around the area. Our poor kids have to ride their bike along Fiddymont to get to school as huge trucks whiz by at 50 - 60mph.
- Will the building of the paved trails seriously disrupt wild life?
- I fully understand the desire to better protect the wildlife and natural areas. Would it be possible to create dirt trails - meaning control which ones should be used with the normal path fencing (posts with a cable), but leave the pathway dirt? My family uses the space both for bike riding - kids love to ride on dirt - and for running, as a dirt is far better on your body than pavement. So rope off where I can and can't run/ride to control some of the off-road stuff, but leave it dirt!
- Have a butterfly house. Use Roseville's summer heat and solar power, as an attraction and place to go, learn, enchant.
- I really appreciate all the great trails in Roseville. I am excited about this project.
- This is great.
- Please do not lose the nature part of the area.
- I think paving a trail would be a waste of materials. Growing up in the area, I've never had an issue accessing the trail space.
- Please connect this trail to the riverside/darling access point.
- I really like the idea. My wife and I recently moved from the South Land Park Neighborhood. I was on the board for SLPNA for 8 years, and was also very active in getting the Del Rio Trail project started.
- Make main use trails wider than side branch trails

- Would be great if this trail was expanded to other areas in Roseville, like a protected bike lane down Woodcreek and along baseline. Getting from baseline to Mahany can be dangerous
- Thank you. We moved to Roseville because off the bike trails. More trails would be welcomed.
- I would prefer that the repair and maintenance of the trail around the outside of Maidu Park and other areas of the City take precedence over this trail when using non-regional park building permit fees (which are intended for construction of these types of projects).
- Consider paving the gravel parking area next to the aquatic center for trailhead parking. Trees along the trail would be nice to keep it shaded in the hot summers.
- Build a little bridge that crosses behind the dog park off the paved main trail. So you can go directly from Alsbury all the way straight on the path to Pleasant Grove
- As a senior, I am not comfortable walking on non-paved trails so this would add a very nice opportunity for me to get into a more natural setting for my walks.
- I think it is a great idea to have some wonderful pathways.
- Leave it alone, it is a great place to take a respite from all the noise.
- Please do not add a paved trail. Do not disrupt the space any more
- The trail should be extended into West Park
- Also include signage for trail etiquette: i.e. regarding trail markings (e.g. which side to walk vs ride a bike) and sharing the trail.
- I'm completely in favor of this project.
- I think it's a great idea to have a paved controlled access trail, both for the sake of trail users and for the wildlife
- Drainage on the path of the pedestrian undercrossing near Sun City needs to be address as there is always a muddy area to traverse. Also graffiti has become an issue and needs to be addressed more quickly. I would love to see footbridges to cross the creeks, which swell during the rainy seasons, making the areas impassable.
- Makes sense to at least pave the existing gravel road and to complete the trail from E to M, connecting to Pleasant Grove Blvd. near the dog park.
- I would love to leave it the way it is and has been. Just because the city of Roseville keeps allowing thousands of people to crowd in here, doesn't mean we need to ruin what has been open space with NO paved trails. Want paved trails, pick a different place. We live right next to it and don't want all the people, trash, and noise that will come. The graffiti, litter, and dog poop is enough already! And garbage cans don't look nice in wetlands. Just saying.
- How many access points will there likely be?
- I have noticed a lot more bicyclists going off trail. I hope this will somehow be discouraged in the future. They go through the grass and wild flowers.
- I would like to see it connect to west park with a tunnel underneath Fiddymont.
- I think it would be a great amenity for the community and a great use of the space.
- The more trails the better!
- I love the idea of a network of trails to use in that space and look forward to completion when I can start using it.
- I'm very pleased that this is being considered and look forward to the grand opening of it.
- How long will it take to finish all of this?

- I would like to be able to cross creeks. I would also like to be able to use inline skates on the trails.
- Thanks so much for addressing this important need! Please make sure this is accessible from Fiddymment!
- I think monies should be maintained to cover the expense of goats for fire protection. And removal of dead trees on trails that could be a hazard. At this time no other money should be spent on this while independent small business owners are struggling to come back from the shutdown of covid-19. All extra money should go to them to help them reopen and continue their livelihood.
- I just would like to see a paved trail from Fiddymment to Woodcreek.
- Please plant tree along the trail
- Need to insure power lines are not accessible to potential vandalism or personal harm.
- It would be awesome for there to be accessible BMX pump tracks for those people (like me) to go do jumps and have fun. You will be surprised of how many friends I have are wanting a track for their bikes to mess around on.
- No fencing on the trails please! Leave it as natural as possible.
- A nature preserve is something to be preserved not degraded with your proposed improvements.
- Mahany Park is filled with enough trails already. It's appeal is that it's not overrun with bicyclists. It's perfect area for walkers and their dogs. If anything, the trails need to be fixed over the creeks where the original foot paths have been washed out.
- This would be very nice, use this trail every week.
- Many people leave their dog poop bags in the trails. Many people let their dogs off the leash with kids and other dogs around.
- However, I would like to see the bridge over the creek that was removed several years ago re-installed.
- The more trails that allow for enjoyment of open spaces, the better.
- I would like to see the proposed sand volleyball courts completed near the tennis courts. What is the status?
- Please leave some of the open space wild.
- We have used the open space area at least since moving here 18 years ago. We would love to see an open space trail area. We are especially interested in the trail linking up with other bike trails in the area.
- My only concern is more people and trash.
- I think it's a great project to connect bike trails around the city. Better connections crossing major streets help also for people trying to bike around the city and would encourage more biking.
- Love the bike trails in the city. Which they were fully connected more since riding on roads today (even within bike lanes) is more dangerous than ever with rampant cell phone use while driving.
- Since there is already a rudimentary trail system in the area, I think improving the trails by paving them would be a fantastic idea.
- Multiple paths would make it easier to social distance.
- I think it's wonderful that you are allowing residents to have an input on this project. Nature areas to walk are important to our mental health.
- I checked the trails out this morning on my bike. Less developed than I expected. I like bike trails, but it might be good to keep some trails undeveloped to keep the bikes off. Also, nice to have benches in shade. there was a wide bridge whose boards need some love.
- Yes, getting run out of the way by bikes speeding buy

- I would love to have more trails to ride in Roseville! I often take my bike down to Folsom because they have so many established trails there. I would love to have the same where I live. I live in Westpark.
- Help connect our city trails and set the foundation to make Roseville a city that you can walk and bike anywhere on safe trail systems
- We love it as is, please don't pave it.
- I really would hate to see things paved over. One of the reasons that I enjoy this area is because it is not paved. There is so much to see and I feel that paving it will completely ruin the experience and scare the wild life away because it would be messing with the natural habitat.
- Is there a gravel option with updated nature signs? Is there a plan to better monitor the area for inappropriate use? We see lights in the area at night. Also, someone was sleeping in a hammock tied to trees in the daytime. Some spray paint under overpass.
- Please continue to try to connect walking and biking trails so we don't have to be on the street
- This is great. A large t-shape through the middle connecting existing trails would be most cost effective.
- It's about time to do this.
- I would like to have a paved path that leads under the bridge near Rose Creek Road from Sun City to Mahany Park.
- I think it would be better to build a skatepark at Mahany Park rather than a trail.
- Wish they had finished the sand volleyball court in the park behind the aquatic center.
- I use this space often and enjoy bringing my children there for nature study. The less natural it is made, the less appealing it becomes. There is such beauty in the lazy dirt paths that wind through the Oaks. I fear that a paved path will bring many more commuters and possibly even transients to the area as has occurred in the downtown Roseville parks. I'm also concerned that with a Paved path there will be toilets added to the area which is thoroughly unnecessary as there is already restrooms near the library. Thanks for allowing us who use the space to share our input.
- It would be a great benefit to connect all trails together eventually. To be able to bike from one part of Roseville to all areas of Roseville similar to what Folsom has.
- Will our taxes go up to fund this?
- Please hook up to all trails leading to Folsom lake.
- Although I understand the need to protect habitat and vegetation, there is an appeal to walking a narrow path which at the moment is dirt. It is more like being in nature than on pavement. The one thing we appreciate about Roseville is all the open spaces to walk. Thanks so much for all you do to make that possible.
- Let's do it!
- Connect all Roseville bike trails.
- The most important part of the trail for us is to pave the part that is gravel so there is a complete paved way to ride to the high school, library, and park. Second, is safe creek crossings.
- People are already using the dirt and chip-and-seal access roads out here. There is a problem with user created bridges in several areas and adding something the city maintains would likely be an overall benefit to the area, as it would mostly confine the areas people use to better maintained trails and having trash cans and dog pots would at least greatly help with the amount of litter and dog droppings left by users of the open space area. Increased traffic would be an ecological detriment in that it increases human traffic in the preserve, but increased traffic would also hopefully increase responsibility of users as they have others around.

- Let's do it! Long overdue to have a bike trail extension west of the pool and school
- No dead ends. Follow existing dirt paths, no right angles. Bridge connections above or below arterial roadways.
- Nope
- I think it's a fabulous idea to have a paved path through the open space
- Have you thought about asking for donations from local organizations or businesses for some of the things needed, like benches or signage or dog waste stations? You might find some of the local organizations might get behind the cause financially to help out.
- Thank you for this project.
- More benches and swings for kids, any activity to bring people out
- This is the Cross Country team's only trail to run on for morning practice. The only thing I would add to the existing trails is more/updated wildlife signage and bridges to cross creeks, which have been a dangerous hazard in the past.
- I would love to see these trails remain dirt
- I think this is a great idea. I wish we could have more trash cans and dog waste stations around our city to help alleviate all of the garbage, waste, and litter that is throughout our residential sidewalks.
- We do need green space pedestrian/bike crossings through highway 65 near Pleasant Grove and near Blue Oaks or Stanford Ranch.
- Please complete this project as soon as possible! Definitely needed many years ago.
- What's the timing and funding sources for this proposal?
- Good idea
- Please keep some dirt trails.
- Paving the general maintenance road would greatly help, I hate riding my bike on it as it's way too bumpy and there is no other access to Woodcreek Oaks from the North/South existing bike trail.
- Please do not pave a trail. Please limit parking and access points. Please keep it as natural and protected as intended. Enforce dog walkers keep dogs on leash and pick up poop. I have seen dog owners turn dogs loose to chase migrating geese in the vernal ponds - awful! Paving will only encourage and increase all kinds of traffic in the park and surrounding areas. Please save your money and spend it on something else like energy rebates, supporting more police activities as the city is growing too fast and is losing the very amenities that used to make it a safe and special place to live.
- I thought the 1/2 percent city sales tax was to supplement the police and fire departments. I don't like seeing it spent on other projects. Our police force needs to be supplemented.
- In Roseville there are many greenbelt bike paths and maintained city parks. The Mahany nature preserve is unique in that it is mostly native valley plants and landscape as well as endangered vernal pools. While paving some of the main trails such as the access road running parallel to the powerlines running E-W and adding bridges for better access might be beneficial, the unpaved dirt trails I would say add to the experience people desire when they visit the Mahany nature center. If visitors want to walk on a paved bike trail there is one in Mahany and many throughout Roseville. While increasing trail signage, interpretive signage, and access would be positive, I would argue strongly against paving everything in order to keep the space somewhat wild.
- Thank you
- I love the idea.
- Please start ASAP

- Love the idea
- I would like to see the leash law enforced. I have been swarmed by dogs multiple times since COVID-19 started with many people out there with dogs off leash. The off leash dogs and owners who can't control them trample thru the plants.
- My family walks the dog several times per week in the Mahany Open Space. We have a Labrador Retriever that loves to play in the water. We have hundreds of friends in the area that walk their dogs off-leash too. These dogs need to run and handlers need Covid-19 safe outdoor activities. For the most part, dog handlers are responsible and self-regulate dogs with aggressive or runaway behavior. We don't need this area turned into a park with rules, parking issues and amateur ornithologists thinking it's a bird sanctuary.
- There are a few bad examples I would like to avoid, namely Veteran's park which is totally off limit to dogs also the trail West of Nichols Park the chain-link fence on the north side of this trail prohibits access to the creek. Pleasant Grove Creek Trail is nice but there are traffic issues with speeding bikers and joggers on the paved sections that are reluctant to slow down. Having leashed dogs makes these situations even harder to manage, like a giant bolas ensnaring everyone in a tangle.
- I am disabled and have limited mobility, a few foot bridges would be useful. There are three places that would be on my list; The North Bridge (38°46'00.42" N, 121°20'17.49" W) by the cardboard recycling bins near the Bear dog park (Point Q). Middle Bridge connecting the Main East and West trails (38°45'51.58" N, 121°20'30.69" W) or as an alternate a Woodland Bridge (38°45'58.70" N, 121°20'36.15" W) on the trail through the oak grove.
- If there were an unlimited budget, it would be nice to put in some tables on the two hill tops (38°45'48.84" N, 121°20'13.43" W) and (38°45'47.16" N, 121°20'11.85" W) and rip out the old benches. It's the best place to watch the sunset. And a garbage can, the kids leave a lot of broken glass up there.
- I was hoping you would pave the gravel maintenance road and replace the surfacing on the bridges.
- Please have all the trails connect.
- Exciting! Thank you!
- None. Thank you for the opportunity to comment
- If trail is going west of Fiddymont one day as shown, pave the existing access/maintenance road off of Fiddymont to park
- Has there been an Environmental Impact Statement conducted for adding paved trails to this open space?
- I would love to see a Par course type exercise stations that you could do as you walk run or bike along the way like they have at many colleges. The equipment is very low maintenance and not very expensive.
- Would love a trail, and to build some bridges! But would hope to keep it simple, so traffic doesn't increase. And also to stick to the current paths and not add new ones closer to homes.
- I use the trails of Mahany Park 5 times a week. I like it as it is, but definitely see the benefits of upgrading the trails. I hope you consider those "paths" that we have created through the woods south of proposed access point L and upgrade them.
- I think this project is a great idea!
- When I walk on some of the trails, they are not wide enough. Bikes come up behind me and dangerously try to go around, but there isn't enough room.
- Would love to see connection from veterans park to Mahany and to Miners Ravine
- Your posted map does not show the proposed trail - there is no highlighted green trail on the map aside from a small part off of Fiddymont road. You should re-publish the map to show what you are actually proposing.

- I would love exercise stations.
- We love the existing walking paths and use them a lot. It makes sense to add more and do it in a good way, the same as it has been done.
- Leave it as it is , a nice relaxed walking areas with no restrictions and a proper open space for everyone to enjoy.
- More police patrol on bike. Public safety.
- Adverse impacts to natural drainage and runoff are a concern; adverse impacts to wildlife
- It's nice that it feels simple and rustic. I appreciate having lands like this so close to Sun City.
- Please make the trail happen
- This is nice to think about but is this a wise use of funds during a depression? How much will taxes go up on the unemployed?
- This seems like a worthwhile project.
- Consider restrooms
- It is needed for safe scenic trail walking by the residents of Sun City; for long overdue removal of dead trees, etc.; for better brush fire control; for aesthetics; and for better insect control eg. mosquitoes.
- Can't our taxpayer money be used for a better purpose than this?
- If this project moves forward, I would suggest that the unpaved trails now being used be the ones that are paved & limit the NEW trails created to keep costs down since this project will not be used by a LARGE number of people. Keep the goats/sheep coming to keep the growth down & make sure LIGHTING is included to keep the people safe.
- It would be nice for the city to leave some places in the natural state that they are currently in. Adding garbage cans or dog waste bag stations are a plus. Otherwise that is all.
- Welcome all paved, off-road areas to walk and bike
- I would like to see the bike trails connect to existing trails and expanded so I can stay out of traffic.
- Leash laws should be posted. Nothing is worse than going on a run and approaching dogs without a leash, it's always scary.
- Please connect or make plans for a strong future connection to Sierra Vista community (e.g. pedestrian only light/ cross walk). The Sierra Vista specific plan calls for a commercial development and hopefully a access path through that future development. We need to get access to this wonderful project.
- I love this area!! I visit it weekly. I think it would be fantastic to have more trails that are user friendly to run, bike and walk on in Mahany Park!
- Paved pathways will reduce erosion, will probably encourage more people to use trails in rainy months, will encourage users to stay on trails and out of fragile land areas.
- Maybe add more "fun facts" signage or nature/map signage. Also if possible, maybe add some lighting along the proposed trails since it gets very dark once the sunsets and would help for safety. Also, add some bridges along creeks.
- Will the bridge crossing the creek located by the old water substation be maintained/ fixed, some of the wooden planks are rotting and getting loose (bridge is located in the area of "F" on the map above for Existing Access Points).
- A pedestrian overpass at Pleasant Grove and Woodcreek would be nice.
- Let's definitely make this happen! We love Roseville!

- I think this is a great idea and as west Roseville continues to grow this will provide a much needed recreation destination for families.
- Wait until the City finances improve
- Has the project been approved to be built and the city is just looking for input or is the city debating whether to proceed with building the trail?
- Will you be taking public donations after the \$300K?
- More bike trails allow for safer modes of transportation that are not shared with cars
- Plant some colorful trees, shade, water stations Please plant some nice small trees, planting in front of Fiddymment transformer station. The surrounding area by the station is an eyesore. The landscaping in front of the station has been severely neglected!!
- I go on these trails almost every day and I really enjoy them, I've lived here my whole life and the trails have lots of memories for me and the bike jumps that are there are really fun, and if it becomes paved, it will ruin the ability to enjoy the trails for me and my visitation of these trails will significantly decrease. Please do not pave these trails. It will seriously ruin the atmosphere and I will not enjoy a paved trail.
- Great idea! We walk the trail out to the small power shed and back to the library.
- How much would this cost? The map does not show where the trail would be located, would it connect with Fiddymment, Raley's, Library, Ball parks?
- Thanks for doing it. I'd love to see it ultimately connect to the Dry Creek Trail way
- I drive special to Mahany Park open space to run on the dirt trails. It hurts more to run on paved trails. All the trails around my house are paved and not enjoyable to run on. I also like to walk my dogs on dirt trails as temperatures rise it's hot on their paws to walk on paved trails versus dirt trails. Please keep this area natural.
- What plants and habitat are endangered in the area that would be improved by putting in a paved path? I think that paving paths throughout this area would be more of a threat to the "endangered habitat" than leaving it as is. Adding bridges over certain creeks and endangered areas would be more of a benefit than spending money on paving trails. I feel that people would continue to create dirt paths throughout the area, therefore negating any benefit that paved paths would create.
- I have lived in West Roseville for 17 years. I am proud of the fact that we have the Mahany Park nature preserve and it feels like you're taking a nature walk (ignoring the powerlines, of course.) I like the dirt paths.
- Mountain bike area or flat track
- How is this being paid for?
- Yes! It seems to me there are other needs that should take priority over paving a trail. Repair streets. I'd like to send you a bill for the roundup I use to kill the weeds on the streets in front of my house.
- Leave it like it is except lighting
- Please provide visible lines of sight around tight corners or steep slopes for bicyclist and pedestrians and provide money for maintenance for park staff to complete plant trimmings for over grown areas that impede visible lines of sight. Please put solar LED lights under bridges. Please provide 1'-2' wide compact granite shoulders on each side of the paved trail for walks and runners. Please plan and budget for maintenance for future slurry seals and maintenance on the asphalt trail.
- What are the environmental impacts?
- One of the reasons I like walking through the area is to get off of the asphalt and concrete that covers most of the rest of Roseville.

- I was very disappointed when the former plank bridges crossing the creek were removed. So having another bridge would be nice.
- I don't understand the contention that having a swath of asphalt through the area is less disruptive to nature than dirt paths (some of which were created by wildlife). I have been walking the area for over 20 years and have noticed different dirt paths come and go.
- You have too many names for the area, Mahany Park Preserve, Woodcreek West Preserve, Silverado Oaks Reserve, Woodcreek Nature Preserve. In fact, putting an improved multi-use trail through a "Preserve" seems kind of antithetical. I guess I am ambivalent about the project. From my perspective, there are things that would be nice about it, but I could easily do without it.
- I like it the way it is.
- Well overdue. Always wondered who owned the property and why it was so underdeveloped
- I repeat, less focus on open space and more on the needs of West Roseville residents.
- I actually like the dirt roads/trails, so see the bridges as the most important element.
- Leave it just the way it is. We love the natural feeling of the open space.
- The most important improvement is providing cross over of the creeks which would greatly improve connection with all the trails.
- Frequent user of pleasant grove creek trail. People do not know how to use the trail, unattended children, oblivious adults, right way to walk or bike, littering, dog poop, unleashed dogs & children, lastly mandatory trail safety course attendance.
- More paved trails = more people = more congestion, trash, and less nature = less wildlife = fewer reasons to have the open space area.
- Trails increase the desirability for family living and working in Roseville. Build and connect trails.
- I regularly use and enjoy this open space and have been picking up trash throughout the area for 9 years. Trash cans would be an excellent addition. Thank you for the thoughtful consideration of further improvement to this multi-use area
- It's such a beautiful peaceful walk right now you will change all that by changing the environment
- About time
- One of the best birding spots in Roseville. Plant more native trees and plants. Don't let the goats eat the willows. Protect the large oaks.
- I like the nature area the way it is, not looking forward to having more people in the area parking their cars in the neighborhood so access the trails. I live here and purchased the house because it had a wetland preserve so as to know that there would be no future infill projects.
- One of the top 10 Birding Hotspots in Placer County
- Great idea!
- This would be great. Would love to walk and ride my bike through the park.
- I love this trail. I run and walk my dog on it every day. I am 36 years old and have been using this trail since I was 14 years old in Cross Country at Woodcreek. It is invaluable to my perception of why I KNOW Roseville is the best city in Placer County. I love how clean the streets/trails are and look forward to putting our tax dollars towards something that will increase our quality of life.
- Excited for more trails!
- I frequently have to avoid walking through the park because it is common for people to unleash their dogs.

- I relocated to Roseville one year ago and didn't know there was an Open Space at Mahany Park. I'm eager to see trails added so that I can use that space. I'd rather walk on a paved trail than through any area where I could disrupt vegetation or animals.
- Excited
- If you want to preserve the area, I do not see making improvements which will drastically increase traffic being a good move.
- Keep the area dark, it's great to have a place to go see the stars from.
- Adding a trail through the area is a much needed improvement. Crossing the creek W. of the dog park would be a nice addition to the area. Providing a trail through or near the old Oaks might discourage some abuse of that area. I've seen 400 year old oaks fall to the ground, it is heart breaking. It would be nice to see the old trees in this area continue outlive the residents.
- Would it be possible to fence off some of the vernal pools to protect them from people and unleashed dogs? Would it be possible to add more oak plantings in with this effort for some of the areas out there?
- As a side, I've lived in Roseville for over 20 years and ran that informal trail the entire time. It used to be one path but over time has spiders out into several. It's a beautiful piece of nature in the city that I'd love to have responsible city management of for both environmental and public benefit.
- I would love more trails, but wonder if the city should be budgeting a project like this right now in a time of such economic uncertainty.
- Please at least put asphalt on existing gravel maintenance "red" path
- The space is so beautiful and tranquil. It offers local residents the opportunity to enjoy the outdoors close to home. Sometimes paved trails can bring a lot of traffic to nearby neighborhood homes that would be unwelcome and unfair to the homeowners who bought specifically for a quiet neighborhood near a green space.
- I would like to see it remain as it is
- I think paving the wide, gravel part is a good idea. It provides better and easier access to some people and is more bike friendly. But what we currently have is a nice way to connect with nature in the middle of the suburbs, and I don't think we should undo that
- I continue to encourage the City of Roseville and Placer County to develop and interconnect their multi-use trails.
- The elementary school nature walk field trip with High School student presenters was peaceful and enjoyable. Hopefully a new multi-use trail will not negatively impact the natural beauty of the space and the wildlife and their habitat. All existing Mahany Park areas and nearby public facilities are unique and wonderful.
- I would support small wood bridges being added to make the many creeks easier to cross when they have water in them.
- Mostly I would love to see the power lines go away and be sunk underground. They are ugly and I worry about being around them in terms of my health. On the other hand, I am pretty sure the only reason this space is not developed is because the power lines are there. Let's be honest, there is not much public open space actually set aside. "
- Nice to see more rec options for residents
- I have lived near this open space for 13 years and have longed for a paved trail in this area both for exercise and for my kids to walk/bike to school on! However, what I don't understand when looking at this map is why the trail can't just go through the

middle of the open space like the dirt trails already do?! They are nice trails that could be made even better by paving them and building a bridge over the creek! I walk the Veterans Park trail quite frequently and I know that there have been bridges and additional trails added there within the last 5 years or so. When looking at the proposed trails on the other side of Fiddymment it does look like that trail would run through where the electrical towers are, not around.

- Also the gravel maintenance road is horrible to bike or walk on, is this going to be paved as well?
- And lastly, I don't like the idea of having to walk out on Fiddymment or Pleasant Grove at all. Those are very busy streets and if you're trying to enjoy a nice walk having to walk with cars zooming by you is not very relaxing!
- Public water fountain and restroom station. Entrance F is currently not so friendly to strollers or bikes.
- I would not want any paved trail over existing bridges or creeks. Please keep it as natural as possible by not paving in the interior of the park. If paving, please limit to outer perimeter only.
- Keep it accessible and fun for trail riding mountain bikers.
- It's a great idea. As much as possible, connect with other trails.
- I see the damage due to trespass as a failure by the city to protect the open space habitat in the first place. The open space was protected as mitigation for previous urban development and the city has a (legally binding) stewardship obligation that cannot be set aside. The excuse that you must "pave it to save it" does not hold up. There should be an analysis of the stewardship obligation of the city, which is not even mentioned.
- I wish there were a better way to link the trails, so you could use them to get places without using the street as much
- Connect East to west Roseville
- Wish it would remain untouched. There are enough paved areas if people want to go on them I have seen many people enjoying the paths walking running and biking especially during the quarantine. Don't need bathrooms or fitness stations or trash cans out there
- Please build the Linda Creek trail first.
- I'm a bike rider who doesn't like riding on the streets as some drivers are careless in driving habits and wander into bike lanes.
- I've loved this place since I've lived in Roseville (12 years). It's been a huge part of my childhood and growing up, and I hope it can be a source of natural beauty for many years.
- The pump station at the end of the gravel road looks awful and run down, is it even used? It needs to be fixed up and maybe have some plants around it. For a city that takes great care of its infrastructure it's a sad sight and has been for many years.
- I would like the city to protect the large oaks from the goats which it employs for fire protection. Over the last few years I have seen the goats doing damage to the trees by foraging on the lower branches. I have an plant and tree science background. This damages the beautiful heritage oaks. The lower branches sometimes do not recover from the stripping of foliage and bark.
- I live a block away and walk there most evenings in the spring through fall. I am concerned about the wildlife being disturbed. Please keep this in mind as you plan additional use of this space
- I am concerned that trails will become too busy
- I love the space.
- Great ride location. Keep up your good work for the residents of Roseville. Thanks for the survey.

- If this project goes underway, please make sure that it doesn't affect the environment at all!!!
- Love the idea
- I don't believe this is a necessary project. The beauty of this area is it's "natural" feel. There are enough designated paths already.
- If possible, a gravel/smooth dirt trail would be a nice addition to Roseville's trail system.
- Keep doing a great job. You can't please everyone, but be fiscally conservative and spend your residents tax money wisely. Keep focus on community and the people that pay for a great Roseville.
- More details on other bike trails this project will connect with.
- None
- A paved trail that links the dog park, Junction, and the Roseville Aquatics Complex is 20 years overdue. Nonmotorized access is not possible without using a high-speed arterial or collector.
- Well-designed survey. Thank you.
- I think this is way overdue excited Roseville is creating paved trails I would like the trail to be connected to Suncity so people don't have to cross or access the roads to be able to go to the other side.
- Connect all bike trails throughout all Roseville
- Construct bike park with jumps.
- I love walking the local trails and would like to see it linked with others for additional trail options.
- Our trails are fantastic. I would love to have all trails connect without the need to go onto roads/sidewalks. For example, the trail that goes past Barbara Chilton and then extends west and curves north could connect to the trail that goes through the pistachio trees / orchards on the trail that is north of Blue Oaks Blvd. This would be fairly easy to do, and this would allow people to connect many more of the trails together for fitness and recreation. Thanks for all of the work on our trails and parks!
- I do have a question about the land that is at the corner of Fiddymont and Blue Oaks. We have been waiting for a long time for trails on that land. When will the promised ""nature trails"" be established there? Thanks for any information that you can provide (jmwhitman92@gmail.com).
- Thanks for building trails to prevent erosion and damage to plants.
- This has been needed for a very long time!
- More small trees on the Western portion for shade would benefit, or a public fruit tree picking area e.g. lemons, figs, olives.
- Would very much appreciate having this additional paved trail
- This would be a lovely place for an evening walk.
- I think this is a great idea. My family and I already utilize the space for bike riding and are interested in doing so for many more years to come.
- From the maps provided I don't see much proposed improvement within the red-outlined area - just a small additional trail outside the red lines.
- Keep up the "open minded" approach to alternative modes of transportation for an area growing too fast
- Would be great to have safe bridges to cross the creek at all the access points.
- Shaded areas with benches.
- Hope you create the trails such that the preserve can be protected and admired.
- Pavement is hot in summer months and can burn the feet of dogs. Leave it alone. Complete waste of money.

- Thanks so much for taking input. This would be a great addition to our already wonderful city trails and parks.
- I would love to see a paved trail in the open spaces. I enjoy walking , especially in nature areas.
- Is there a way to keep motorized or semi-motorized (electric bike/scooters) off the trails? I've seen OHV using trails on the west end of town.
- We have learned from the COVID 19 quarantine just how vital these outdoor opportunities are for citizens of all ages. I want to thank the City for having the foresight to construct such beautiful parks and set aside open space. I served on the Parks and Rec Commission back in the 90s. I believe that Ed Mahany would be so happy to see today's residents enjoying this land while preserving its beauty.
- Yes please make it only for dogs on a leash.
- I'd rather it stay unpaved. It's a great place where people can still go ride dirt bikes and mountain bikes, explore the marshes, and walk along well-worn footpaths. It's nice to still have a chunk of Roseville in its natural state to explore.
- Better use of money that you usually waste!
- I think this is great, especially if it's connected to other paths. I don't like riding my bike on the street & desperately are looking for longer, safer places to ride. Thank you!
- I come to Roseville with my kids and push my Grandma who lives in Del Webb on the paved trails and my kids ride their scooters. More paving would be nice and we would be able to go farther.
- The open space is relatively flat and serves well as-is, unpaved. I believe that paving a trail through would reduce the charm and character of the open space and increase traffic and refuse through the area.
- I think a multi-use trail is a welcome addition to the space, since it can provide a nice area away from streets and cars to enjoy a walk/run/bike.
- Good ide
- Do not pave
- Again, please plant more trees and have it connect into existing bike trail
- How will it connect to existing trails and what trails will it connect too?
- Thus is a place where people can walk outside and feel a connection with natural beauty. Not every park requires all kinds of amenities. There are ample bike lanes and sidewalks, as well as developed parks. Leave the open space as is, people want and need more undeveloped areas in Roseville or it will soon feel like San Jose.
- There is little information and general knowledge of this trail system and all trail systems in Roseville. We have been here 6 years, we are walkers, and yet we never knew there was a Mahaney trail. No maps, no signage, no marketing of such city trails.
- The more trails in Roseville the better
- I would like to see these paths better connected to each other. Right now it seem like it's .5 miles here and .5 miles there. It would be nice to have a 5 to 10 mi. loop.
- Please work with WLL Board.
- What bucket of funds does this come out of? I am concerned that there are other more pressing needs with limited dollars. How is it being prioritized? Not sure this is priority.
- Living in the Westpark area, my family and I would love to see a trail through this area as well as a connector and trails in the open discernment directly to the west of Fiddymont (under the power lines). We live to bike and walk and for safety prefer trails over roads. It would be nice to be able to bike to get

groceries at Raley's and visit shops/eateries nearby.

- Pavement is bad for walkers/joggers joints. Also, the paving material is full of chemicals that bleed into the surrounding areas.
- I think making it a large loop with a few different inlets from streets/neighborhoods would be the best. Roseville needs another trail, a large circle like Maidu Park. Please!
- Looks like a good project! Emphasis should be on connections between existing and proposed trails so as to create a transportation system.
- The open space is so beautiful and feels like a walk in the country. I think the impact on wildlife from bringing in noisy equipment and smelly asphalt would not be good. A lot of people stay off the trails in the wet season which gives wild life a break from people.
- Leave it natural, not everything needs to be paved.
- I love that trails will connect to the larger network. Please consider adding lighting in some areas. Perhaps solar powered?
- Will there be a paved trail down the middle of the open space down to Fiddymment? It is not shown as proposed on the map.
- Please don't pave. We have enough paved trails. We need the nature
- Just build bridges across creeks on current dirt/gravel trails and done. Don't need anything more.
- Some dirt trails built in would be awesome too
- Please provide access across the creek from point M on pleasant grove to existing trail coming north
- Would be great to incorporate more features for mountain bikers. Maybe a bike park.
- These improvements would be received well by the community.
- Make it happen
- A paved path to the dog park would be amazing. A paved or gravel path from the aquatic center to Fiddymment would be great for exercise.
- Keep dirt trails parallel to paved trails. Don't just pave over them.
- This multi-use trail is a wonderful idea. Thank you very much.
- Please connect all trails. Drivers do not respect bikers. There are a few trails in West Roseville that should be connected.
- Any ponds or Creek areas for nature.
- When will it connect West of Fiddymment & South of Pleasant Grove?
- I would love to see all our trails connected; makes for great adventures with family and friends when we walk, run or ride our bikes.
- Dirt paths are still good. Don't pave everything.
- It would be great to be able to ride from here and connect up with Washington to Royer and jump on the trail to Folsom.
- Water fountain at either ends and in the middle.
- Wonderful
- A parking area at the end of the trail (access point L) would be nice.
- Since we all get taxed a huge percentage of each sale for the wetlands, how fast can you get this done?
- Please make bridges over the little rivers, we would like to bike
- Great idea! Lots of teenagers take it to and home from school. Maybe some safety features. Worry about homeless in the field.

- The more ways we have to get out and appreciate nature, the better
- I think it sounds like a great idea.
- I do currently enjoy the dirt fire road path out there more than I enjoy paved trail and visit because of the option to run on dirt
- It would be great for the city
- I would love for this path to be paved and for multiple points to enter the path. I see it as a great form of exercise, and to enjoy nature. I would really utilize the open space preserve more if there was paved access. Right now I worry about uneven ground and tripping and falling where there isn't a bridge across the creeks.
- We also need shops and gas station
- I would like it left the way it is. I like hiking on the dirt trails. People will still make their own trails even with the paved trails. I am against the pave project.
- This is a great idea
- It would make it easier for the kids to ride bikes on. Thank you!
- Install a Par course
- It would be amazing
- Please build this!
- Please Do it
- I love Roseville open space projects and I think it's great during the events of recent times to encourage more people to spend time outside since we know in this format it's less risk than other indoor leisure activities.
- Thank you for helping improve trail connectivity.
- I like paved trails for biking
- Looking for a continuation of the bike trail
- Can't wait for the improvements
- Paved trails are great, but dirt single track trails are also a lot of fun for the whole family. You truly feel removed from the city and in nature when you are on a dirt trail. Roseville should start a program to develop and maintain single track throughout the city. This would be much cheaper than spending millions of tax payer dollars on paved trails. Again I love both, but think we need more single track in the city.
- I love the trails. Big proponent of having trails be able to connect together!
- Would like to see the area planted with blue oaks.
- I think the footpaths would be reduced just by putting in bridges, especially in trees near Pleasant Grove where people trample the bank trying to find way across stream that has steep banks
- Access points from Pleasant Grove Blvd. are the most needed.
- Pave the trail along the power lines, the rocks aren't nice to bikes, man or beasts
- Finish the trail across the creek to Pleasant Grove next to the dog park
- I currently use the Open Space and feel bad about using all the dirt "paths."
- I think it's a great idea. Trees or fruit trees will be great. As well as water station or water for drinking. Miles marker will be great too.
- Would love to see the gravel path paved to connect to other paved pathways.
- Possible restroom and or water fountain

- I lived near current access Point P and used the area frequently, all seasons. Tremendous asset. Now live in East Roseville, still drive over to walk my dog in the old stomping grounds he traveled as a pup 12 years ago.
- Please add pavement markings for those who cannot read to walk left, ride right. I think if you painted this info head to head showing the direction if going one way and again a few feet farther along to show if walking in the opposite direction it might help the obvious confusion. People and often foreign language users do not read the green sign at all.
- I moved here last year and didn't know there was an open space and will access it now that I know it's there when I go to the library.
- Leashed Dog Signs thru out
- A timeline for how long the process is would be nice to have.
- Excited to see it happen.
- We must consider a safe way to cross Fiddymment for residents in West Park and Sierra Vista to safely access this Mahany Park Open Space Trail from the west.
- I would prefer to keep it as-is and more natural rather than more paved trails
- I don't currently use the trail space but if it were connected to other trails I do use, I would begin to use it
- Do it. I've been waiting for this to be completed for years.
- Connect existing bike trails and build creek bridges, but leave the rest alone
- I moved too Roseville because off the walking/bike paths. The more the better
- What a wonderful idea! It would be nice to connect with the existing trail along the power transmission line on the other side of Woodcreek Oaks Blvd.
- I have always wanted to walk back there but have been hesitant because of the uneven surfaces. I would love to have more paved walking trails in the area.
- Building more trails - and linking them together - is a win, win for everyone
- I live in Olympus Point so my use would be minimal at best. However, it seems like a good idea for the City and will help protect those habitats.
- We really need paved trails that start in point E and ends at the Roseville Commuter Stop (park and ride). Currently is hard to bike to the Commuter Stop. I live close to point E
- Trail etiquette pamphlets or signage at trail heads would be amazing - The amount of people "doing their own thing" is unsafe
- Keep the dirt trails
- will you openly allow input? Too many people and too many improvements all in the name of progress. Ruining the only remaining preserve we have by laying concrete. Most people do not respect wildlife, natural areas, or common sense to clean up after their dogs. The police will not even come out when dirt bikes, quad runners and golf carts are reported as they rip through trails. The few animals and wildlife that still exist will be pushed out.
- Leave it the way it is
- Consider moving Fiddymment Road access points (on both east and west side of the road) a little bit north, closer to Pleasant Grove Blvd, to encourage using the signaled intersection instead of jaywalking across the road.
- Would like to see shade structures at points along the trail. It often gets very hot walking with little ones within minimal cover.

- Connect it to Maidu.
- This would be great. Even if it is a simple trail that extends the length of the open space and connects to the existing trail. It doesn't need to be super extensive and cross crossing all over.
- It would be wonderful to create this trail and especially connect it with other paved trails in the area. I am always looking for safe places to exercise away from the dangerous conditions that exist on Roseville's public streets. Drivers are paying less and less attention, which increases the risks to those riding their bikes, running, and walking along our streets. I hope the City of Roseville agrees to go forward with this plan.
- It's beautiful. Keep it clean
- I would love to see all the pathways eventually connect. I'd love to be able to ride my bike from the path head at Woodcreek near the overflow lot to the restaurants on Pleasant Grove and somehow see it connect to the path off Diamond Oaks that takes you to the Fountains and mall.
- Much overdue
- I would like Roseville to have a vast network of bike trails similar to Folsom.
- Maybe a couple drinking fountains for children and dogs
- I would love to see more trails in this area because there are limited places to explore on a bike due to the limited paved trails in this area. The nature is beautiful in this area but hard to explore and appreciate due to the limited paved trails. I think connecting different parks and neighborhoods with trails helps limit the need to drive to these areas, and helps promote biking and walking to different parks and neighborhoods. This will promote cleaner air and more community interaction.
- Area needs more trees.
- I'm a runner and would love to have more paved trails around to keep me off sidewalks and near traffic. It's also safer to bring my kids along when traffic isn't a concern.
- I really like to see the paved multi-use trails. I would like to see more continuity between the trails. I think there are plans to connect trails but I don't know how long that will take.
- It is time to do this because of the population boom
- Great project, just do it
- This is really a great opportunity to dramatically improve both N-S and E-W connectivity in North Roseville, especially by making direct connections between surrounding neighborhoods and both Mahany Park and Woodcreek HS. This also provides an opportunity to maximize the value of the existing undercrossing of Pleasant Grove Blvd. I also think interpretation of the natural area is important to foster a sense of stewardship for the preserve, which will ultimately help it thrive as its primary purpose, a preserve.
- Yes, I support this project
- Trails are important, my first priority is another trail over or under Interstate 80 in the Kirby Street area.
- A paved path would be beneficial to students attending Woodcreek HS. It also would be nice to have more bike trails in this area.
- I think it would be a very nice addition to existing trail complex that make Roseville such a great place to live
- Create more dirt trails too
- I'm so excited to hear this could be in the works.
- I really think this trail could be incredible for the community. I think it would serve the community better than apartment complexes or another shopping center. I also believe this would be important in helping

with the preservation of a lot of wildlife in the area.

- Most important to replace the bridges that the city removed a few years ago making Mahany Park almost unusable
- It gets too crowded now
- How fast can you make it happen?
- Bathroom. Bridge over creek. Water fountain.
- I've always wondered what killed the numerous dead oak trees along the waterway. If you're adding informational signage, the information would be interesting to know.
- Where will the Woodcreek HS MTB team practice if they lose their trail? Please consider that natural surface trails can be sustainable with proper design and maintenance, and are much more enjoyable. A parallel natural trail may be a solution.
- I love this area and I walk through it 3-5 times a week. I would love to see some improvements without hurting the current feel of it. It's very soothing and relaxing to walk through .
- There are no connections to the "Saint" Streets from the trail and we have to walk through the plants if we need a quick way home. We'd love a dirt path connection to some of these streets. Also, the post and cable fencing at these streets do not have any openings to get bikes through. We have two young kids (one we're pulling in a bike trailer) and we're unable to get through this way. The same issue occurs near Junction as well as Aylesbury.
- It would be wonderful to have a connecting bike trail through the western part of the city. Away from "freeway" conditions on major thoroughfares.
- Great idea
- This is the right direction for the city and citizens
- Roseville should have a network of multiuse trails that connect west and east, such that people could bike across town in safety.
- I like how it is. No bikes speeding by. Perfect as it is
- Put gravel trails in, don't pave it. Bridges to cross creeks so it doesn't erode the land
- My concern is about destruction of the habitats
- Not sure it's worth the tax dollars to do this especially given our poor economy right now
- Don't have this valuable resource

Public Comments from Social Media

- After living here 21 years, Roseville has horrendously mismanaged this area. First the inadequate slope for drainage under Pleasant Grove Blvd created back up, raising the water table. Addition of housing irrigation runoff in the summer added to this problem. Dozens of 100 - 200 year old blue oaks have died in the last 20 years due to too much water. Second besides the vernal pools, much of the understory vegetation is invasive plants typical of the long term grazing impacts from California. Lately concern over fire danger has led the city to use goats to graze vegetation down to the ground. These goats are moved all around the sacramento region, and therefore spread weed seeds in their fur and feces. I suggest you develop an adequate habitat management and restoration plan on top of the concept of just paving the walkways.
- I would prefer you left it just the way it is. A little untarnished dose of nature. Helps keep me sane. I agree with the other folks on here already: manage this natural resource properly, but spend our tax dollars on

the important things first. Laying more pavement is unneeded.

- Could you clean up the homeless camps by Olympus Pointe Sculpture Park?
- Not too paving. Too much of our city is now a concrete jungle. Sand and gravel a path if you must.
- Like others said, just leave it the way it is. If anything plant more trees there.
- How about people use the existing spaces that we've been taxed for.
- The more trails, the merrier. Also, a great addition to our existing parks that have a vast area not being used, would be pump tracks. A concrete course with jumps and turns for bikes.
- My morning walk
- It would be nice to see a paved sidewalk on Pleasant Grove near the fountains so people didn't have to walk or bike in dirt. The sidewalk just stops till the light.
- Just pave it, they will come.
- Yes, connect and make trails!
- Look forward to learning more.
- Build a new bike park like Auburn did, along with a new skate park.
- The balance of trails and open spaces is one of Roseville's greatest treasures.
- Personally I'd like to see the city invest some money into fixing the death trap that is Maidu Skate Park before you start paving over more open space preserves.
- I would prefer that it remain as much of a nature preserve as possible, permeable pathways, least amount of development
- This would be awesome! Looking forward to a trail from far west Roseville to fountains.
- Great idea on the trail, but don't pave it
- Sounds inviting for many reasons. Trails for running, walking, biking etc. and watching nature and it's beauty
- Excellent idea. Always nice to be close to nature. Definitely pave it so everyone has a chance to safely walk/ride the trail.
- What about a off road mountain bike trail with some rough terrain?
- Yes, keep people on the paved path, let nature have the rest.
- Can Roseville please get a legitimate Skate/BMX Park. Love how two monster projects are going on at both Crabb and Central Park and neither are getting a concrete park. Please let me know how I can actually help make this a reality
- I feel like the public is very respectful of using the trails that have been worn away and that there is not an over abundance of them.
- My kids really enjoy the dirt trails. Since Roseville doesn't have a bike park, dirt trails in the open space are the next best thing.
- I love Roseville and all the wonderful trails dirt or paved.
- It's nice to live in Roseville. We have lots of nice trails.
- Take that money and put into our schools.
- It is hard to think about a walking path, during a pandemic, with our children suffering, and more money being taken away from their future.
- Although there are several joint use agreements between parks and the schools around town too may be worth mentioning.

- Open up the batting cages at Mahany & Maidu
- Put in a disc golf course.
- Yes, we need more walking trails and as long as it doesn't interfere with wildlife. And it sounds like this will actually help.
- Dirt trails are way more fun and it is a great contact with nature. I believe dirt trails absorb less heat than paved trails, making happier hikers.
- Make more golf cart trail for west park.
- Put some bike trails and/or a park. You spend enough time and effort tearing down the jumps built by kids, put in a park so they don't have to tear up non-designated property. There are already plenty of paved trails for walkers and casual riders.
- We really like the fact that it is dirt. We go for bike rides or nature walks. My kids never want to be on the paved portion because it's boring. They love being on the dirt. Keeping it dirt makes you feel like you've left the city and gone into nature. I hope you reconsider.

Appendix B

Biological Constraints Report

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Mahany Park Open Space Trail

Biological Constraints Report

August 2020 | CRS-03

Prepared for:

City of Roseville
311 Vernon Street
Roseville, CA 95678

Prepared by:

HELIX Environmental Planning, Inc.
1677 Eureka Road, Suite 100
Roseville, CA 95661

Mahany Park Open Space Trail

Biological Constraints Report

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ACRONYMS AND ABBREVIATIONS

CDFW	California Department of Fish and Wildlife
CESA	California Endangered Species Act
CEQA	California Environmental Quality Act
CFR	Code of Federal Regulations
CNDDDB	California Natural Diversity Database
CNPS	California Native Plant Society
CSA	California Special Animals
CWA	Clean Water Act
DBH	diameter at breast height
EPA	Environmental Protection Agency
FESA	Federal Endangered Species Act
HCP	Habitat Conservation Plan
HELIX	HELIX Environmental Planning, Inc.
HUC	hydrologic unit code
IPaC	Information for Planning and Consultation
ISA	International Society of Arboriculture
MBTA	Migratory Bird Treaty Act
MM	mitigation measure
MSL	mean sea level
NCCP	Natural Community Conservation Plan
NEPA	National Environmental Protection Act
NPDES	National Pollution Discharge Elimination System
OHWM	ordinary high water mark
PER	Planning and Environmental Review
RWQCB	Regional Water Quality Control Board
SAA	Streambed Alteration Agreement
SSC	Species of Special Concern
SWRCB	State Water Resources Control Board
TPZ	tree protection zone

ACRONYMS AND ABBREVIATIONS (cont.)

USACE	U.S. Army Corps of Engineers
USC	United States Code
USFWS	U.S. Fish and Wildlife Service
WEAP	Worker Environmental Awareness Program
WOTUS	Waters of the U.S.
WQC	Water Quality Certification

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1.0 INTRODUCTION

The purpose of this Biological Constraints report is to assess the general biological resources on the Mahany Park Open Space site (Study Area), to assess its suitability to support special-status species and sensitive vegetation communities or habitats, and to provide recommendations for any regulatory permitting or further analysis that may be required prior to development activities. HELIX Environmental Planning, Inc. (HELIX) conducted biological and arborist surveys of the Study Area in February 2020.

2.0 PROJECT SITE

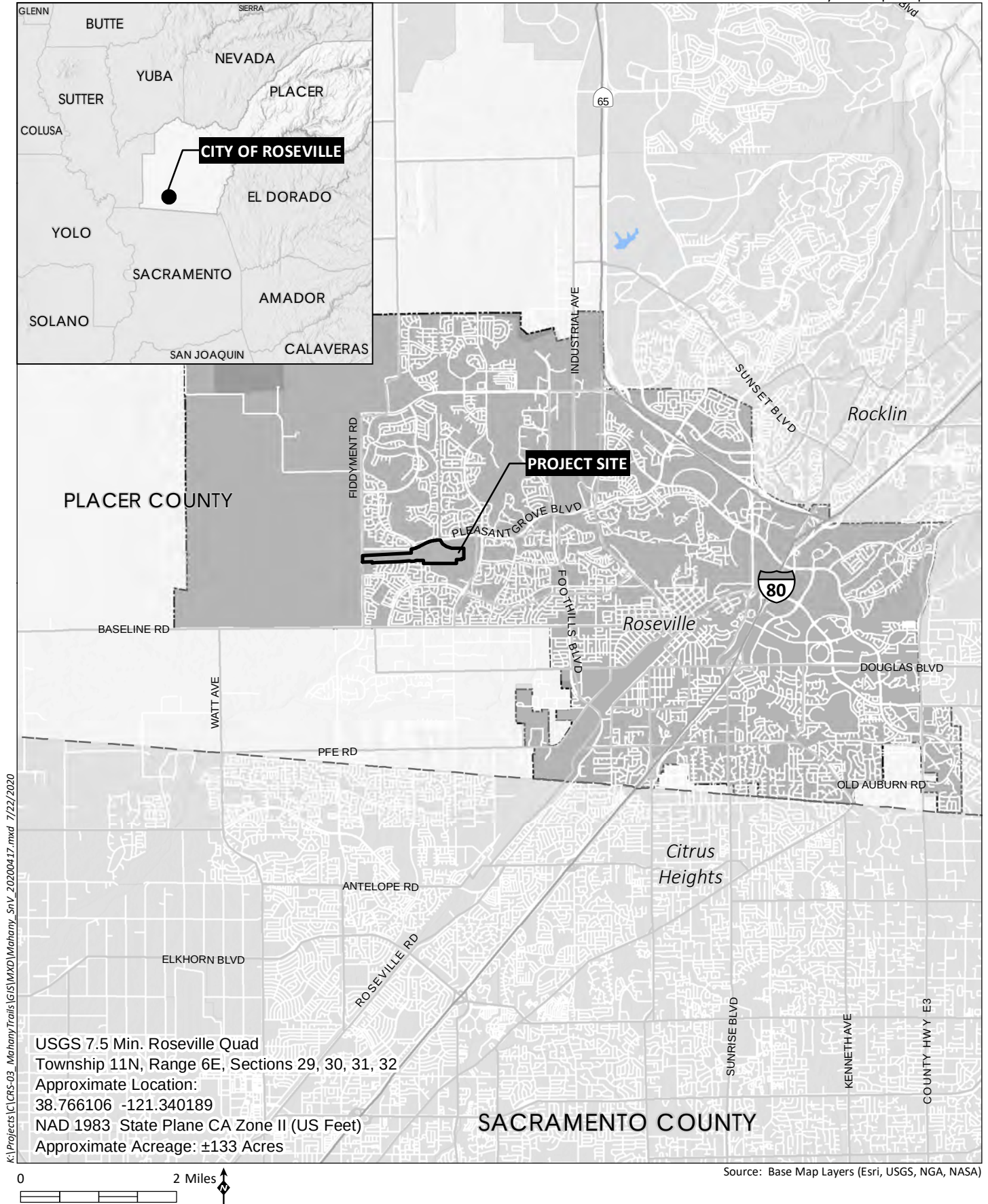
2.1 PROJECT LOCATION

The ±133-acre Study Area is located in the western half of the City of Roseville, California. It is within Township 11N, Range 6E, Sections 29, 30, 31, and 32 of the United States Geological Survey (USGS) 7.5-minute series *Roseville* quadrangle and its approximate location is -121.340189 West and 38.766106 North. Parks, schools, businesses, and multi-family and single-family residences surround the Study Area. Pleasant Grove Boulevard, Mahany Regional Park, and Bear Dog Park are located to the north of the Study Area. Bottlebrush Circle, Woodcreek High School, and Silverado Oaks Urban Preserve are located to the south of the Study Area. Fiddymont Road is located to the west of the Study Area. A CVS drugstore is to the northwest of the Study Area and to the east of the Study Area is Woodcreek Oaks Boulevard (Figure 1).

2.2 TOPOGRAPHY AND WATERSHED

The general topography of the Study Area consists of rolling and moderately sloped areas, with elevations that range from approximately 116 to 137 feet (35 to 41 meters) above mean sea level (MSL).

The Study Area is in the Pleasant Grove Creek Watershed Hydrologic Unit Code (HUC) 12-180201610302 and the Curry Creek Watershed HUC 12-180201610401. Both creeks empty into the Pleasant Grove Creek Canal which drains to the Sacramento River via the Cross Canal. The majority of the Study Area is located within the Pleasant Grove Creek Watershed. The hydrologic regime within the Study Area is predominantly seasonal stormwater runoff and direct precipitation, which primarily falls between November and March. Kaseberg Creek, a major drainage of the Pleasant Grove watershed meanders through the eastern portion of the Study Area.



3.0 REGULATORY BACKGROUND

3.1 JURISDICTIONAL WATERS

3.1.1 Federal Jurisdiction

Any person, firm, or agency planning to alter or work in Waters of the U.S. (WOTUS), including the discharge of dredged or fill material, must first obtain authorization from the U.S. Army Corps of Engineers (USACE) under Section 404 of the Clean Water Act (CWA; 33 United States Code [USC] 1344). Waters of the U.S. are defined as:

- (1) All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters which are subject to the ebb and flow of the tide;
- (2) All interstate waters, including interstate wetlands;
- (3) The territorial seas;
- (4) All impoundments of waters otherwise identified as waters of the United States under this section;
- (5) All tributaries, as defined in paragraph (c)(3) of this section, of waters identified in paragraphs (a)(1) through (3) of this section;
- (6) All waters adjacent to a water identified in paragraphs (a)(1) through (5) of this section, including wetlands, ponds, lakes, oxbows, impoundments, and similar waters;
- (7) All waters in paragraphs (a)(7)(i) through (v) of this section where they are determined, on a case-specific basis, to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. The waters identified in each of paragraphs (a)(7)(i) through (v) of this section are similarly situated and shall be combined, for purposes of a significant nexus analysis, in the watershed that drains to the nearest water identified in paragraphs (a)(1) through (3) of this section. Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.
 - (i) **Prairie potholes.** Prairie potholes are a complex of glacially formed wetlands, usually occurring in depressions that lack permanent natural outlets, located in the upper Midwest.
 - (ii) **Carolina bays and Delmarva bays.** Carolina bays and Delmarva bays are ponded, depressional wetlands that occur along the Atlantic coastal plain.
 - (iii) **Pocosins.** Pocosins are evergreen shrub and tree dominated wetlands found predominantly along the Central Atlantic coastal plain.

(iv) *Western vernal pools.* Western vernal pools are seasonal wetlands located in parts of California and associated with topographic depression, soils with poor drainage, mild, wet winters and hot, dry summers.

(v) *Texas coastal prairie wetlands.* Texas coastal prairie wetlands are freshwater wetlands that occur as a mosaic of depressions, ridges, intermound flats, and mima mound wetlands located along the Texas Gulf Coast.

(8) All waters located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (3) of this section and all waters located within 4,000 feet of the high tide line or ordinary high water mark of a water identified in paragraphs (a)(1) through (5) of this section where they are determined on a case-specific basis to have a significant nexus to a water identified in paragraphs (a)(1) through (3) of this section. For waters determined to have a significant nexus, the entire water is a water of the United States if a portion is located within the 100-year floodplain of a water identified in paragraphs (a)(1) through (3) of this section or within 4,000 feet of the high tide line or ordinary high water mark. Waters identified in this paragraph shall not be combined with waters identified in paragraph (a)(6) of this section when performing a significant nexus analysis. If waters identified in this paragraph are also an adjacent water under paragraph (a)(6), they are an adjacent water and no case-specific significant nexus analysis is required.

Within non-tidal waters that meet the definition given above, and in the absence of adjacent wetlands, the indicator used by the USACE to determine the lateral extent of its jurisdiction is the ordinary high water mark (OHWM), which is defined as that line on the shore established by the fluctuations of water and indicated by physical characteristics such as a clear, natural line impressed on the bank, shelving, changes in the character of soil, destruction of terrestrial vegetation, the presence of litter and debris, or other appropriate means that consider the characteristics of the surrounding areas.

Wetlands are defined under the CFR Part 328.3 as those areas that are inundated or saturated by surface or ground water at a frequency and duration to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions.

The USACE has determined that not all features which meet the WOTUS definition are, in fact, considered WOTUS. Normally, features not considered WOTUS include:

(1) Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA.

(2) Prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with the U.S. Environmental Protection Agency (EPA).

(3) The following ditches:

(i) Ditches with ephemeral flow that are not a relocated tributary or excavated in a tributary.

(ii) Ditches with intermittent flow that are not a relocated tributary, excavated in a tributary, or drain wetlands.

(iii) Ditches that do not flow, either directly or through another water, into a water identified in paragraphs (a)(1) through (3) of this section.

(4) The following features:

(i) Artificially irrigated areas that would revert to dry land should application of water to that area cease;

(ii) Artificial, constructed lakes and ponds created in dry land such as farm and stock watering ponds, irrigation ponds, settling basins, fields flooded for rice growing, log cleaning ponds, or cooling ponds;

(iii) Artificial reflecting pools or swimming pools created in dry land;

(iv) Small ornamental waters created in dry land;

(v) Water-filled depressions created in dry land incidental to mining or construction activity, including pits excavated for obtaining fill, sand, or gravel that fill with water;

(vi) Erosional features, including gullies, rills, and other ephemeral features that do not meet the definition of tributary, non-wetland swales, and lawfully constructed grassed waterways; and

(vii) Puddles.

(5) Groundwater, including groundwater drained through subsurface drainage systems.

(6) Stormwater control features constructed to convey, treat, or store stormwater that are created in dry land.

(7) Wastewater recycling structures constructed in dry land; detention and retention basins built for wastewater recycling; groundwater recharge basins; percolation ponds built for wastewater recycling; and water distributary structures built for wastewater recycling.

Other features may be excluded based on Federal court rulings (e.g., SWANCC and Rapanos) or by regulation.

Permits, licenses, variances, or similar authorization may also be required by other federal, state, and local statutes. Section 10 of the Rivers and Harbors Act of 1899 prohibits the obstruction or alteration of navigable WOTUS without a permit from the USACE (33 USC 403).

On January 23, 2020 the EPA and the USACE finalized the Navigable Waters Protection Rule to define Waters of the U.S. and establish federal regulatory authority under the CWA. The rule will become effective 60 days after publication in the *Federal Register*. On April 21, 2020, the EPA and USACE published the Navigable Waters Protection Rule to define “Waters of the United States” in the Federal Register. On June 22, 2020 the Navigable Waters Protection Rule: Definition of “Waters of the United States” (NWPR) became effective in 49 states, including California, and in all US territories.

3.1.2 State Jurisdiction

Regional Water Quality Control Board

Any action requiring a CWA Section 404 permit must also obtain a CWA Section 401 Water Quality Certification. The State of California Water Quality Certification (WQC) Program was formally initiated by the State Water Resources Control Board (SWRCB) in 1990 under the requirements stipulated by Section 401 of the Federal CWA. Although the Clean Water Act is a Federal law, Section 401 of the CWA recognizes that states have the primary authority and responsibility for setting water quality standards. In California, under Section 401, the State and Regional Water Boards are the authorities that certify that issuance of a federal license or permit does not violate California's water quality standards (i.e., that they do not violate Porter-Cologne and the Water Code). The WQC Program currently issues the WQC for discharges requiring USACE permits for fill and dredge discharges within Waters of the United States, and now also implements the State's wetland protection and hydromodification regulation program under the Porter Cologne Water Quality Control Act.

On April 2, 2019, the SWRCB adopted a State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Waters of the State (Procedures), for inclusion in the forthcoming Water Quality Control Plan for Inland Surface Waters and Enclosed Bays and Estuaries and Ocean Waters of California. The Procedures consist of four major elements: 1) a wetland definition; 2) a framework for determining if a feature that meets the wetland definition is a water of the state; 3) wetland delineation procedures; and 4) procedures for the submittal, review and approval of applications for Water Quality Certifications and Waste Discharge Requirements for dredge or fill activities. The Office of administrative Law approved the Procedures on August 28, 2019, and the Procedures became effective May 28, 2020.

Under the Procedures and the State Water Code (Water Code §13050(e)), "Waters of the State" are defined as "any surface water or groundwater, including saline waters, within the boundaries of the state." Unless excluded by the Procedures, any activity that could result in discharge of dredged or fill material to Waters of the State, which includes Waters of the U.S. and non-federal Waters of the State, requires filing of an application under the Procedures.

The Porter-Cologne Water Quality Control Act (Porter-Cologne Act, Water Code Section 13000 et seq.) is California's statutory authority for the protection of water quality in conjunction with the federal CWA. The Porter-Cologne Act requires the SWRCB and RWQCBs under the CWA to adopt and periodically update water quality control plans, or basin plans. Basin plans are plans in which beneficial uses, water quality objectives, and implementation programs are established for each of the nine regions in California. The Porter-Cologne Act also requires dischargers of pollutants or dredged or fill material to notify the RWQCBs of such activities by filing Reports of Waste Discharge and authorizes the SWRCB and RWQCBs to issue and enforce waste discharge requirements, National Pollution Discharge Elimination System (NPDES) permits, Section 401 water quality certifications, or other approvals.

3.2 RIPARIAN HABITAT/SECTION 1600 OF FISH AND GAME CODE

The California Department of Fish and Wildlife (CDFW) is a trustee agency that has jurisdiction under Section 1600 et seq. of the California Fish and Game Code. Under Sections 1602 and 1603, a private party must notify CDFW if a proposed project will "substantially divert or obstruct the natural flow or substantially change the bed, channel, or bank of any river, stream, or lake designated by the department, or use any material from the streambed, except when the department has been notified

pursuant to Section 1601.” Additionally, CDFW asserts jurisdiction over native riparian habitat adjacent to aquatic features, including native trees over four inches in diameter at breast height (DBH). If an existing fish or wildlife resource may be substantially adversely affected by the activity, CDFW may propose reasonable measures that will allow protection of those resources. If these measures are agreeable to the parties involved, they may enter into an agreement with CDFW identifying the approved activities and associated mitigation measures. Generally, CDFW recommends that an application for a Streambed Alteration Agreement (SAA) be submitted for any work done within the lateral limit of water flow or the edge of riparian vegetation, whichever is greater.

3.3 PROTECTED SPECIES

3.3.1 Federal Endangered Species Act

The U.S. Fish and Wildlife Service (USFWS) enforces the provisions stipulated within the Federal Endangered Species Act of 1973 (FESA; 16 USC 1531 et seq.). Species identified as federally threatened or endangered (50 CFR 17.11, and 17.12) are protected from take, defined as direct or indirect harm, unless a Section 10 permit is granted to an entity other than a federal agency or a Biological Opinion with incidental take provisions is rendered to a federal lead agency via a Section 7 consultation. Pursuant to the requirements of FESA, an agency reviewing a proposed project within its jurisdiction must determine whether any federally-listed species may be present in the study area and determine whether the proposed project will jeopardize the continued existence of or result in the destruction or adverse modification of critical habitat of such species (16 USC 1536 (a)[3], [4]). Other federal agencies designate species of concern (species that have the potential to become listed), which are evaluated during environmental review under the National Environmental Protection Act (NEPA) or CEQA although they are not otherwise protected under FESA.

3.3.2 California Endangered Species Act and Fully Protected Species

The California Endangered Species Act (CESA) (California Fish and Game Code Sections 2050 to 2097) is similar to the FESA. The California Fish and Wildlife Commission is responsible for maintaining lists of threatened and endangered species under CESA. CESA prohibits the take of listed and candidate (petitioned to be listed) species. “Take” under California law means to hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch capture, or kill (California Fish and Game Code, Section 86). The CDFW can authorize take of a state-listed species under Section 2081 of the California Fish and Game Code if the take is incidental to an otherwise lawful activity, the impacts are minimized and fully mitigated, funding is ensured to implement and monitor mitigation measures, and CDFW determines that issuance would not jeopardize the continued existence of the species. A CESA permit must be obtained if a project will result in the “take” of listed species, either during construction or over the life of the project. For species listed under both FESA and CESA requiring a Biological Opinion under Section 7 of the FESA, CDFW may also authorize impacts to CESA species by issuing a Consistency Determination under Section 2080.1 of the Fish and Game Code.

Legal protection is also provided for wildlife species in California that are identified as “fully protected animals.” These species are protected under Sections 3511 (birds), 4700 (mammals), 5050 (reptiles and amphibians), and 5515 (fish) of the California Fish and Game Code. These statutes prohibit take or possession of fully protected species at any time. CDFW is unable to authorize incidental take of fully protected species when activities are proposed in areas inhabited by these species. CDFW has informed non-federal agencies and private parties that they must avoid take of any fully protected species in

carrying out projects. However, Senate Bill 618 (2011) allows the CDFW to issue permits authorizing the incidental take of fully protected species under the CESA, so long as any such take authorization is issued in conjunction with the approval of a Natural Community Conservation Plan that covers the fully protected species (California Fish and Game Code Section 2835).

3.4 CEQA SIGNIFICANCE

Section 15064.7 of the State CEQA Guidelines encourages local agencies to develop and publish the thresholds that the agency uses in determining the significance of environmental effects caused by projects under its review. However, agencies may also rely upon the guidance provided by the expanded Initial Study Checklist included in Appendix G of the CEQA Guidelines. Appendix G provides examples of impacts that would normally be considered significant. Based on these examples, impacts to biological resources would normally be considered significant if the project would:

- Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS;
- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the CDFW or USFWS;
- Have a substantial adverse effect on State or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species, or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and
- Conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional or state habitat conservation plan.

An evaluation of whether or not an impact on biological resources would be substantial must consider both the resource itself and how that resource fits into a regional or local context. Substantial impacts would be those that would diminish, or result in the loss of, an important biological resource, or those that would obviously conflict with local, State, or federal resource conservation plans, goals, or regulations. Impacts are sometimes locally important but not significant according to CEQA. The reason for this is that although the impacts would result in an adverse alteration of existing conditions, they would not substantially diminish, or result in the permanent loss of, an important resource on a population-wide or region-wide basis.

3.4.1 California Native Plant Protection Act

The California Native Plant Protection Act of 1977 (California Fish and Game Code Sections 1900-1913) requires all state agencies to use their authority to carry out programs to conserve endangered and

otherwise rare species of native plants. Provisions of the act prohibit the taking of listed plants from the wild and require notification of CDFW at least 10 days in advance of any change in land use (other than changing from one agricultural use to another), which allows CDFW to salvage listed plants that would otherwise be destroyed.

The California Native Plant Society (CNPS) is a non-governmental conservation organization that has developed a list of plants of special concern in California. This information is published in the *Inventory of Rare and Endangered Vascular Plants of California*. Potential impacts to populations of CNPS-ranked plants receive consideration under CEQA review. The following identifies the definitions of the CNPS Rare Plant Ranking System:

Rank 1A: Plants presumed Extinct in California and either rare or extinct elsewhere

Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere

Rank 2A: Plants presumed extirpated in California but common elsewhere

Rank 2B: Plants Rare, Threatened, or Endangered in California, but more common elsewhere

Rank 3: Plants about which we need more information – A Review List

Rank 4: Plants of limited distribution – A Watch List

Although the CNPS is not a regulatory agency and plants on these lists have no formal regulatory protection, plants with a Ranking of 1A through 2B may be considered to meet the definition of endangered, rare, or threatened species under Section 15380(d) of CEQA (see above), and impacts to these species may be considered “significant.”

In addition, CDFW recommends, and local governments may require, protection of species which are regionally significant, such as locally rare species, disjunct populations, essential nesting and roosting habitat for more common wildlife species, or plants with a CNPS Ranking of 3 and 4.

3.4.2 California Department of Fish and Wildlife Species of Concern

Some additional fish, amphibian, reptile, bird, and mammal species may receive consideration by CDFW and lead agencies during the CEQA process, in addition to species that are formally listed under FESA or CESA or are fully protected. These species are included on the Special Animals List, which is maintained by CDFW. This list tracks species in California whose numbers, reproductive success, or habitat may be in decline. In addition to “Species of Special Concern” (SSC), the Special Animals List includes species that are tracked in the California Natural Diversity Database (CNDDB) but warrant no legal protection. These species are identified as “California Special Animals” (CSA).

Additionally, California Fish and Game Code Subsections 3503 and 3800 prohibit the possession, take, or needless destruction of birds, their nests, and eggs, and the salvage of dead nongame birds. California Fish and Game Code Subsection 3503.5 protects all birds in the orders of Falconiformes and Strigiformes (birds of prey). Fish and Game Code Subsection 3511 states that fully protected birds or parts thereof may not be taken or possessed at any time. Fish and Game Code Subsection 3513 states that it is unlawful to take or possess any migratory nongame bird as designated in the Migratory Bird Treaty Act or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the Migratory Bird Treaty Act. The Attorney General of California has released an opinion that the Fish and Game Code prohibits incidental take.

3.5 ROSEVILLE NATIVE OAK TREE ORDINANCE

The City of Roseville (City) Native Oak Tree Ordinance (Ordinance) regulates encroachment within the protected zone and removal of protected trees (City of Roseville 2020a). Protected trees include any native oak, defined as valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizeni*), or any hybrid between these species, with a trunk diameter of six inches or greater at breast height (54 inches or 4.5-feet above grade) measured as a total of a single trunk or multiple trunks. The tree protection zone) is the area within a circle around the tree defined by the largest radius of the canopy plus one foot.

City projects, such as the Mahany Trail Project, do not require a tree permit, but are required to comply with the preservation and mitigation requirements of the Native Oak Tree Ordinance. The City requires mitigation for tree removal. However, trees identified by an arborist as dead or hazardous trees do not require mitigation. The City may approve any of the following methods or combination thereof; however, on-site tree replacement is the preferred method.

- Replacement trees may be planted on-site or in other areas where maintenance and irrigation are provided to ensure survival of the trees. Removal of protected trees to be replaced shall be calculated based upon an inch for an inch replacement of the DBH of the removed tree(s) where:
 - One 15-gallon tree will replace 1-inch DBH of the removed tree;
 - One 24-inch box tree will replace two inches; and
 - One 36-inch box tree will replace three inches.

The replacement trees shall have a combined diameter equivalent not less than the total diameter of the tree(s) removed. A minimum of 50 percent of the replacement requirement shall be met with native oak trees and up to 50 percent may be fulfilled with non-native species;

- Relocation of native oak trees from one area to another, may be considered by the City in certain cases. Credit shall be given for relocation on the same basis as replacement, and guidelines and limitations for relocation are outlined under the Ordinance;
- Implementation of a revegetation program to propagate native oak trees from seed using currently accepted methods; and/or
- Payment of an in-lieu mitigation fee, if the City determines that the other methods outlined above are not feasible or desirable.

4.0 HABITATS AND SPECIAL-STATUS SPECIES

The ±133-acre Study Area includes 95.25 acres of annual grassland, 5.96 acres of oak woodland, 5.24 acres riparian woodland, and 4.34 acres of disturbed area. Aquatic features include 18.01 acres of vernal pools, 2.43 acres of seasonal wetlands, 0.38 acre of seasonal drainage, and 1.43 acres of perennial drainage (Kaseberg Creek), all of which are anticipated to be jurisdictional waters. Paved multi-use trails and a gravel access road that leads to an existing utility building transects the central portions of the Study Area. Many overhead utility lines cross the site, including three lines of high-voltage transmission towers and two lines of utility poles. Numerous informal dirt paths cross the annual grassland, oak woodland, and portions of the riparian habitat (Figure 2).

Regionally occurring special-status species were identified by conducting a search of the California Natural Diversity Database (CDFW 2020), the CNPS Ranking List (CNPS 2020), and the USFWS IPaC list (USFWS 2020) for special-status species documented within the *Pleasant Grove, Nicolaus, Sheridan, Verona, Roseville, Taylor Monument, Rio Linda, and Citrus Heights* USGS quadrangles. HELIX biologist Marisa Britts conducted a biological constraints level survey on February 17 and 18, 2020. An arborist survey was also conducted within the Study Area by a HELIX International Society of Arboriculture (ISA)-Certified Arborist Charlotte Marks (WE-10519A) on February 17, 18, and 19, 2020.

A total of forty-four special-status wildlife and thirteen special-status plant species have the potential to be found in the vicinity of the Study Area (Appendix A). Based on research and site conditions, twenty-four special-status wildlife and nine special-status plants have the potential to occur within the Study Area. Special-status wildlife species with potential to occur in the Study Area are burrowing owl (*Athene cunicularia*), Swainson's hawk (*Buteo swainsoni*), western spadefoot toad (*Spea hammondi*), western pond turtle (*Actinemys marmorata*), pallid bat (*Antrozous pallidus*), valley elderberry longhorn beetle (*Desmocerus californicus dimorphus*), and andrenid bee (*Andrena subapasta*). Additionally, there is potential for nesting birds and raptors, including grasshopper sparrow (*Ammodramus savannarum*), long-billed curlew (*Numenius americanus*), purple martin (*Progne subis*), Nuttall's woodpecker (*Picoides nuttallii*), oak titmouse (*Baeolophus inornatus*), yellow-billed magpie (*Pica nuttalli*), black-crowned night heron (*Nycticorax nycticorax*), common yellowthroat (*Geothlypis trichas*), great blue heron (*Ardea herodias*), great egret (*Ardea alba*), song sparrow (Modesto population) (*Melospiza melodia*), tricolored blackbird (*Agelaius tricolor*), and white-tailed kite (*Elanus leucurus*), and vernal pool invertebrates, including California linderiella (*Linderiella occidentalis*), Ricksecker's water scavenger beetle (*Hydrochara rickseckeri*), vernal pool fairy shrimp (*Branchinecta lynchi*), and vernal pool tadpole shrimp (*Lepidurus packardii*), to occur. Special-status plant species with the potential to occur within the Study Area include stinkbells (*Fritillaria agrestis*), Sanford's arrowhead (*Sagittaria sanfordii*), Ahart's dwarf rush (*Juncus leiostermus* var. *ahartii*), Boggs Lake hedge-hyssop (*Gratiola heterosepala*), dwarf downingia (*Downingia pusilla*), legenere (*Legenere limosa*), pincushion navarretia (*Navarretia myersii* ssp. *myersii*), Red Bluff dwarf rush (*Juncus leiostermus*), and valley brodiaea (*Brodiaea rosea* ssp. *vallicola*).

Table 1, below, lists the habitats and the number of special-status species that could occur within that habitat (note that a species may occur in multiple habitats). For example, Swainson's hawk may forage in the annual grasslands and has the potential to nest in the oak woodland, therefore this species is identified in both habitats. Information on these species is included in the discussion of the appropriate habitat below. Species observed during field surveys are included in Appendix B and representative site photos are included in Appendix C.

Table 1
HABITATS AND POTENTIAL SPECIAL-STATUS SPECIES

Habitat	Acres	Potential Special-Status Species	
		Wildlife	Plants
Annual Grassland	95.25	Burrowing owl *Swainson's hawk Nesting birds and raptors Western spadefoot toad	Stinkbells
Oak Woodland	5.96	Nesting birds and raptors *Pallid bat	
Riparian Woodland and Creek	6.67	Nesting birds and raptors *Pallid bat *Swainson's hawk Western pond turtle Valley elderberry longhorn beetle *Andrenid bee	Sanford's arrowhead
Vernal Pool	18.01	Vernal pool invertebrates Western spadefoot toad *Andrenid bee	Boggs Lake hedge Dwarf downingia Legenere Pincushion navarretia Red bluff dwarf rush Valley brodiaea

(*)Species has the potential to occur in multiple habitats.



4.1 ANNUAL GRASSLAND

Annual grassland occurs within the majority of the Study Area, Figure 2. The annual grassland landscape supports many different grasses, forbs, and isolated small clusters of trees and shrubs. Growth occurs during early spring turning the landscape green. During the summer many of the plants in this community are dormant. Plants commonly found in the annual grassland include wild oat (*Avena fatua*), Italian ryegrass (*Festuca perennis*), barley (*Hordeum marinum*), brome (*Bromus* sp.), wild rye (*Elymus* sp.), and medusa head (*Elymus caput-medusae*), as well as forbs such as filarees (*Erodium* spp.) and mustard (*Brassica* sp.). California's Mediterranean type grasslands are recognized among the world's "hot spots" of native biodiversity, despite being generally dominated by non-native species (Bartolome et al. 2014).

Within the annual grasslands are seasonal wetland and drainages, as well as vernal pools, which are discussed in more detail below. Seasonal wetlands and drainages are dependent on rainfall and they can be inundated for days to weeks after a storm.

Black-tailed deer (*Odocoileus hemionus columbianus*), black-tailed jackrabbit (*Lepus californicus*), California ground squirrel (*Spermophilus beecheyi*), pocket gopher (*Thomomys bottae*), and house mouse (*Mus musculus*) were documented within the Study Area. Western meadowlarks (*Sturnella neglecta*) and western kingbirds (*Tyrannus verticalis*) feed on insects and seeds, red tailed hawks (*Buteo jamaicensis*), northern harrier (*Circus cyaneus*), and red shouldered hawks (*Buteo lineatus*) feed on gophers and mice that are commonly found within annual grassland habitats. Evidence and/or observations of these species was noted during the field survey of the Study Area. Additional species observed are listed in Appendix B.

Appendix A lists the number of known CNDDDB occurrences of special-status species within a 5-mile radius of the Study Area as well as additional information about special-status species with the potential to occur within the Study Area. Swainson's hawk has the potential to forage in the annual grassland and is discussed in further detail in Section 4.3 – Riparian Woodland and Creek.

4.1.1 Burrowing Owl

Burrowing owl is a California Species of Special Concern. This small ground-dwelling owl generally inhabits gently sloping areas, characterized by low, sparse vegetation (Poulin et al. 2011). The breeding season for burrowing owls is from February to August, peaking in April and May (Zeiner et al. 1990). Burrowing owls nest in burrows in the ground, often in old ground squirrel burrows. Burrowing owls are also known to use artificial burrows including pipes, culverts, and nest boxes. The annual grassland and existing ground squirrel burrows within this community provide suitable habitat for this species within the Study Area. The burrows within the annual grassland and drainages/culverts provide wintering and nesting habitat for this species. This species is predominantly non-migratory in California.

4.1.2 Grasshopper Sparrow

Grasshopper sparrow is a California Species of Special Concern. This small sparrow frequents annual grassland and grasshopper sparrow nests are often constructed at the base of an overhanging clump of grass. These weak fliers don't tend to fly around much but rather scurry on the ground like mice (Cornell Lab of Ornithology 2019). This migratory bird is observed between April and June during the summer breeding season in California.

4.1.3 Long-Billed Curlew

Long-billed curlew is a Bird of Conservation Concern. It is the largest bird in the sandpiper family. The long-billed curlew nests in low-growing vegetation (4 to 8-inches high) and is often found in annual grasslands and vernal pools during the summer breeding months. In the winter, they migrate to the coast where they inhabit wetlands, tidal estuaries, mudflats, flooded fields, and occasionally beaches (Cornell Lab of Ornithology 2019).

4.1.4 Purple Martin

The purple martin is California Species of Special Concern. This species is in the swallow family and is known to perform aerial acrobatics to snap up flying insects. They nest in wide variety of open annual grasslands and partially open habitats like the of the riparian woodland and creek and oak woodland communities within the Study Area. They nest in tree cavities, abandoned woodpecker holes, crevices in rocks, and sometimes in bird houses or gourds put up by humans. At the end of the summer breeding season they gather in big flocks and make their way to South America (Hood 2017).

4.1.5 Tricolored Blackbird

The tricolored blackbird is a California Threatened Species. Tricolored blackbirds look very much like their cousin, the red-winged blackbird. What distinguishes these two species from one and other is the addition of the white strip on the shoulder of the tricolored blackbird. Male tricolored blackbirds are entirely black with a bright red shoulder patch bordered below by a white to cream-colored band. Females are dark gray-brown overall. This species forages in grasslands and breeds in freshwater marshes. Nests occur in large colonies of up to thousands of individuals (NatureServe 2020). Nesting locations must be large enough to support a minimum colony of approximately fifty pairs (Zeiner et al. 1990). This species forages in grasslands and agricultural fields with low-growing vegetation (Shuford and Gardladi 2008).

4.1.6 Western Spadefoot Toad

Western spadefoot toad is a California Species of Special Concern. This species spends most of the year underground, where individuals seek refuge from desiccation by constructing and residing in small burrows. Adults emerge from underground with the onset of the first rains of the season (Zeiner et al. 1988-1990). Breeding and egg laying occur in temporary pools and quiet streams. Breeding typically end in March, but may extend as late as May, depending on rainfall (Stebbins 2003; Zeiner et al. 1988-1990). Egg masses contain approximately 10 to 42 eggs, and are attached to vegetation or other submerged objects, and hatch within approximately two weeks (Zeiner et al. 1988-1990). Western spadefoot toads are most commonly found in grassland habitats containing vernal pool complexes but can also be found in burrows adjacent to drainages. This species has been found to move an average of 800 feet from its breeding pool (Muths 2003). Its skin is smoother than that of the western toad and it has two pale strips along its back. The “spade” is a sharp, black ridge on its hind feet that enables the toad to dig its burrow.

4.1.7 Stinkbells

Stinkbells are a CNPS Rare Plant Rank 4.2 plant species. Stinkbells are a perennial bulbiferous herb found in clay soils, sometimes in serpentinite soil in moist annual grasslands. Flowers are white with greenish to

pinkish markings on the outer surface and purple brown on the inner surface. The flowers have an unpleasant odor, hence its name. The typical bloom period is between March and June (CNPS 2020).

4.2 OAK WOODLAND

Oak woodland is located in the eastern and central portions of the Study Area (Figure 2). Denser stands of large, mature oaks are located in the north and central portions of the Study Area associated with Kaseberg Creek.

The oak woodland within the Study Area is primarily characterized by an overstory of native oak trees including blue oak, interior live oak, and valley oak. The understory is mostly devoid of other woody vegetation and is composed primarily of non-native annual grasses like that found in the annual grassland community. Woody plants that were observed in this community include poison oak (*Toxicodendron diversilobum*) and Himalayan blackberry (*Rubus armeniacus*).

Acorn woodpeckers (*Melanerpes formicivorus*) were seen adding acorns to acorn granaries, northern flickers (*Colaptes auratus*), a red-tailed hawk, California scrub jays (*Aphelocoma californica*), American crow (*Corvus brachyrhynchos*), and red shouldered hawk were observed perched in trees or soaring above the oak woodland. In addition, a great horned owl (*Bubo virginianus*) was observed in its nest in an oak in the northeastern section of the oak woodland see Figure 2 for approximate nest location.

Special-status species with the potential to occur in the oak woodland habitat are listed below. Appendix A lists the number of known CNDDDB occurrences of special-status species within a 5 miles radius of the Study Area as well as additional information about special-status species with the potential to occur. Purple martin and stinkbells were previously discussed under Section 4.1 – Annual Grassland, as these species have the potential to occur within the annual grassland as well as the oak woodland.

4.2.1 Nuttall's Woodpecker

Nuttall's woodpecker is a Bird of Conservation Concern. This small woodpecker has black and white spots covering most of its body. Males have a bright red crown where females lack this. Nesting occurs primarily in oak cavities (Cornell Lab of Ornithology 2019) and this species is non-migratory.

4.2.2 Oak Titmouse

Oak titmouse is a Bird of Conservation Concern. This species is about the size of a sparrow. This rather plain gray bird has a crest on its head. It nests in natural tree cavities or in woodpecker holes (Hood 2017) and this species is non-migratory.

4.2.3 Pallid Bat

Pallid bat is a California Species of Special Concern. This bat is yellowish brown to cream colored. A distinguishing characteristic is its large ears that are almost half as long as the total length of its head and body. Also, its eyes are larger than most species of North American bats. Day roosts are located in crevices and occasionally in hollow trees and buildings. Pallid bats forage over riparian woodland and creek habitat. Roosts must protect bats from high temperatures during the day (Barbour; Davis 1969). This species can be observed year-round.

4.2.4 Yellow-Billed Magpie

Yellow-billed magpie or “California magpie” is a Bird of Conservation Concern. This species is only found in California and nowhere else in the world. This boisterous bird is about the size of a crow with a long tail. Its white belly and wing patches stand out against the black of its head and tail. Yellow-billed magpies’ nest in tall trees averaging 47 feet often in clumps of mistletoe (Hood 2017).

4.3 RIPARIAN WOODLAND AND CREEK

Riparian woodland and Kaseberg Creek are located in the northeast portion of the Study Area. The overstory of this community is comprised of willows (*Salix* sp.) cottonwoods (*Populus fremontii* ssp. *fremontii*), and oaks. The understory, specifically southwest of Bear Dog Park and south of Pleasant Grove Boulevard, is comprised of vines and brush such as wild grape (*Vitis californica*), coyote bush (*Baccharis pilularis*), and Himalayan blackberry.

Kaseberg Creek exhibits a bed, bank, and OHWM. The creek is not highly vegetated because of the scouring effect of fast-moving water; however, sections of the creek were colonized by plants including sedges (*Carex* sp.), rushes (*Juncus* sp.), and willows (*Salix* sp.).

Special-status species with the potential to occur in the riparian and creek habitat are listed below. Appendix A lists the number of known CNDDDB occurrences of special-status species within a 5 miles radius of the Study Area as well as additional information about special-status species with the potential to occur. Purple martin has the potential to nest and feed within the riparian and creek habitat. This species was previously discussed in Section 4.1 – Annual Grassland.

4.3.1 Black-crowned Night Heron

The black-crowned night heron is considered a California Special Animal. This primarily nocturnal, short-necked heron comes out at dusk to hunt on a variety of prey including insects, small fish, and rodents. Adults have a dark black crown and back. This species is non-migratory in this region (Hayes et al. 2006).

4.3.2 Common Yellowthroat

Common yellowthroat is a Bird of Conservation Concern. This small sparrow sized bird has yellow plumage around its throat. This species feeds in moist areas typically along creeks and drainages and nests are woven by females using various grasses (Hood 2017). This non-migratory bird is observed year-round.

4.3.3 Great Blue Heron

Great blue heron is considered a California Special Animal. This large bird stands about 4 feet tall with a wingspan of 6 feet (Hood 2017). This grey-blue bird is an expert fisherman, hunting in vernal pools, creeks, and wetlands. This non-migratory bird is observed year-round.

4.3.4 Great Egret

The great egret is considered a California Special Animal. This large all white bird has a long neck and stands about 3 feet tall. Egrets feed by wading through the water slowly, then spearing their prey with a sudden lunge (Cornell Lab of Ornithology 2019). This non-migratory bird is observed year-round.

4.3.5 Song Sparrow (“Modesto” Population)

Song sparrow is a California Species of Concern. This medium sized bulky sparrow is found in thickets and bushes. Their coloring includes brown upperparts with dark streaks on the back with white underneath with dark streaking and a dark brown spot in the middle of the breast. They have a brown cap and a long brown rounded tail (Cornell Lab of Ornithology 2019). This non-migratory bird is observed year-round.

4.3.6 Swainson’s Hawk

Swainson’s hawk is a California Threatened Species. They arrive in the Central Valley between March and early April to establish breeding territories. Breeding occurs from late March to late August, peaking in late May through July (Zeiner et al. 1990). In the Central Valley, Swainson’s hawks nest in isolated trees, small groves, or large woodlands next to open grasslands or agricultural fields. This species typically nests near riparian areas; however, it has been known to nest in urban areas as well. In the Central Valley, the most commonly used trees include cottonwoods, willows, sycamores (*Platanus* sp.), valley oaks, walnuts (*Juglans* sp.), and occasionally gum trees (*Eucalyptus* sp.), pines (*Pinus* sp.) and redwoods (*Sequoia sempervirens*) (Woodbridge 1998). Nest locations are typically located within a 10-mile radius of suitable foraging habitats, which include annual grassland and agricultural fields. There are seven historic nest locations recorded within 5 miles of the Study Area. Swainson’s hawks leave their breeding grounds to return to their wintering grounds in late August or early September.

4.3.7 White-Tailed Kite

White-tailed kite is a California Fully Protected Species. This largely pale raptor is easily identified by its entirely white tail and black shoulder patches. It has a unique way of hunting; the white-tailed kite rapidly beats its wings allowing it to hover in place. During the nonbreeding season, it gathers in communal roosts (Cornell Lab of Ornithology 2019). This non-migratory bird is observed year-round. This species was observed in the Study Area during the February 17 and 18, 2020 field survey.

4.3.8 Valley Elderberry Longhorn Beetle

The valley elderberry longhorn beetle is a Federally Threatened Species. It is associated with elderberry shrubs (*Sambucus* sp.) often within riparian habitats. Adult males have red-orange wing covers with four elongate spots. Adult females have dark colored wing coverings. Females lay their eggs on the bark of elderberry shrubs. Larvae hatch and burrow into the stems, and presence can be indicated by bore-holes in stems of elderberries (USFWS 2017). Although no elderberry shrubs were observed during the field survey, a section of riparian habitat located adjacent to Bear Dog Park, in the northeastern portion of the Study Area was not fully accessible due to thick undergrowth. Therefore, there is the potential that suitable habitat exists in the Study Area for valley elderberry longhorn beetle.

4.3.9 Western Pond Turtle

Western pond turtle is a California Species of Special Concern. This species occurs in ponds, lakes, rivers, streams, creeks, marshes, and irrigation ditches with suitable basking sites. Suitable aquatic habitat typically has a muddy or rocky bottom. Western pond turtles nest and overwinter in areas of sparse vegetation, usually grassland, typically within 500 feet of aquatic habitat. The typical shell coloring is dark brown, blackish or olive a network of with lines and spots (Hayes et al. 2006). Western pond turtle may be present in the Study Area year-round.

4.3.10 Sanford's Arrowhead

Sanford's arrowhead is a CNPS Rare Plant Rank 1B.2 plant species. This aquatic perennial herb has leaves that are very often submerged, variable in shape, usually long and strap-shaped like an arrowhead. The plant is monoecious, with individuals bearing both male and female flowers. The male flowers have rings of stamens at the centers. Female flowers each have a spherical cluster of pistils which develops into a head of tiny fruits. The typical bloom period is May through October (CNPS 2020).

4.4 VERNAL POOLS

Vernal pools are found within the annual grasslands of the Study Area where impervious layers of clay underlie the surface soil. Vernal pools have three distinct phases: the wet phase, the flowering phase, and the dry phase. The vernal pools in the Study Area were just entering the flowering phase during the February 17 and 18 site survey, however, some deeper pools were still inundated. Common vernal pools species observed within the Study Area included woolly marbles (*Psilocarphus brevissimus*), spikerush (*Eleocharis macrostachy*), and popcorn-flower (*Plagiobothrys stipitatus*). Additionally, a common garter snake (*Thamnophis sirtalis*) was observed.

During the wet phase or rainy season, which typically occurs between November and March (April), pools fill with water creating habitats for a unique array of plants and animals. Aquatic life is teeming in the vernal pools. In addition to listed vernal pool invertebrates, water fleas (Cladocera), copepods (Copepoda), seed shrimp (Ostracoda), flatworms (Turbellaria), diving water beetles (Dytiscidae), midges (Chironomidae), crawling water beetles (Haliplidae), and Sierran treefrog (*Pseudacris sierra*) have the potential to occur within the pools. Typically, around March the vernal pools start to dry up and flowers start to emerge. Vivid yellow concentric rings are sometimes seen around the perimeter of the pool. Pink, purple, and white flowers bloom. During the summer months, vernal pools blend into the dry annual grassland landscape. Mammals, like ground squirrels and jack rabbits, birds, and insects all come to the dry pools to feed on the seeds and bulbs of the vernal pool plants. Other larger species, like raptors, feed on them.

Special-status species with the potential to occur in the vernal pool habitat are listed below. Appendix A lists the number of known CNDDDB occurrences of special-status species within a 5 miles radius of the Study Area as well as additional information about special-status species. Long-billed curlew has the potential to feed in the vernal pools in the wet season, western spadefoot toad has the potential to breed and lay eggs during the wet season. Both species are discussed in Section 4.1 – Annual Grassland. Herons and egrets have the potential to feed in the vernal pools and are discussed in Section 4.3 – Riparian Woodland and Creek.

4.4.1 Andrenid Bee

Andrenid bees are California Special Animals. These ground nesters will be underground in the summer, fall and winter and emerge in early spring to forage and pollinate early blooming plants, such as willows and other early blooming wildflowers found in vernal pools, annual grasslands, and riparian woodland.

4.4.2 California Linderiella

California linderiella is a California Special Animal. Cysts containing the invertebrates hatch soon after the vernal pools become inundated. The cysts can stay dormant as the vernal pool dries and they can withstand extreme environmental conditions until they hatch (Eriksen and Belk 1999). Unlike the other fairy shrimp, the California linderiella is a member of the family Linderiellidae. It is smaller than fairy shrimp in the family Branchinectidae, typically ~10 millimeters (0.39 inch) in length and has red eyes (Dodds 1923).

4.4.3 Ricksecker's Water Scavenger Beetle

Ricksecker's water scavenger beetle is a California Special Animal. These aquatic beetles are known to occur in vernal pools. Ideal habitat includes, neutral to slightly alkaline, clear, low dissolved salts, dominated with vernal pool plant species, and complex of vernal pool crustacean species.

4.4.4 Vernal Pool Fairy Shrimp

Vernal pool fairy shrimp are Federally listed as Threatened. Cysts containing the invertebrates hatch soon after the vernal pool becomes inundated. The cysts can stay dormant as the vernal pool dries and they can withstand extreme environmental conditions until they hatch. Cyst dispersal can occur through watershed connections of freshwater habitats or via bird discharge (cysts are consumed by a bird and deposited in other habitats) (Eriksen and Belk 1999).

4.4.5 Vernal Pool Tadpole Shrimp

Vernal pool tadpole shrimp are Federally listed as Endangered. One of the largest crustaceans found in vernal pools, vernal pool tadpole shrimp produce cysts or eggs that lie buried in the soil until the next winter rains trigger the eggs to hatch. The cysts may hatch in as little as 4 days (Ahl 1991). Mature vernal pool tadpole shrimp range from 0.6 to 3.3 inches in length (USFWS 2006). Vernal pool tadpole shrimp have a shield-like cover called a carapace that can be olive-green, brown or gray. Their abdomen sticks out behind the carapace and ends in two long, thin tails.

4.4.6 Ahart's Dwarf Rush

Ahart's dwarf rush is State Listed as Endangered and a CNPS 1B.2 plant species. Ahart's dwarf rush is annual herb that blooms from March through May (CNPS 2020).

4.4.7 Boggs Lake Hedge-Hyssop

Boggs Lake hedge-hyssop is State Listed as Endangered and a CNPS 1B.2 plant species. Flowers are white with light green strips. This species requires fresh-water conditions and usually occurs in vernal pool habitat. The bloom period is from April through August (CNPS 2020).

4.4.8 Dwarf Downingia

Dwarf downingia is a CNPS 2B.2 plant species. A member of the bellflower family this annual herbaceous plant has flowers that are typically white to slight blue. This species requires shallow, fresh-water conditions and usually occurs in vernal pool habitat. The bloom period is March through May (CNPS 2020).

4.4.9 Legenere

Legenere is a CNPS 1B.1 plant species. A member of the bellflower family this annual herbaceous plant requires fresh-water conditions and usually occurs in vernal pool habitat. Flowers are white. The bloom period is April through June (CNPS 2020).

4.4.10 Pincushion Navarretia

Pincushion navarretia is a CNPS 1B.1 plant species. Flowers are white. This species is found in vernal pools, which are often located on acidic soils. The bloom period is April through May (CNPS 2020).

4.4.11 Red Bluff Dwarf Rush

Red Bluff dwarf is a CNPS 1B.1 plant species. This rush is a grass like annual herb in the rush family. This species requires fresh-water conditions and usually occurs in vernal pool habitat. The bloom period is March through June (CNPS 2020).

4.4.12 Valley Brodiaea

Valley brodiaea is a CNPS 4.2 plant species. This perennial bulbiferous species is typically found on silty, sandy, or gravelly loam soils within swales of annual grassland and vernal pools. The bloom period is from April through May or June (CNPS 2020).

4.5 PROTECTED TREES

A total of 259 protected native oak trees were surveyed within the Study Area by ISA-Certified Arborist Charlotte Marks (WE-10519A) on February 17, 18 and 19, 2020. Protected trees identified in the Study Area include 227 blue oaks, 23 interior live oaks, and nine valley oaks. Additionally, 502 non-protected trees including 457 blue oaks, 37 interior live oaks, seven valley oaks and one cork oak tree (*Quercus suber*) were observed within the Study Area but were not individually surveyed. A total of 19 dead native oak trees were mapped within the Study Area. Detailed tree data for all surveyed trees is included in Appendix C. The approximate locations of all surveyed trees are shown on Figure 3. Table 2 shows the number of protected trees by health and structure ratings.

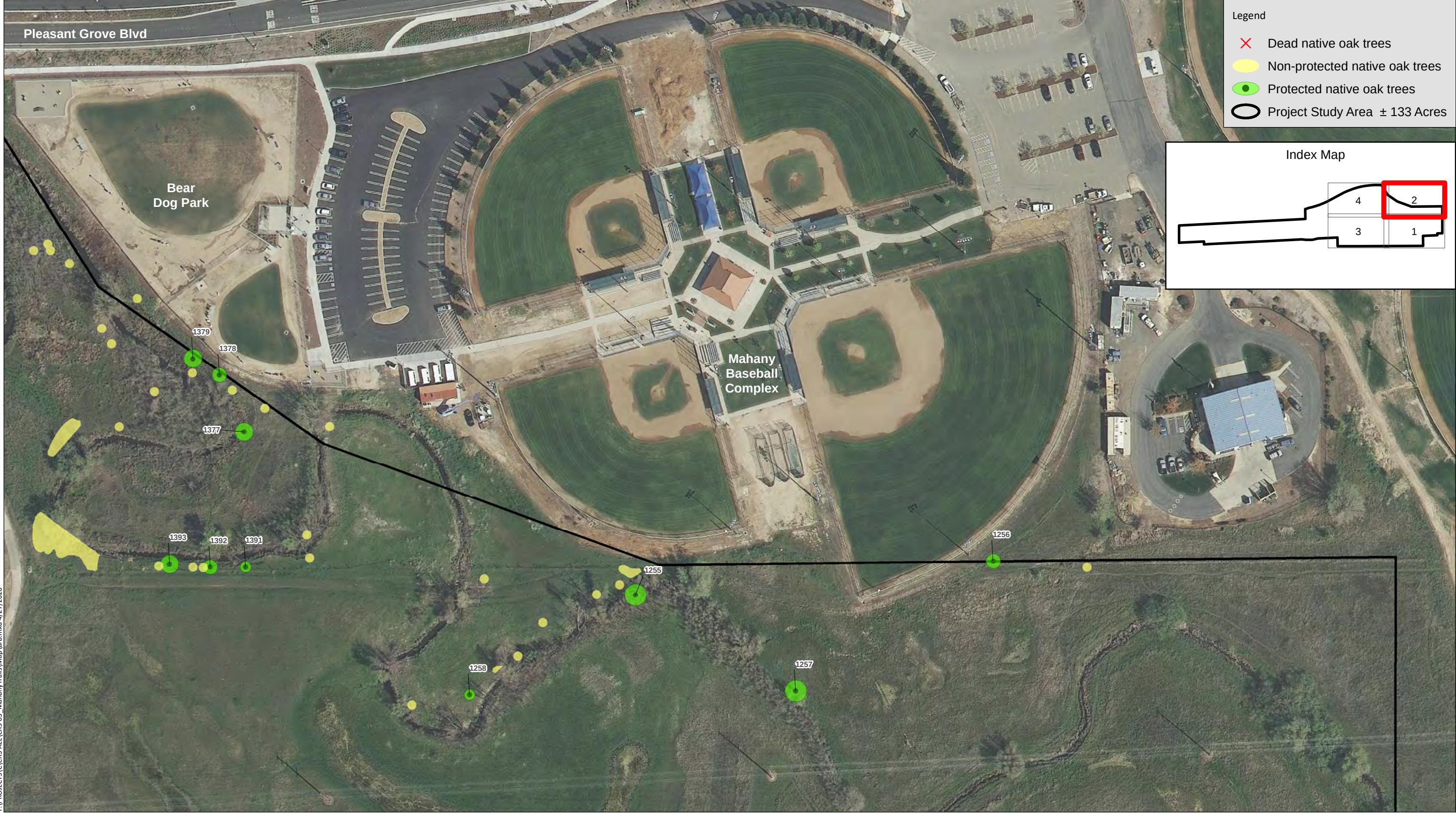
Table 2
NUMBER OF TREES BY HEALTH AND STRUCTURE RATINGS

Health							
Structure		Good	Fair-Good	Fair	Poor-Fair	Poor	Total Trees
	Good	0	0	0	0	0	0
	Fair-Good	0	0	2	0	0	2
	Fair	0	0	132	20	0	152
	Poor-Fair	0	0	43	31	6	80
	Poor	0	0	0	12	13	25
	Total Trees	0	0	177	63	19	259

Approximately 68 percent of the trees (177 of 259) are in Fair health and approximately 59 percent (154 of 259) are in Fair or better structure. These trees are typically suitable for preservation and integration into the project even in close proximity to people and property. However, they should be re-assessed during the final project design. A total of 62 trees (24 percent) are recommended for removal due to Poor to Poor-Fair health and structural condition, as noted in Appendix D. These trees may not be suitable for preservation around new development or in areas where people or property may be significantly injured by tree failure. Many of the trees in poor health have moderate to severe trunk rot and/or limb rot, bark wounds, trunk death, and trunk lean, which provide entry points for disease and decay organisms, and are a potential hazard to public safety in the long term. However, dead and dying trees provide vital habitat for wildlife, such as for nesting and breeding, and should be preserved where they do not pose a hazard to people or property. Therefore, even trees in poor condition should be removed only when it is determined that the tree presents an unacceptable risk to the public or infrastructure.

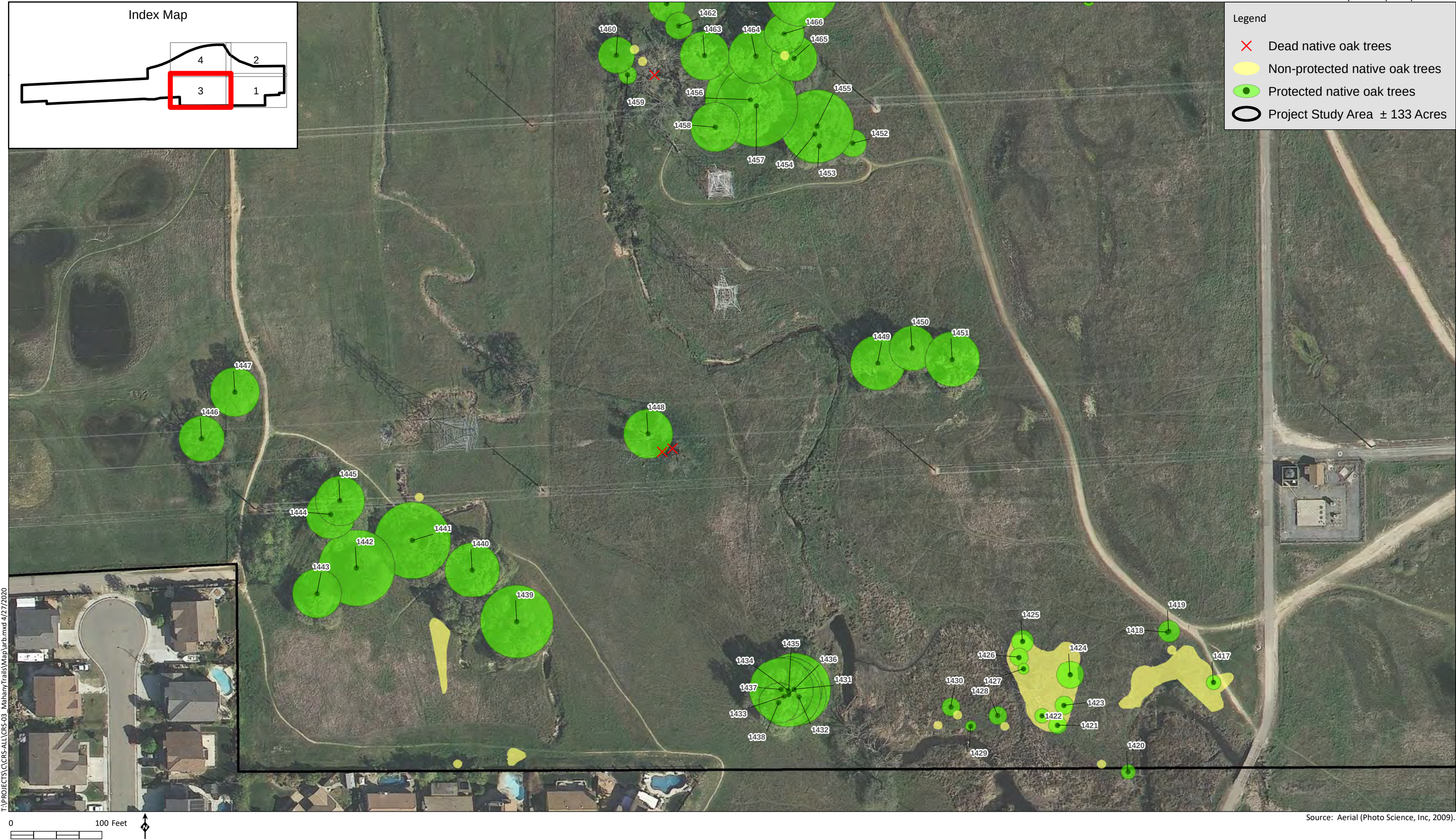


Source: Aerial (Photo Science, Inc, 2009).



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Source: Aerial (Photo Science, Inc, 2009).





5.0 RECOMMENDATIONS

Special-status species with the potential to occur on the site include nine plant species, burrowing owl, Swainson's hawk, other migratory birds and raptors, pallid bat, western pond turtle, western spadefoot Andrenid bee, vernal pool invertebrates, and valley elderberry longhorn beetle. White-tailed kite and two active bird nests were observed within the Study Area during the field survey.

Table 3 below summarizes recommended avoidance and minimization measures for sensitive habitats, plants, and wildlife that have the potential to occur within the Study Area and additional studies or permitting that may be required. These recommendations are further detailed following the table.

Table 3
SUMMARY OF AVOIDANCE RECOMMENDATIONS

Sensitive Resource	Avoidance Measures During Design	Additional Studies and Avoidance Measures During Construction
Habitat		
Vernal Pool Habitat	Avoid direct impacts and minimize impacts to watershed.	Implement water quality and erosion control measures during construction to prevent runoff into vernal pools.
Riparian Woodland Habitat	Avoid or minimize direct impacts to habitat.	Obtain 1600 Agreement prior to work in riparian areas.
Protected Trees	Avoid or minimize development within the tree protection zone.	Implement tree protection measures and mitigation for impacted trees in accordance with Native Oak Tree Ordinance.
Jurisdictional Waters	Avoid or minimize impacts to jurisdictional waters.	Submit wetland map for verification and obtain applicable permits from the USACE and RWQCB as required prior to construction.
Special-Status Species		
Special-Status Plants	Avoid or minimize direct impacts to vernal pools and Kaseberg Creek.	Conduct focused botanical survey of project footprint and surrounding 50 feet, where accessible, during bloom season prior to construction.
Burrowing Owl	Minimize impacts to annual grassland habitat.	Conduct protocol surveys prior to construction.
Swainson's Hawk	Avoid or minimize removal of mature trees from oak woodland and riparian woodland. Minimize impacts to annual grassland habitat.	Conduct site clearing outside of nesting season. Conduct pre-construction surveys if construction will occur between February 28 and September 15. Implement avoidance measures as required until young have fledged. Implement mitigation for loss of foraging habitat as required.
Raptor Nests and other nesting birds	Avoid or minimize impacts within 50 feet of known active nests.	Conduct site clearing outside of nesting season. Conduct pre-construction surveys if construction will occur between February 1 and August 31. Implement avoidance measures as required until young have fledged.

Table 3 (cont.)
SUMMARY OF AVOIDANCE RECOMMENDATIONS

Sensitive Resource	Avoidance Measures During Design	Additional Studies and Avoidance Measures During Construction
Pallid Bat	Preserve dead trees or trees with hollows to the greatest extent feasible.	Conduct pre-construction surveys and implement construction training and monitoring measures if species is found.
Western Pond Turtle	Avoid or minimize impacts to Kaseberg Creek and within 500 feet of Kaseberg Creek.	Conduct pre-construction surveys and implement construction training and monitoring measures if species is found.
Western Spadefoot Toad	Avoid direct impacts to and minimize impacts within 800 feet of vernal pools and seasonal wetlands.	Conduct pre-construction surveys and implement construction training and monitoring measures if species is found.
Vernal Pool Invertebrate	Avoid direct impacts to vernal pools. Minimize impacts to vernal pool watersheds or construction within 250 feet of pools.	Consult with USFWS to determine extent of project impact once construction documents are completed. Implement water quality and erosion control measures during construction to prevent runoff into vernal pools.
Valley Elderberry Longhorn Beetle	Maintain minimum 20-foot setback from riparian areas that could not be surveyed.	Survey riparian areas within 165 feet of project area for elderberry shrubs.
Andrenid Bee	Minimize impacts to annual grassland habitat.	No species-specific measures.

5.1 SPECIAL-STATUS SPECIES

5.1.1 Special-Status Plants

Nine special-status plants have the potential to occur within the Study Area including stinkbells, Stanford's arrowhead, Ahart's dwarf rush, Boggs Lake hedge-hyssop, dwarf downingia, legenera, pincushion navarretia, Red Bluff dwarf rush, and valley brodiaea. These species were not observed during the field survey; however, the survey was not floristic in nature and was conducted outside of the typical identification period for these plants.

Avoidance and Minimization Measures

Special-status plant species have the potential to occur in the annual grassland, riparian woodland, and vernal pools within the Study Area. Since there are no known populations of these species, direct avoidance during design is not feasible. However, impacts to eight of the nine species can be minimized or avoided by avoiding direct impacts to vernal pools and Kaseberg Creek.

Prior to construction of any improvements in the Study Area, a qualified botanist should conduct special-status plant surveys of the Study Area during the appropriate identification period for these species. One survey conducted between April and May will satisfy the blooming period for all nine potentially occurring special-status plant species. If no special-status plants are observed within the Study Area, then a letter report documenting the survey results should be prepared and submitted to the City and no further measures are recommended.

If special-status plants are observed within the Study Area, the location of the special-status plants should be marked with pin flags or other highly visible markers and may also be marked by GPS. The Project proponent should determine if the special-status plant(s) onsite can be avoided by Project design or utilize construction techniques to avoid impacts to the special-status plant species. All special-status plants to be avoided within the Study Area should have exclusion fencing or other highly visible material marking the avoidance area and the avoidance area should remain in place throughout the entire construction period. Prior to commencement of work activities, a designated botanist/biologist should provide a Worker Environmental Awareness Program (WEAP) training to all Project-related personnel. The training should include information on identifying special-status species found on the project site, their ecology and habitat requirements, the Project boundaries, and the avoidance and minimization measures to be followed to avoid impacts to those species. Upon completion of the training, all construction personnel should sign a form stating that they have attended the training and understand all the measures. Proof of this instruction should be kept on file with the Project proponent.

If special-status plants are found within the Study Area and cannot be avoided, the Project proponent should consult with the CDFW and/or the USFWS as appropriate, and depending on the status of the plant species in question, determine appropriate measures to mitigate for the loss of special-status plant populations within the Study Area. These measures may include gathering seed from impacted populations for planting within nearby appropriate habitat, preserving or enhancing existing offsite populations of the plant species affected by the Project, or restoring suitable habitat for special-status plant species habitat as directed by the regulatory agencies.

5.1.2 Burrowing Owl

The annual grassland within the Study Area contains herbaceous habitat and some small mammal burrows that are potentially suitable nesting habitat for burrowing owl, although no burrowing owls were observed during the field survey.

Avoidance and Minimization Measures

Since there are no known populations of these species, direct avoidance during design is not feasible. However, avoiding or minimizing the loss of annual grassland habitat will reduce the potential for the project to impact burrowing owl.

Prior to the start of construction, protocol surveys for the presence of burrowing owl should be conducted by a qualified biologist in accordance with the CDFW 2012 Staff Report. If burrowing owls are observed on or within 500 feet of proposed development activities that will result in ground disturbance, then an impact assessment should be prepared and submitted to the CDFW, in accordance with the CDFW 2012 Staff Report. If it is determined that project activities may result in impacts to occupied western burrowing owl habitat, then the project proponent should consult with CDFW and develop a detailed mitigation plan establishing avoidance and mitigation measures based on the requirements set forth in Appendix A of the CDFW 2012 Staff Report (CDFW 2012).

5.1.3 Swainson's Hawk Foraging Habitat and Nesting Habitat

The annual grassland within the Study Area provides suitable foraging habitat and the mature trees in the riparian and oak woodlands provide suitable nesting habitat for Swainson's hawk. The CDFW considers five or more vacant acres of suitable foraging habitat within ten miles of an active nest within

the last five years to be significant foraging habitat for Swainson's hawk, the conversion of which to urban uses is considered a significant impact (CDFW 1994; Staff Report). Although implementation of the trail project will retain the majority of the annual grassland habitat, loss of habitat may require mitigation.

Avoidance and Minimization Measures

Since there are no known occurrences of Swainson's hawk in the Study Area, direct avoidance during design is not feasible. However, avoiding or minimizing the removal of mature trees that could be used for nesting and the loss of annual grassland foraging habitat will reduce the potential for the project to impact Swainson's hawk.

Trees should be removed between September 16 and February 28, which is outside of the Swainson's hawk nesting season, if feasible.

Prior to the start of construction, protocol surveys for active Swainson's hawk nests should be conducted by a qualified biologist in accordance with the *Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (Swainson's Hawk Technical Advisory Committee 2000). If no active Swainson's hawk nests are observed, then a letter report documenting the results of the survey should be provided to the City for their records, and no additional measures are recommended.

If active nests are observed on or within ¼-mile of the project site, then additional avoidance measures are recommended. CDFW should be consulted to determine to establish an appropriate noise buffer, develop take avoidance measures, and implement a monitoring and reporting program prior to any construction activities occurring within ¼-mile of the nest. A pre-construction WEAP training should be completed. Biological monitoring of the nest should be conducted until the young have fledged.

If the project impacts five or more acres of annual grassland habitat, mitigation for loss of this foraging habitat should be implemented in accordance with the Staff Report. Foraging habitat losses on projects located greater than five miles but less than ten miles of an active nest tree documented within the last five years shall be mitigated at a 0.5:1 ratio.

5.1.4 Nesting Birds and Raptors

The various habitats within the Study Area provide potential nesting and foraging habitat for many raptor and other bird species. One white-tailed kite was observed foraging and two active nests were observed within Study Area during the field survey.

Avoidance and Minimization Measures

Although only two active nests were observed during the field survey, it is likely that additional nests will be established in the future. Avoidance and minimization measures during design include maintaining a 50-foot minimum setback from known active nests and minimizing impacts to oak woodland and riparian woodland habitats.

If feasible, then ground clearing activities and tree/shrub removal should be completed between September 1 and January 31, outside of the nesting season.

If construction begins during the nesting season (February 1 through August 31), then a pre-construction nesting bird survey shall be conducted within 14 days prior to the commencement of construction activities or vegetation removal. If the pre-construction survey results in no evidence of active nests, then a letter report should be submitted to the City for their records and no additional measures are recommended.

If active nests are found, additional avoidance measures are recommended. A pre-construction WEAP training should be completed. A qualified biologist should establish an appropriate species-specific buffer zone around the nests. The biologist shall mark the buffer zone with high visible flagging or pin flags and maintain the buffer zone until all construction has been completed, until the end of the breeding season, or until the young have successfully fledged and/or the nest is no longer active. The active nests should be monitored weekly during construction to evaluate potential nesting disturbance caused by construction activities.

If establishing the typical buffer zone is impractical, then the qualified biologist may reduce the buffer, depending on the species, and conduct daily monitoring to ensure that the nest is not disturbed and that no forced fledging occurs. Daily monitoring shall occur until the qualified biologist determines that the nest is no longer occupied or that it has been determined that nesting activity is not negatively affected by adjacent Project construction activities.

5.1.5 Pallid Bat

Pallid bat has the potential to roost in hollows within trees and the existing utility building and to forage within the Study Area.

Avoidance and Minimization Measures

The potential for impacts to pallid bat can be minimized during the design process by retaining dead trees or trees with hollows whenever possible.

A qualified biologist should conduct a pre-construction survey for the pallid bat within 14 days prior to the start of tree removal or grading operations. If no bat roosts are observed, then a letter report documenting the results of the survey should be provided to the City for their records, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is recommended.

If pallid bat is found, additional avoidance measures are recommended. A pre-construction WEAP training should be completed. If pallid bats are roosting on or within 100 feet of the proposed project footprint, then the biologist should establish an appropriate buffer around the roost site prior to construction. At a minimum, no trees being used for roosts should be removed until the biologist has determined that bats are no longer roosting. Additional mitigation measures, such as installation of bat boxes or alternate roost structures, would be recommended only if bats are found to be roosting within the proposed project area and roosts were determined to be subject to removal during construction.

5.1.6 Western Pond Turtle

Kaseberg Creek provides aquatic habitat and the adjacent riparian and annual grassland provide upland habitat for this species.

Avoidance and Minimization Measures

The potential for impacts to western pond turtle can be minimized during the design process by avoiding or minimizing impacts to Kaseberg Creek and the surrounding upland areas within 500 feet of the channel, where this species is most likely to be found.

Prior to construction of any improvements in the Study Area, a qualified biologist should conduct a pre-construction survey within 14 days prior to the start of ground disturbance within 500 feet of riparian and creek habitat. If no western pond turtles are observed, then a letter report documenting the results of the survey should be provided to the City for their records, and no additional measures are recommended. If construction does not commence within 14 days of the pre-construction survey, or halts for more than 14 days, a new survey is recommended.

If western pond turtles are found, additional avoidance measures are recommended. A pre-construction WEAP training should be completed. A qualified biologist should conduct a pre-construction survey within 24 hours prior to commencement of construction activities within 500 feet of the perennial drainage and be present during grading activities in this area for the purpose of relocating any western pond turtles found within the construction footprint to suitable habitat away from the construction zone.

5.1.7 Western Spadefoot Toad

The annual grassland within the Study Area provides potential for upland aestivation habitat and the vernal pools and seasonal wetlands provide potential breeding habitat for western spadefoot toad.

Avoidance and Minimization Measures

The potential for impacts to western spadefoot toad can be minimized during the design process by avoiding or minimizing impacts to vernal pools and seasonal wetlands and the surrounding upland areas within 800 feet, where this species is most likely to be found.

A qualified biologist should conduct a pre-construction survey during the breeding season (February to March). This survey should include aquatic surveys of potential breeding ponds for egg masses and terrestrial surveys of surrounding uplands within 800 feet. If no western spadefoot toads are observed, then a letter report documenting the results of the survey should be provided to the City for their records, and no additional measures are recommended.

If western spadefoot toads are found, then additional avoidance measures are recommended. A pre-construction WEAP training should be completed. A qualified biologist should conduct a pre-construction survey within 24 hours prior to commencement of construction activities within 800 feet of vernal pools and seasonal wetlands and be present during grading activities in this area for the purpose of relocating any western spadefoot toad found within the construction footprint to suitable habitat away from the construction zone.

5.1.8 Vernal Pool Invertebrates

California linderiella, Ricksecker's water scavenger beetle, vernal pool fairy shrimp, and vernal pool tadpole shrimp have the potential to occur in the vernal pools within the Study Area. As noted by USFW, indirect effects on avoided vernal pools can occur as a result of adjacent ground disturbing activities

within a 250-foot radius of avoided vernal pools, specifically, activities and/or structures that adversely affect water quality or alter the hydrology.

Avoidance and Minimization Measures

Design of the trail and other improvements should avoid direct impacts to vernal pools, minimize changes to vernal pool watersheds, and maximize setbacks to vernal pools to the greatest extent feasible. Improvements should be designed to avoid directing runoff into pools.

If the proposed trail or other improvements will be located within 250 feet of a vernal pool, consult with USFWS to determine potential project impacts and appropriate mitigation and protection measures. At a minimum, implement erosion control and water quality best practices to prevent runoff from construction site into vernal pools.

5.1.9 Valley Elderberry Longhorn Beetle

Although no elderberry shrubs were observed during the field survey, a section of riparian habitat located adjacent to Bear Dog Park, in the northeastern portion of the Study Area was not fully accessible due thick undergrowth. Therefore, elderberry shrubs could be present and may provide suitable habitat for valley elderberry longhorn beetle.

Avoidance and Minimization Measures

If an elderberry shrub is located and construction is anticipated within 165 feet of the elderberry shrubs, approval by the USFWS must be obtained and a minimum setback of 20 feet from the driplines of the elderberry shrubs must be maintained, in accordance with the *USFWS Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus)* (Framework) (USFWS 2017).

Project activities that will encroach into the 20-foot minimum setback area are assumed to adversely affect valley elderberry longhorn beetle. Project activities that may directly or indirectly affect elderberry shrubs with stems measuring at least one inch, require minimization measures including planting replacement habitat or purchasing mitigation credits from a USFWS-approved mitigation bank. The mitigation ratios vary based on whether exit holes are present and whether the shrubs occur within riparian habitat

5.1.10 Andrenid Bee

The annual grassland and oak woodland within the Study Area contains potentially suitable habitat for Andrenid bee, although no Andrenid bee were observed during the field survey. Since andrenid bee establishes new nests annually, the potential loss of individual nests is not expected to have a significant impact on this species.

Avoidance and Minimization Measures

Since there are no known populations of these species, direct avoidance during design is not feasible. However, avoiding or minimizing the loss of annual grassland habitat and oak woodland habitat will reduce the potential for the project to impact Andrenid bee.

No species-specific mitigation pre-construction measures are recommended for this species.

5.2 FUTURE PERMITS AND ENVIRONMENTAL COMPLIANCE

Additional environmental review and permitting may be required prior to the start of construction.

5.2.1 Environmental Review

Prior to construction, the City must complete a review of the project for compliance with state environmental regulations. If Federal funding is obtained for the project then a NEPA review may also be required. As part of the preparation of these documents additional technical studies may be required.

5.2.2 Regulatory Permits

Prior to initiation of any construction activities which could result in impacts to potentially regulated aquatic features, permits for these impacts under Section 404 and 401 of the CWA and the State Water Code will be required. As part of the permitting process, a formal aquatic resources delineation should be completed and submitted to the USACE for verification of the extent of regulated aquatic features. Any conditions included in the final permits, including prescribed mitigation measures, would be required to be implemented prior to filling or impacting these features.

If aquatic features are determined not to be subject to regulation under the CWA, then these features may still be considered waters of the State. An application for discharge of dredge or fill material should be submitted to the RWQCB prior to the start of construction.

Impacts to the bed and bank or riparian vegetation of any creek or seasonal drainage may require a streambed alteration agreement. An application for a SAA should be submitted to CDFW, which will review it and determine if an SAA is required.

5.2.3 Protected Trees

As outlined under City's Municipal Code Section 19.66.60, *Standard Policies and Procedures for Approved Work*, the following measures define procedures necessary to safeguard the health of protected trees to be preserved onsite or which may be impacted as a result of construction activities (City of Roseville 2020a).

- A minimum five-foot high chain link or substitute fence approved by the City Planning Manager ("Manager") shall be installed at the outermost edge of the protected zone ("TPZ") of each protected tree or groups of protected trees. Exceptions to this policy may occur in cases where protected trees are located on slopes that will not be graded. However, approval must be obtained from the City's Planning Division ("Planning Division") to omit fences in any area of the project.
- Tree protection fencing shall be installed in accordance with the approved fencing plan prior to the commencement of any grading operations or such other time as determined by the review body. The developer shall call the Planning Division for an inspection of the fencing prior to grading operations. Upon approval, the fences shall remain in place throughout the entire construction period and shall not be removed, relocated, taken down, or otherwise modified in whole or in part without prior written authorization from the Planning Division.

- Signs shall be installed along the tree protection fencing in four equidistant locations around each individual protected tree, or at 50-foot intervals along the fencing surrounding a grove of protected trees. The size of each sign must be a minimum of two feet by two feet and must contain the following language:

“WARNING, THIS FENCE SHALL NOT BE REMOVED OR
RELOCATED WITHOUT WRITTEN AUTHORIZATION FROM THE
CITY OF ROSEVILLE PLANNING DIVISION.”

- To ensure the preservation of protected trees during construction, a minimum \$10,000.00 deposit (or greater, if deemed necessary by the Approving Authority) shall be posted and maintained. The deposit shall be posted in a form approved by the City Attorney prior to any grading, delivery of materials, or movement of heavy equipment onto the site, or issuance of any permits. Each violation of any Tree Permit condition regarding tree preservation shall result in forfeiture of a portion or the entirety of the deposit, at the discretion of the Approving Authority, provided that such determinations may be appealed (City of Roseville 2020b).
- Where a Tree Permit has been approved for construction of a retaining wall(s) within the protected zone of a protected tree, the developer will be required to provide for immediate protection of exposed roots from moisture loss during the time prior to completion of the wall. The retaining wall shall be constructed within 72 hours after completion of grading.
- Pruning of living roots of less than one-inch diameter (minor roots) may be cut, but damaged roots shall be traced back and cleanly cut behind any split, cracked or damaged area. Pruning of living roots over one-inch in diameter (major roots) may not be cut without approval of an ISA-Certified Arborist. Cut all roots cleanly at the edge of the trench. Do not tear or pull roots out of ground. If roots are split during excavation, follow root back to immediately above split and cut cleanly.
- If required, preservation devices such as aeration systems, oak tree wells, drains, special foundation systems, special paving and cabling systems must be installed per approved plans and certified by the project arborist.
- Every effort should be made to avoid cut and/or fill slopes within or in the vicinity of the protected zone of any protected tree. No grade changes are permitted which would cause water to drain to the area within twice the longest radius of the protected zone of any protected tree or would result in the ground being lowered on all sides of the tree.
- When permitted, trenching within the protected zone of a protected tree may only be conducted with hand tools or as otherwise directed by an arborist, in order to avoid root injury.
- A certification letter should be submitted by the project arborist to the Planning Division within five working days of completing any regulated activity within the protected zone of protected trees, attesting that all work was conducted in accordance with the appropriate permits and the requirements of this chapter.
- All conditions of approval should be adhered to as outlined under the project’s Tree Permit obtained from the City.

The following measures are general best management practices (BMPs) that are recommended to minimize the potential for injury or damage to occur to trees to be preserved onsite.

- No parking, portable toilets, dumping or storage of any construction materials, including oil, gas, or other chemicals, or other infringement by workers or domesticated animals is allowed in the TPZ;
- Minimize disturbance to the native ground surface (grass, leaf, litter, or mulch) under preserved trees to the greatest extent feasible. All brush, earth, and debris that is required to be removed within the dripline of a preserved tree should be conducted in a manner that prevents injury to the tree;
- All pruning should be done in accordance with ISA American National Standards Institute (ANSI) tree care standards using tree maintenance best practices;
- Climbing spikes should not be used on living trees;
- All exposed roots should be covered with protective material (e.g., damp burlap) during construction to prevent drying out;
- No signs, ropes, cables, or any other item should be attached to a tree; and
- No burning or use of equipment with an open flame should occur near or within the TPZ. Appropriate fire prevention techniques should be employed around all trees to be preserved. This includes prohibiting the use of tools that may cause sparks, such as metal blade trimmers or mowers.

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Appendix A

Regionally Occurring Listed and Special-Status Species

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Appendix A
Regionally Occurring Listed and Special-Status Species

Table 1 — Legally Protected Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Plants				
Boggs Lake hedge-hyssop <i>Gratiola heterosepala</i>	--; CE; --; 1B	Annual herb found on clay soils in vernal pools and swamps, occasionally along lake margins, from 10 to 2,375 meters.	Blooming period: April – August	High. The Study contain suitable vernal pool habitat for this species. There are three CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
Invertebrates				
Valley elderberry longhorn beetle <i>Desmocerus californicus dimorphus</i>	FT; --; --; --	Associated with elderberry shrubs (<i>Sambucus</i> sp.) often within riparian habitats. Presence can be indicated by bore-holes in stems of elderberries.	March – June (Adults) Year – round (Larvae)	Low. Elderberry shrubs were not noted during the site survey however, sections of the riparian habitat west of Bear Dog Park and North of Kaseberg Creek were not accessible due to dense thorny brush. Therefore, elderberry shrubs have the potential to occur within this section of the Study Area.
Vernal pool fairy shrimp <i>Branchinecta lynchi</i>	FT; --; --; --	Inhabits vernal pools, swales, and ephemeral freshwater habitat. Known from Alameda, Butte, Calaveras, Colusa, Contra Costa, El Dorado, Fresno, Glenn, Kings, Madera, Merced, Monterey, Napa, Placer, Riverside, Sacramento, San Benito, San Joaquin, San Luis Obispo, Santa Barbara, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Tuolumne, Ventura, Yolo, and Yuba counties.	USFWS protocol-level wet-season sampling and/or dry season cyst identification	High. The Study contain suitable vernal pool habitat for this species. There are 26 CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
Conservancy fairy shrimp <i>Branchinecta conservatio</i>	FE; --; --; --	Inhabits vernal pools, swales, and ephemeral freshwater habitat. Known from Butte, Tehama, Glenn, Yolo, Solano, Stanislaus, Merced, and Ventura counties.	USFWS protocol-level wet-season sampling and/or dry season cyst identification	None. Although the Study Areas contains vernal pool habitat, the Study is outside of the known geographical range of this species.
Vernal pool tadpole shrimp <i>Lepidurus packardii</i>	FE; --; --; --	Inhabits vernal pools, swales, and ephemeral freshwater habitat. Known from Alameda, Butte, Colusa, Contra Costa, Fresno, Glenn, Kings, Merced, Placer, Fresno, San Joaquin, Shasta, Solano, Stanislaus, Sutter, Tehama, Tulare, Yolo, and Yuba counties.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	High. The Study Area contains suitable vernal pool and ephemeral freshwater habitat for this species. There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2020).
Fish				
Delta smelt <i>Hypomesus transpacificus</i>	FT; CE; --; --	Found in open waters of bays, tidal rivers, channels, and sloughs.	Year – Round	None. The Study Area does not contain suitable habitat to support this species (i.e., open waters of bays, tidal rivers, channels, and sloughs).
Chinook salmon-Central Valley spring-run <i>Oncorhynchus tshawytscha</i>	FT; CT; --; --	Found in the ocean, rivers, creeks, and large inland lakes.	Year-round	None. The Study Area does not contain suitable habitat to support this species. Although Kaseberg Creek transects a portion of the Study Area, this creek hydrology does not provide enough flow to support this large fish species
Longfin smelt <i>Spirinchus thaleichthys</i>	FC; CT; --; --	Inhabits estuaries and bays in the Delta and Sacramento-San Joaquin Rivers. Migrate to freshwater to spawn.	(November) December – February (June)	None. The Study Area does not contain suitable habitat for this species (i.e., estuaries and bays in the Delta).
Steelhead - Central Valley DPS <i>Oncorhynchus mykiss irideus</i>	FT; --; --; --	Found in the ocean, rivers, creeks, and large inland lakes. This distinct population only occurs in the Sacramento and San Joaquin Rivers and their tributaries.	Year – Round	None. This species is confined to the uppermost portions of the watershed (e.g. Miners and Secret Ravine) for rearing due to the consistently cooler summer temperatures (GANDA 1998) There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2020).
Amphibians/Reptiles				
California red-legged frog <i>Rana draytonii</i>	FT; CSC; --; --	Found near quiet, permanent pools of streams, marshes, and ponds with extensive vegetation below 1200 meters. Typically occurs in humid forests, woodlands, grassland, and foothill habitats. Adults may disperse considerable distances between pools during rain events. Breeds in permanent pools from January through July.	Year – Round	None. This species is generally considered extirpated from the valley.

Appendix A (cont.)
Regionally Occurring Listed and Special-Status Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
California tiger salamander Central Population <i>Ambystoma californiense</i>	FT; CT--; --	Breeds in vernal pools and seasonal ponds in grasslands and oak savannas. Adults spend summer in small mammal burrows.	Drift fence studies during fall and winter for upland habitats. November – February (adults) March 15 – May 15 (larvae)	None. The Study Area is not within the known range of the species.
Giant garter snake <i>Thamnophis gigas</i>	FT; CT--; --	Found in agricultural wetlands and other wetlands such as irrigation and drainage canals, low gradient streams, marshes, ponds, sloughs, small lakes, and their associated uplands in Sacramento, Sutter, Butte, Colusa, and Glenn counties.	Active outside of dormancy period November-mid March	None. The Study Area is outside of the current known range of the species.
Birds				
Bald eagle <i>Haliaeetus leucocephalus</i>	FD; CE; --; --	Breeding habitat most commonly includes areas within 2.5 miles (4.0 kilometers) of coastal areas, bays, rivers, lakes, and reservoirs. Nests usually are in tall trees or on pinnacles or cliffs near water.	Year round	None. The Study Area does not contain suitable habitat for this species (i.e., within 2.5 miles (4.0 kilometers of coastal areas, bays, rivers, lakes, and reservoirs).
Bank swallow <i>Riparia riparia</i>	--; CT; --; -- Nesting	Colonial breeder found in open and partly open situations, frequently near flowing water. Nests on steep sand, dirt, or gravel banks, in burrows dug near the top of the bank, along the edge of inland water, or along the coast, or in gravel pits or road embankments.	February – October	None. The Study Area does not provide suitable habitat for this species. The banks of the creek are not steep and gravel riparap is adjacent to busy roadways.
California black rail <i>Laterallus jamaicensis coturniculus</i>	--; CT; --; --	Saltwater, brackish, and freshwater marshes. Does not occur in wetland areas with annual fluctuations in water level and need a permanent water source of at least 1 inch in depth.	Year – round	None. Although the Study Area contains wetland, there is seasonal fluctuation in the hydrology with no permanent water and no marsh habitat is present.
Golden eagle <i>Aquila chrysaetos</i>	--; CFP; --; --	Open and semi-open areas in the mountains up to 12,000 feet in elevation. They are also found in canyon lands, rimrock, terrain, and riverside cliffs and bluffs. Nest are built on cliffs and steep escarpments in grassland, in trees, chaparral, shrubland, forests and man-made structures within vegetated areas.	Year -round	None. The Study Area does not contain suitable habitat for this species. The Study Area is relatively flat lacking the steep cliff and bluff habitat for nesting this species is generally associated with.
Swainson’s hawk <i>Buteo swainsoni</i>	--; CT; --; --	Nest peripherally in valley riparian systems, lone trees or groves of trees in agricultural fields. Valley oak, Fremont cottonwood, walnut, and large willow trees, ranging in height from 41 to 82 feet, are the most commonly used nest trees in the Central Valley.	Breeding: March – October	High. The Study Area provides suitable nesting habitat within the riparian and oak woodland. The annual grassland provides foraging habitat for this species as numerous rodent burrows were observed during the March 2020 site survey. There are seven CNDDB record for this species within five miles of the Study Area (CDFW 2020).
Tricolored blackbird <i>Agelaius tricolor</i>	--; CCE; CSA; --	Nests in colonies near fresh water, usually within emergent wetland habitat with tall, dense cattails, tule, willow, blackberry, wild rose, and other marshy vegetation. Forages in open grassland, wetland, and agricultural habitats.	Year – Round	Low. Nesting habitat for this species is limited within the Study Area to small patches within the riparian and creek habitat. Suitable foraging habitat exists for this species within the annual grassland community. There is one CNDDB records for this species within five miles of the Study Area (CDFW 2020).
Western yellow-billed cuckoo <i>Coccyzus americanus occidentalis</i>	FT; CE; --; --	Found in woodlands, thickets, orchards, and streamside groves. Breeds mostly in dense deciduous stands, including forest edges, tall thickets, dense second growth, overgrown orchards, and scrubby oak woodlands. Often found in willow groves around marshes. In the west, mostly in streamside trees, including cottonwood-willow groves in arid country.	Late Spring – Early Fall (Breeding)	None. Although the Study Area contains some riparian habitat, this species requires large blocks of riparian habitat for nesting. Along the Sacramento River, nesting yellow-billed cuckoos occupied home ranges which included 25 acres (10 hectares) or more of riparian habitat. Another study on the same river found riparian patches with yellow-billed cuckoo pairs to average 99 acres (40 hectares). Home ranges in the South Fork of the Kern River averaged about 42 acres (17 hectares) (CDFW 2017).

Table 1 includes federal threatened or endangered species and eagles, and State threatened, endangered, or fully protected species.

Appendix A (cont.)
Regionally Occurring Listed and Special-Status Species

Table 2 — Species Subject to CEQA Review

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Plants				
Ahart’s dwarf rush <i>Juncus leiospermus</i> var. <i>ahartii</i>	--; --; --; 1B	Annual herb found in mesic areas in valley and foothill grasslands from 30 to 229 meters.	Blooming period: March – May	High. The Study Area provides suitable habitat for this species within the vernal pool habitat.
Dwarf downingia <i>Downingia pusilla</i>	--; --; --; 2B	An annual herb found in mesic areas within valley and foothill grassland and vernal pool habitats from 1 to 445 meters.	Blooming period: March – May	High. The Study Area contains suitable vernal pool and grassland habitat for this species. There are sixteen CNDDDB records for this species within five miles of the Study Area (CDFW 2020F).
Hispid bird's-beak <i>Chloropyron mole</i> ssp. <i>hispidum</i>	--; --; --; 1B	Annual hemiparasite herb found on alkaline soil in meadows and seeps, playas, valley and foothill grasslands, from 1-155 meters.	Blooming period: June – September	None. The Study Area does not provide suitable habitat for this species (i.e., alkaline soils in meadows and seeps, playas).
Legenere <i>Legenere limosa</i>	--; --; --; 1B	Annual herb found in vernal pools from 1 to 880 meters.	Blooming period: April – June.	High. The Study Area contains suitable vernal pool habitat for this species. There are three CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
Pincushion navarretia <i>Navarretia myersii</i> ssp. <i>myersii</i>	--; --; --; 1B	Annual herb often found in acidic soils within vernal pools from 20 to 330 meters.	Blooming period: April – May	Low. Although the Study Areas contains vernal pools, the soils may not be the adequate pH for this species to thrive.
Red Bluff dwarf rush <i>Juncus leiospermus</i>	--; --; --; 1B	Annual herb in vernal moist chaparral, cismontane woodlands, meadows and seeps, valley and foothill grasslands, and vernal pools from 35-1,250 meters.	Blooming period: March – June	High. The Study Area contains suitable vernal pool and annual grassland habitat for this species. There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2020).
Sanford's arrowhead <i>Sagittaria sanfordii</i>	--; --; --; 1B	Perennial rhizomatous herb found in assorted shallow freshwater wetlands, marshes, and swamps from 0 to 650 meters.	Blooming period: May – October	High. The seasonal wetlands within the Study Area provide suitable habitat for this species. There are three CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
Wolly rosemallow <i>Hibiscus lasiocarpus</i> var. <i>occidentalis</i>	--; --; --; 1B	Perennial rhizomatous herb often found on the sides of levees within freshwater marshes and swamps from 0 to 120 meters.	Blooming period: June-September	None. The Study Area does not provide suitable habitat for this species.
Invertebrates				
California linderiella <i>Linderiella occidentalis</i>	--; CSA; --; --	Found in most landforms, geologic formations and soil types supporting vernal pools in California. They are typically found in deeper vernal pools throughout elevations ranging from 10 to 1,159 meters.	USFWS protocol-level wet-season sampling and/or dry season cyst identification.	High. The Study Area contains suitable vernal pool habitat for this species. There are twenty-two CNDDDB records for this species within five miles of the Study Area (CDFW 2020).
Fish				
Sacramento splittail <i>Pogonichthys macrolepidotus</i>	--; CSC; --; --	Inhabits the streams and tributaries of the Sacramento-San Joaquin Rivers in estuaries, marshes, and freshwater.	Spawns in spring (sometimes in winter and early summer).	None. The Study Area is not within the known watersheds this species inhabits.
Amphibians/Reptiles				
Western pond turtle <i>Emys marmorata</i>	--; CSA; --; --	Occurs in a variety of aquatic habitats such as ponds, creeks, ditches, lakes, and marshes. Prefers areas with abundant vegetation and rocky or muddy substrate. Exposed banks or other basking areas such as logs or cattail mats are required. Upland habitat typically occurs within woodlands, forests, or grasslands, within the vicinity of aquatic habitat.	Year – Round	High. The Study Area provides suitable aquatic and upland habitat for this species in the riparian and creek habitats.
Western spadefoot <i>Spea hammondi</i>	--; CSC; --; --	Found in a variety of upland habitats, including lowlands, foothills, grasslands, open chaparral, and pine-oak woodlands. Habitat preferences include shortgrass plains, and sandy or gravelly soils for burrowing (e.g., alkali flats, washes, alluvial fans). Hibernates/aestivates for most of the year underground. During the breeding season are found in temporary rain pools, and slow-moving streams (e.g., areas flooded by intermittent streams).	Breeding: January – May	High. The annual grassland and vernal pools located throughout the Study Area provided suitable habitat for this species. Numerous suitable burrows were noted during the 2020 survey. There are five CNDDDB record for this species within five miles of the Study Area (CDFW 2020).

Appendix A (cont.)
Regionally Occurring Listed and Special-Status Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Birds				
Black-crowned night heron <i>Nycticorax nycticorax</i>	--; CSA; --; --	Found in saltwater, brackish and freshwater habitats that include marshes, swamps, wooded streams, mangroves, lake shores, ponds, and lagoons. Roosting occurs in mangrove forests or swampy woodlands. Nesting occurs in trees near coastal marshes or on marine islands, swamps, marsh vegetation, clumps of grass on the dry ground, orchards, etc. Nesting usually occurs with other heron species.	Winter (Non-breeding)	Low. Wetlands, vernal pools and riparian habitat located within the Study Area provide foraging habitat for this species. However, no rookeries were observed.
Burrowing owl <i>Athene cunicularia</i>	--; CSC; --; -- (burrowing sites and some wintering sites)	Nests in burrows in the ground, often in old ground squirrel burrows or badger, within open dry grassland and desert habitat. The burrows are found in dry, level, open terrain, including prairie, plains, desert, and grassland with low height vegetation for foraging and available perches, such as fences, utility poles, posts, or raised rodent mounds.	Year – round	High. The annual grassland located throughout the Study Area provides suitable habitat for this species. Numerous suitable burrows were noted during the 2020 survey. There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2020).
California thrasher <i>Toxostoma redivivum</i>	--; CSC; --; --	Found in chaparral within shrubs and small trees and woodlands if ample underbrush is present. This species is only in California and a small part of Baja California.	Year-Round	None. The Study Area does not provide suitable habitat for this species (i.e., chaparral).
Common Yellowthroat <i>Geothlypis trichas</i>	BCC; --; --; --	Found in open habitats such as marshes, wetland edges, and brushy fields. they are also found in dry upland pine forests, palmetto thickets, drainage ditches, hedgerows, orchards, fields, burned-over oak forests, shrub-covered hillsides, river edges, and disturbed sites. They winter in similar habitats with dense vegetation in the southern United States, Mexico, Central America, and the Caribbean.	Year Round	High. The Study Area provides suitable foraging and nesting habitat for this species within the annual grassland, oak woodland, and riparian habitats.
Grasshopper sparrow <i>Ammodramus savannarum</i>	--; CSC; --; --	Frequents dense, dry, or well drained grassland, especially native grassland. Nests at base of overhanging clump of grass. This species is known from Los Angeles, Mendocino, Orange, Placer, Sacramento, San Diego, San Luis Obispo, Solano, and Yuba counties, in California.	April – July (breeding)	Low. Although portions of the Study Area contain annual grasslands that provide habitat for this species, the Study Area shows signs of recent grazing, thus reducing vegetation density that the species requires for nesting.
Great blue heron <i>Ardea herodias</i>	--; CSA; --; --	Inhabits both freshwater and saltwater habitats and forages in grassland and agricultural field. Breeding colonies are located within 2 to 4 miles of feeding areas, often in isolated swamps or on islands, and near lakes and ponds bordered by forests.	Year – round	Present. This species was observed feeding in Kaseberg Creek within the Study Area during the March 2020 site visit. Wetlands, vernal pools and riparian habitat located within the Study Area provide foraging habitat for this species. However, no rookeries were observed.
Great egret <i>Ardea alba</i>	--; CSA; --; --	Found in marshes, swampy woods, tidal estuaries, lagoons, mangroves, streams, lakes, ponds, fields and meadows. Nests primarily in tall trees, or in woods or thickets near water.	Year – round	Present. This species was observed feeding in a seasonal wetland within the Study Area during the March 2020 site visit. Wetlands, vernal pools and riparian habitat located within the Study Area provide foraging habitat for this species. However, no rookeries were observed.
Lewis’ woodpecker <i>Melanerpes lewis</i>	BCC; --; --; --	Found in open forest and woodland, often logged or burned, including oak, coniferous forest (primarily ponderosa pine), riparian woodland (dominated by cottonwood), orchards, and less commonly in pinyon-juniper habitat. In winter uses oak woodlands, nut and fruit orchards. Nests in natural tree cavities, abandoned northern flicker holes or previously used cavities.	Year Round	None. This species inhibits transitional habitats between oak and coniferous forests at higher elevations than the Study Area.
Long-billed curlew <i>Numenius americanus</i>	BCC; --; --; --	Nests in low-growing vegetation (4-8” high), including shortgrass and mixed grass prairies and agricultural fields. In the winter, they migrate to the coast where they inhabit wetlands, tidal estuaries, mudflats, flooded fields, and occasionally beaches.	Summer (breeding)	Low. Although portions of the Study Area contain annual grasslands that provide habitat for this species, the Study Area shows signs of recent grazing, thus reducing vegetation high that the species requires for nesting.

Appendix A (cont.)
Regionally Occurring Listed and Special-Status Species

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Nuttall’s woodpecker <i>Picoides nuttallii</i>	BCC; --; --; --	Found primarily in oak woodlands and in riparian woods; rarely in conifer.	Year Round	High. The oak woodland and riparian habitat provide suitable foraging and nesting habitat for this species.
Oak titmouse <i>Baeolophus inornatus</i>	BCC; --; --; --	Found in oak and pine-oak woodland, arborescent chaparral, and oak-riparian associations. Nests are constructed in natural tree cavities, in woodpecker holes or bird boxes approximately 1 to 11 meters above ground.	Year Round	High. The oak woodland and riparian habitat provide suitable foraging and nesting habitat for this species.
Purple martin <i>Progne subis</i>	--; CSC; --; --	Nests in wide variety of open and partly open habitats that are often near water or around towns. Nests in tree cavities, abandoned woodpecker holes, crevices in rocks, and sometimes in bird houses or gourds put up by humans.	Summer (breeding)	High. The Study Area provides suitable nesting and foraging habitat for this species within the annual grassland, riparian and oak woodland habitat. There is one CNDDB occurrence documented within five miles of the Study Area (CDFW 2020).
Short-billed dowitcher <i>Limnodromus griseus</i>	BCC; --; --; --	Found in small lakes, and in manmade environments such as impoundments, sewage ponds, and flooded farm fields as well as in muddy margins of rivers, lakes, and bays. Migrants also rest on rocky and sandy shorelines and occasionally feed in such places, but they forage mostly where there is a fine muddy bottom covered by a few inches of water.	Year Round	None. The Study Area does not provide habitat for this species.
Song sparrow (“Modesto” population) <i>Melospiza melodia</i>	--; CSC; --; --	Found in thickets, brush, marshes, roadsides, gardens. Habitat varies over its wide range. In most areas, found in brushy fields, stream sides, shrubby marsh edges, woodland edges, hedgerows, well-vegetated gardens. Some coastal populations live in salt marshes. Nests in dense streamside brush in southwestern deserts, and in any kind of dense low cover on Aleutian Islands, Alaska.	Year – round	High. The Study Area provides suitable nesting and foraging habitat for this species within the annual grassland, riparian and oak woodland habitat.
White-tailed kite <i>Elanus leucurus</i>	--; CFP; --; -- (nesting)	Inhabits savanna, open woodlands, marshes, desert grassland, partially cleared lands and cultivated fields. Nests in trees, often near a marsh in savanna, open woodland, partially cleared lands, and cultivated fields. Foraging occurs within ungrazed or lightly grazed fields and pastures.	Year – round	Present. This species was observed in the riparian habitat and foraging in the annual grassland during the 2020 site assessment. The Study Area provides suitable foraging habitat within the annual grassland and nesting habitat for this species within the existing trees located in the oak woodland and riparian habitat. There are eight CNDDB occurrence for this species within five miles of the Study Area (CDFW 2020).
Yellow-billed magpie <i>Pica nuttalli</i>	BCC; --; --; --	Found in open oak woodland and oak savannas. Forages and nests in agricultural areas and pastures that feature tall trees (average 47 feet) in large tress often in clumps of mistletoe.	Year Round	High. The Study Area provides suitable foraging and nesting habitat for this species within the annual grassland, oak woodland, and riparian habitats.
Mammals				
Pallid bat <i>Antrozous pallidus</i>	--; CSC; --; --	Found in grasslands, shrublands, woodlands, and forests from sea level up through mixed conifer forest habitats. Roosts in colonies usually in rock crevices, caves, mines, hollow trees, and buildings.	March – October	Low. The Study Area provides suitable roosting habitat for this species within the mixed oak woodland however, the Study Areas lacks caves or mines that this species often utilizes.

Table 2 includes state and federal species of concern and Rank 1 and 2 CNPS species.

Appendix A (cont.)
Regionally Occurring Listed and Special-Status Species

Table 3 — Other Species of Interest

Special-Status Species	Regulatory Status	Habitat Requirements	Identification/ Survey Period	Potential for Occurrence
Plants				
Adobe navarretia <i>Navarretia nigelliformis</i>	--; --; --; 4.2	Annual herb found on clay and sometimes serpentinite soils in foothill grasslands and sometimes in vernal pools from 100 to 1,000 meters.	Blooming period: April-June	None. Although the Study Area contains vernal pools, the Study Area is outside the known elevation range of this species.
Parry's rough tarplant <i>Centromadia parryi</i> ssp. rudis	--; --; --; 4.2	Annual herb found in alkaline soil, in vernal mesic, seeps, sometimes roadsides, in valley and foothill grasslands, vernal pools, from 0 to 100 meters.	Blooming period: May – October	None. The Study Area does not contain suitable habitat (i.e., alkaline soil) to support this species.
Stinkbells <i>Fritillaria agrestis</i>	--; --; --; 4.2	Perennial bulbiferous herb found in clay soils, sometimes in serpentinite, chaparral, cismontane woodland, pinyon and juniper woodland, and valley and foothill grassland from 10 to 1,555 meters.	Blooming period: March – June	High. The Study Area provides suitable habitat for this species within the annual grassland. There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2020).
Valley brodiaea <i>Brodiaea rosea</i> ssp. <i>vallicola</i>	--; --; --; 4.2	Perennial bulbiferous herb found in old alluvial terraces on silty, sandy, or gravelly loam soils within swales of valley and foothill grassland and vernal pools.	Blooming period: April – May (June)	High. The Study Area provides suitable habitat for this species within the annual grassland and vernal pool habitats located throughout the Study Area. Although there are no CNDDDB records within 5 miles of the Study Areas, there are two occurrences within 15 miles to the north and west of the Study Area.
Invertebrates				
Antioch Dunes anthicid beetle <i>Anthicus antiochensis</i>	--; CSA; --; --	Found in interior sand dunes and sandbars that are either bare or contain little vegetation cover. Feeds on dead insects. Actively scavenges at night, burrowing into the sand and remaining inactive during the day. Adults overwinter, emerge in the spring to lay eggs from which the larvae hatch, and the next generation of adults emerges in early summer. Adults are most commonly collected in June and July (Davis 1991).	Spring-Summer	None. The Study Area does not contain suitable habitat (i.e., sand dunes) to support this species.
An andrenid bee <i>Andrena subapasta</i>	--; CSA; --; --	Found in grassland habitats within El Dorado, Placer, Sacramento, and San Joaquin counties. Ground nesters that will be underground from summer, fall and winter and emerge in early spring to forage and pollinate early bloomers, such as willows, maples, violets and other early blooming wildflowers.	Spring – Fall	High. The Study Area provides suitable habitat for this species within the ruderal habitat. There is one CNDDDB record for this species within five miles of the Study Area (CDFW 2019).
Sacramento Valley tiger beetle <i>Cicindela hirticollis abrupta</i>	--; CSA; --; --	Typically found near aquatic environments. Their burrows are located in moist soils that are far enough away from water bodies to avoid being inundated with water. Most frequently found on the sandy shorelines of rivers, lakes, and oceans. (Pearson et al., 2006; Schlesinger and Novak 2011)	Spring-Fall	None. The Study Area does not contain suitable habitat (i.e., sandy shorelines of rivers, lakes, and oceans) to support this species.
Sacramento anthicid beetle <i>Anthicus sacramento</i>	--; CSA; --; -- (S1)	Found in loose sands along the Sacramento and San Joaquin rivers, from Shasta to San Joaquin counties, and at one site along the Feather River at Nicolaus. Adults overwinter, emerge in the spring to lay eggs from which the larvae hatch, and the next generation of adults emerge in early summer. The collection of larvae in the fall indicates a second generation may be produced. Adults are most commonly collected in June, July, and August (Davis 1991).	Year-Round	None. The Study Area does not contain suitable habitat (i.e., rivers) to support this species.
Ricksecker’s water scavenger beetle <i>Hydrochara rickseckeri</i>	--; CSA; --; --	An endemic aquatic beetle known to occur in vernal pools that are inundated in winter and spring and dry during the summer months. Ideal habitat includes, neutral to slightly alkaline, clear, low dissolved salts, dominated with vernal pool plant species, and complex of vernal pool crustacean species. Known to occur in the Central Valley below 300 meters in elevation.	Year – round	Low. The Study Area provides suitable habitat for this species within the vernal pool habitats located throughout the Study Area. Although there are no CNDDDB records within 5 miles of the Study Areas, the species is known to occur in the Central Valley below 300 meters in elevation.

Table 3 includes Rank 3 and 4 CNPS species and non-listed invertebrates, which may not be subject to CEQA review.

REFERENCES:

GANDA. 1998. Cirby-Linda-Dry Creek Flood Control Project - Biological Assessment for Chinook Salmon and Steelhead Trout. Prepared for the City of Roseville, Community Development Department and Dames & Moore. 37 pp., plus 187 5/20/2005 appendices.

Appendix B

Plant and Wildlife Species Observed

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Appendix B Plant Species Observed

Family	Scientific Name	Common Name	Native (N), Non-native (NN), Invasive (I)
Dicots			
Anacardaceae	<i>Toxicodendron diversilobum</i>	poison oak	N
Apiaceae	<i>Sanicula bipinnatifida</i>	purple sanicle	N
Araceae	<i>Lemna sp.</i>	duckweed	N
Araceae	<i>Baccharis pilularis</i>	Coyote brush	N
Boraginaceae	<i>Amsinckia intermedia</i>	fiddleneck	N
Asteraceae	<i>Centaurea solstitialis</i>	yellow star thistle	NN, I
Asteraceae	<i>Dittrichia graveolens</i>	stinkwort	NN, I
Asteraceae	<i>Hypochaeris glabra</i>	smooth cat's ear	NN, I
Asteraceae	<i>Lactuca serriola</i>	prickly lettuce	NN
Asteraceae	<i>Layia fremontii</i>	Fremont layia	N
Asteraceae	<i>Leontodon saxatilis</i> ssp. <i>longirostris</i>	hawkbit	NN
Asteraceae	<i>Psilocarphus brevissimus</i>	woolly marbles	N
Asteraceae	<i>Silybum marianum</i>	blessed milkthistle	NN, I
Asteraceae	<i>Sonchus oleraceus</i>	sow thistle	NN
Asteraceae	<i>Xanthium strumarium</i>	rough cocklebur	N
Brassicaceae	<i>Brassica nigra</i>	black mustard	NN, I
Convolvulaceae	<i>Convolvulus arvensis</i>	field bindweed	NN
Euphorbiaceae	<i>Croton setiger</i>	turkey-mullein	N
Euphorbiaceae	<i>Triadica sebifera</i>	Chinese tallowtree	NN, I
Fabaceae	<i>Trifolium hirtum</i>	rose clover	NN, I
Fabaceae	<i>Trifolium sp.</i>	clover	~
Fabaceae	<i>Vicia sp.</i>	vetch	~
Fabaceae	<i>Vicia villosa</i>	hairy vetch	NN
Fagaceae	<i>Quercus douglasii</i>	blue oak	N
Fagaceae	<i>Quercus lobata</i>	valley oak	N
Fagaceae	<i>Quercus wislizeni</i> var. <i>wislizeni</i>	interior live oak	N
Geraniaceae	<i>Erodium botrys</i>	big heron bill	NN
Geraniaceae	<i>Geranium dissectum</i>	wild geranium	NN, I
Geraniaceae	<i>Geranium molle</i>	crane's bill geranium	NN
Myrsinaceae	<i>Lysmachia arvensis</i>	scarlet pimpernel	NN
Papaveraceae	<i>Eschscholzia californica</i>	California poppy	N
Plantaginaceae	<i>Plantago lanceolata</i>	English plantain	NN, I
Polemoniaceae	<i>Navarretia leucocephala</i>	white headed navarretia	N
Polygonaceae	<i>Persicaria sp.</i>	smartweed	(N)
Polygonaceae	<i>Polygonum aviculare</i> ssp. <i>depressum</i>	prostrate knotweed	NN
Polygonaceae	<i>Polypogon monspeliensis</i>	rabbitsfoot grass	NN, I
Polygonaceae	<i>Rumex crispus</i>	curly dock	NN, I
Polygonaceae	<i>Rumex pulcher</i>	fiddle dock	NN
Rosaaceae	<i>Rubus armeniacus</i>	Himalayan blackberry	NN, I
Rosaceae	<i>Rosa sp.</i>	rose	NN
Salicaceae	<i>Populus fremontii</i> ssp. <i>fremontii</i>	Fremont cottonwood	N

Appendix B (cont.) Plant Species Observed

Family	Scientific Name	Common Name	Native (N), Non-native (NN), Invasive (I)
Salicaceae	<i>Salix sp.</i>	willow	~
Typhaceae	<i>Typha sp.</i>	cattail	N
Verbenaceae	<i>Phyla nodiflora</i>	lippia	N
Viscaceae	<i>Phoradendron leucarpum ssp. macrophyllum</i>	mistletoe	N
Vitaceae	<i>Vitis californica</i>	California grape	N
Monocots			
Cyperaceae	<i>Cyperus eragrostis</i>	tall cyperus	N
Cyperaceae	<i>Eleocharis acicularis</i>	needle spike rush	N
Cyperaceae	<i>Eleocharis macrostachya</i>	spikerush	N
Juncaceae	<i>Juncus bufonius</i>	common toad rush	N
Juncaceae	<i>Juncus sp.</i>	rush	N
Poaceae	<i>Alopecurus saccatus</i>	Pacific foxtail	N
Poaceae	<i>Avena barbata</i>	slender oat	NN, I
Poaceae	<i>Brachypodium distachyon</i>	false brome	NN, I
Poaceae	<i>Briza minor</i>	little quaking grass	N
Poaceae	<i>Bromus diandrus</i>	ripgut grass	NN, I
Poaceae	<i>Bromus hordeaceus</i>	soft chess	NN, I
Poaceae	<i>Cynosurus echinatus</i>	annual dogtail grass	NN, I
Poaceae	<i>Elymus caput-medusae</i>	medusa head	NN, I
Poaceae	<i>Elymus cf. ponticus</i>	tall wheat grass	NN
Poaceae	<i>Festuca bromoides</i>	brome fescue	NN
Poaceae	<i>Festuca perennis</i>	rye grass	NN, I
Poaceae	<i>Hordeum marinum</i>	seaside barley	NN
Poaceae	<i>Hordeum murinum</i>	foxtail barley	NN, I
Poaceae	<i>Muhlenbergia rigens</i>	deergrass	N
Themidaceae	<i>Dichelostema capitatum</i>	blue dicks	N
Themidaceae	<i>Triteleia hyacinthina</i>	white brodiaea	N

Appendix B (cont.) Wildlife Species Observed

Order	Family	Scientific Name	Common Name
Piciformes	Picidae	<i>Melanerpes formicivorus</i>	Acorn woodpecker
Passeriformes	Corvidae	<i>Corvus brachyrhynchos</i>	American crow
Passeriformes	Turdidae	<i>Turdus migratorius</i>	American robin
Apodiformes	Trochilidae	<i>Calypte anna</i>	Anna's hummingbird
Coraciiformes	Alcedinidae	<i>Megasceryle alcyon</i>	Belted kingfisher
Passeriformes	Tyrannidae	<i>Sayornis nigricans</i>	Black phoebe
Charadriiformes	Recurvirostridae	<i>Himantopus mexicanus</i>	Black-necked stilt
Lagomorpha	Leporidae	<i>Lepus californicus</i>	Black-tailed jackrabbit
Artiodactyla	Cervidae	<i>Odocoileus hemionus</i>	Black-tailed mule deer
Passeriformes	Icteridae	<i>Euphagus cyanocephalus</i>	Brewer's blackbird
Rodentia	Sciuridae	<i>Otospermophilus beecheyi</i>	California ground squirrel
Galliformes	Odontophoridae	<i>Callipepla californica</i>	California quail
Passeriformes	Corvidae	<i>Aphelocoma californica</i>	California scrub-jay
Passeriformes	Passerellidae	<i>Melospiza crissalis</i>	California towhee
Anseriformes	Anatidae	<i>Branta canadensis</i>	Canada goose
Passeriformes	Corvidae	<i>Corvus corax</i>	Common raven
Passeriformes	Passerellidae	<i>Junco hyemalis</i>	Dark-eyed Junco
Lagomorpha	Leporidae	<i>Sylvilagus audubonii</i>	Desert cottontail
Carnivora	Felidae	<i>Felis catus</i>	Domestic cat
Carnivora	Canidae	<i>Canis lupus familiaris</i>	Domestic dog
Passeriformes	Sturnidae	<i>Sturnella vulgaris</i>	European starling
Squamata	Colubridae	<i>Thamnophis sp.</i>	Garter snake
Pelecaniformes	Ardeidae	<i>Ardea alba</i>	Great egret
Strigiformes	Strigidae	<i>Bubo virginianus</i>	Great horned owl
Passeriformes	Fringillidae	<i>Haemorhous mexicanus</i>	House finch
Passeriformes	Passeridae	<i>Passer domesticus</i>	House sparrow
Passeriformes	Troglodytidae	<i>Troglodytes aedon</i>	House wren
Charadriiformes	Charadriidae	<i>Charadrius vociferus</i>	Killdeer
Anseriformes	Anatidae	<i>Anas platyrhynchos</i>	Mallard
Columbiformes	Columbidae	<i>Zenaidura macroura</i>	Mourning dove
Piciformes	Picidae	<i>Colaptes auratus</i>	Northern flicker
Passeriformes	Mimidae	<i>Mimus polyglottos</i>	Northern mockingbird
Accipitriformes	Accipitridae	<i>Buteo lineatus</i>	Red-shouldered hawk
Accipitriformes	Accipitridae	<i>Buteo jamaicensis</i>	Red-tailed hawk
Passeriformes	Icteridae	<i>Agelaius phoeniceus</i>	Red-winged blackbird
Galliformes	Phasianidae	<i>Phasianus colchicus</i>	Ring-necked pheasant
Columbiformes	Columbidae	<i>Columba livia</i>	Rock pigeon
Anura	Hylidae	<i>Hyla sierrae</i> (formerly <i>Pseudacris sierrae</i>)	Sierran tree frog
Accipitriformes	Cathartidae	<i>Cathartes aura</i>	Turkey vulture
Squamata	Phrynosomatidae	<i>Sceloporus occidentalis</i>	Western fence lizard
Rodentia	Sciuridae	<i>Sciurus griseus</i>	Western gray squirrel
Passeriformes	Icteridae	<i>Sturnella neglecta</i>	Western meadowlark
Galliformes	Phasianidae	<i>Meleagris gallopavo</i>	Wild turkey

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Appendix C

Representative Site Photos

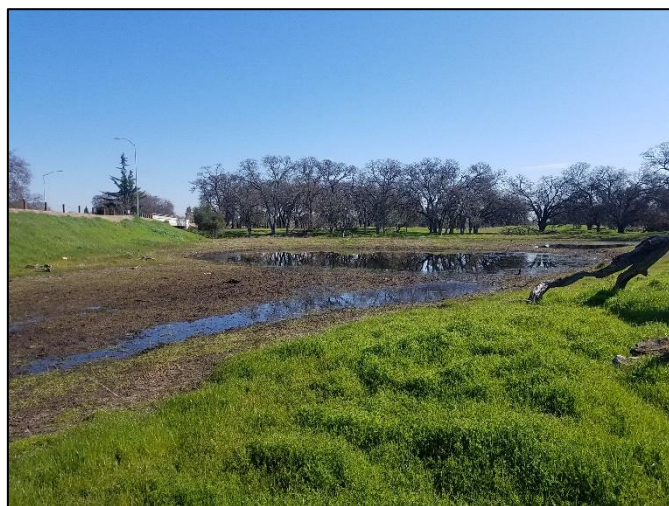
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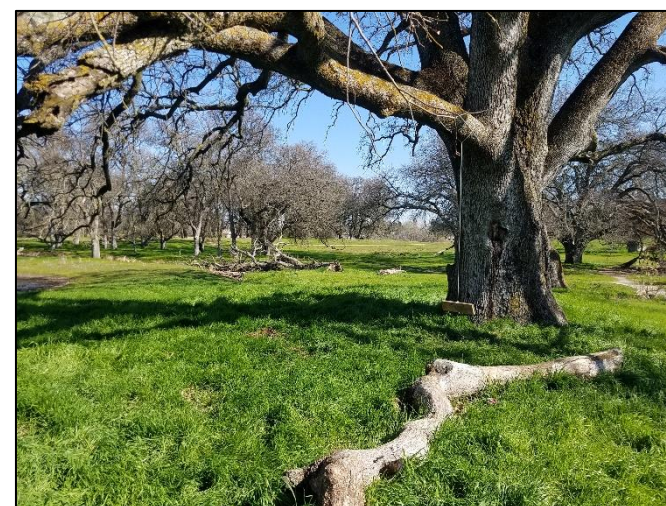
Dirt path within the annual grassland in the western portion of the Study Area.



Garter snake observed along the fringe of a vernal pool.



Overview of an annual grassland, wetland, and adjacent oak woodland west of Kaseberg Creek.



Tree swing on a mature oak within the oak woodland habitat.

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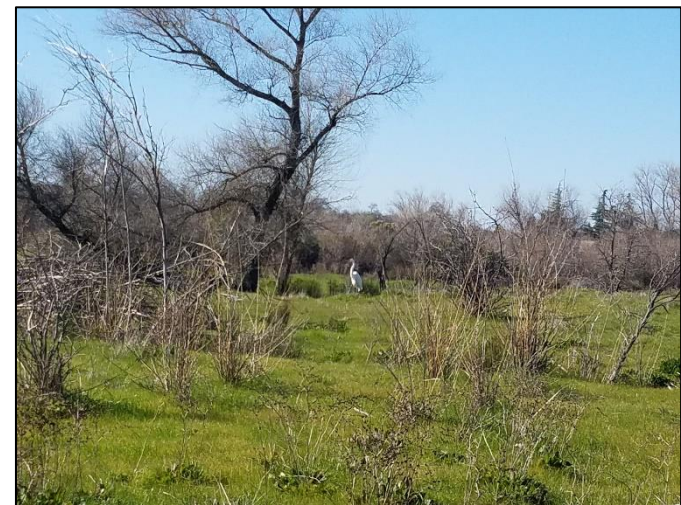
Conspan along Pleasant Grove Boulevard.



Seasonal wetland and oak woodland within the central portion of the Study Area.



Active great horned owl nest in oak.



Egret observed in the riparian and creek habitat.

Appendix D

Tree Survey Data

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Appendix D
Tree Survey Data

Tree Number	Tree Species	No. of Trunks	DBH (inches)	DLR (feet)	Height (feet)	Health	Structure	Vigor	Notes
1201	Blue Oak	1	14	40	27	Fair	Poor-Fair	Poor-Fair	lean, asymmetrical canopy, burls, trunk rot, epicormic growth
1202	Blue Oak	1	24	37	30	Poor	Poor	Poor	nails in trunk, wood plank, trunk scar, trunk rot, leader death, epicormic growth , limb rot
1203	Blue Oak	1	30	17	27	Poor	Poor-Fair	Poor	trunk rot, trunk split, asymmetrical canopy, lean, included bark, trunk scar, limb rot
1204	Blue Oak	2	27,59	45	42	Poor	Poor-Fair	Poor-Fair	trunk rot, included bark, limb failure, limb rot
1205	Blue Oak	3	12,20,16	15	30	Fair	Fair	Fair	included bark, multiple trunks, burls, epicormic growth
1206	Blue Oak	2	24,24	35	55	Fair	Fair	Fair	active owl nest, included bark, lean, limb rot, bark damage
1207	Blue Oak	1	52	30	47	Fair	Poor-Fair	Fair	limb failure, included bark, limb rot, bark damage, sapsucker damage
1208	Blue Oak	1	25	20	42	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, nest cavity, included bark, limb rot, lean, asymmetrical canopy
1209	Interior Live Oak	3	4,6,9	15	22	Fair	Fair	Fair	included bark, dieback
1210	Blue Oak	1	19	22	30	Fair	Poor-Fair	Poor-Fair	lean, included bark, asymmetrical canopy, limb rot
1211	Blue Oak	1	23	25	35	Poor-Fair	Poor	Poor	trunk rot, trunk cavity, hollow trunk, lean, included bark, asymmetrical canopy
1212	Blue Oak	1	27	25	40	Fair	Fair	Fair	included bark, epicormic growth, lean, asymmetrical canopy, wire embedded in the trunk, limb rot
1213	Blue Oak	1	30	22	30	Poor	Poor	Poor	trunk rot, trunk cavity, leader death, burls, included bark, woodpecker damage
1214	Blue Oak	1	9	17	20	Fair	Fair	Fair	included bark, burls
1215	Blue Oak	1	15	17	45	Fair	Fair	Fair	included bark, trunk scar
1216	Blue Oak	1	33	32	42	Poor-Fair	Fair	Poor-Fair	included bark, exfoliating bark , trunk rot, limb rot, lean, bark damage
1217	Blue Oak	1	35	30	37	Poor-Fair	Fair	Fair	included bark, limb rot, trunk rot, nest cavity
1218	Blue Oak	1	19	27	42	Poor-Fair	Fair	Fair	included bark, lean, limb rot, trunk rot, epicormic growth, asymmetrical canopy
1219	Blue Oak	1	13	25	27	Fair	Poor-Fair	Fair	epicormic growth, asymmetrical canopy, trunk scar
1220	Blue Oak	1	25	27	45	Fair	Poor-Fair	Fair	exposed roots, included bark, lean, asymmetrical canopy, burls, limb rot
1221	Blue Oak	1	18	8	25	Poor	Poor	Poor	almost dead
1222	Interior Live Oak	1	10	15	20	Poor-Fair	Fair	Fair	trunk rot, included bark, fungus, epicormic growth, slight lean
1223	Interior Live Oak	2	5,2	8	10	Poor-Fair	Fair	Poor-Fair	trunk rot, lean, dieback, included bark, trunk scar
1224	Blue Oak	1	7	8	17	Fair	Fair	Fair	included bark, bark damage
1225	Blue Oak	3	7,2,2	8	15	Poor-Fair	Poor	Poor	dead tree on trunk, included bark, trunk scar, bark damage, lean
1226	Interior Live Oak	3	5,3,2	8	12	Fair	Fair	Fair	multiple trunks, included bark, bark damage
1227	Interior Live Oak	5	3,4,3,2,2	10	12	Fair	Fair	Fair	pruning cuts, multiple trunk at base, included bark, dieback
1228	Blue Oak	1	39	40	35	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, trunk death, included bark, limb rot, nest cavities, lean, asymmetrical canopy
1229	Interior Live Oak	2	4,4	10	17	Fair	Fair	Fair	included bark, dieback, dead tree at base, bark damage
1230	Interior Live Oak	4	4,3,2,1	6	10	Fair	Fair	Fair	multiple trunk at base, included bark, dead limb on trunk, bark damage
1231	Blue Oak	1	8	12	17	Fair	Fair	Fair	lean, included bark
1232	Interior Live Oak	1	13	15	22	Fair	Fair	Fair	included bark, dieback, lean
1233	Interior Live Oak	7	9,5,6,3,1,6,9	17	20	Fair	Fair	Fair	multiple trunks, included bark, dieback, bark damage
1234	Blue Oak	1	51	35	65	Fair	Fair	Fair	weighted limbs, nest cavity, burls, included bark, wood plank, bark damage, limb rot
1235	Blue Oak	1	56	40	62	Poor-Fair	Fair	Poor-Fair	trunck cavity, trunk wound, trunk rot, included bark, weighted limbs, burrows at the base of the trunk, rope swing, limb rot

Appendix D Tree Survey Data

Tree Number	Tree Species	No. of Trunks	DBH (inches)	DLR (feet)	Height (feet)	Health	Structure	Vigor	Notes
1236	Blue Oak	1	33	37	40	Fair	Fair	Fair	wire embedded in the trunk, lean, included bark, burls, limb rot
1237	Blue Oak	1	30	37	50	Fair	Fair	Fair	included bark, asymmetrical canopy, burls, limb rot
1238	Interior Live Oak	1	10	12	25	Fair	Fair	Fair	lean, included bark, dieback
1239	Blue Oak	1	22	15	27	Poor-Fair	Poor-Fair	Poor-Fair	trunk cavity, trunk rot, trunk death, woodpecker damage, included bark, lean
1240	Interior Live Oak	2	6,9	12	22	Fair	Fair	Fair	included bark, slight lean, dieback
1241	Interior Live Oak	2	6,6	12	15	Fair	Fair	Fair	included bark, dieback, codominant trunks
1242	Blue Oak	1	7	10	15	Fair	Fair	Fair	included bark
1243	Interior Live Oak	3	6,4,4	3	15	Fair	Fair	Fair	bark damage, multiple trunk, included bark, sapsucker damage
1244	Blue Oak	3	5,4,2	6	15	Fair	Fair	Fair	multiple trunks, included bark
1245	Interior Live Oak	3	6,4,2	10	12	Fair	Fair	Fair	multiple trunks, included bark, bark damage, dieback
1246	Blue Oak	3	4,6,5	10	20	Fair	Fair	Fair	fused trunks, included bark, multiple trunk
1247	Blue Oak	3	4,3,3	6	10	Fair	Fair	Fair	included bark, multiple trunk
1248	Blue Oak	1	4,2	8	12	Fair	Fair	Fair	codominant trunks, included bark, slight lean
1249	Blue Oak	3	6,4,3	10	22	Fair	Fair	Fair	multiple trunks, fused trunks, included bark
1250	Blue Oak	1	8	12	25	Fair	Fair	Fair	included bark, epicormic growth
1251	Blue Oak	2	6,4	8	17	Fair	Fair	Fair	included bark, codominant trunks, epicormic growth
1252	Valley Oak	2	11,6	15	30	Fair	Fair	Fair	codominant trunks, included bark, epicormic growth, slight lean
1253	Blue Oak	1	6	10	20	Fair	Fair	Fair	slight lean, included bark
1254	Blue Oak	2	5,4	12	20	Fair	Fair	Fair	included bark, slight lean
1255	Interior Live Oak	1	7	12	17	Fair	Fair	Fair	slight lean, included bark, dieback, bark damage
1256	Interior Live Oak	5	4,2,1,2,1	8	10	Fair	Poor-Fair	Fair	multiple trunk at base, included bark, dieback
1257	Blue Oak	1	8	12	22	Fair	Fair	Fair	included bark
1258	Blue Oak	4	4,3,2,2	6	12	Poor-Fair	Poor-Fair	Poor-Fair	bark damage, included bark, multiple trunks, epicormic growth
1300	Blue Oak	2	11,10	17	25	Fair	Fair	Fair	slight lean, asymmetrical canopy, included bark, epicormic growth
1301	Blue Oak	1	36	30	37	Poor-Fair	Poor-Fair	Poor-Fair	lean, limb rot, included bark, asymmetrical canopy, trunk rot, burls
1302	Blue Oak	1	33	27	37	Poor-Fair	Poor-Fair	Poor-Fair	lean, included bark, burls, trunk rot, burrow at the base of the trunk, epicormic growth
1303	Blue Oak	1	39	22	37	Poor-Fair	Poor	Poor-Fair	trunk rot, trunk fail, included bark, wood planks, lean
1304	Blue Oak	1	49	27	35	Poor-Fair	Poor	Poor-Fair	burrow at the base of the trunk, included bark, trunk rot, hollow trunk, lean, trunk cavity, asymmetrical canopy
1305	Blue Oak	1	8	8	15	Fair	Fair	Fair	included bark, bark damage
1306	Blue Oak	1	16	17	25	Fair	Poor-Fair	Fair	asymmetrical canopy, trunk rot, slight lean, included bark, burls
1307	Blue Oak	1	19	22	40	Fair	Poor-Fair	Fair	burls, lean, included bark, limb rot, asymmetrical canopy, burrow at the base of the trunk
1308	Blue Oak	1	12	12	25	Fair	Fair	Fair	burls, included bark, limb rot
1309	Blue Oak	1	12	35	27	Fair	Poor-Fair	Poor-Fair	severe lean, included bark, limb rot
1310	Blue Oak	1	20	27	42	Fair	Fair	Fair	asymmetrical canopy, included bark
1311	Blue Oak	2	11,17	30	47	Fair	Poor-Fair	Fair	codominant trunks, included bark, lean
1312	Blue Oak	1	21	22	50	Fair	Fair	Fair	limb rot, included bark

Appendix D
Tree Survey Data

Tree Number	Tree Species	No. of Trunks	DBH (inches)	DLR (feet)	Height (feet)	Health	Structure	Vigor	Notes
1313	Blue Oak	1	15	17	40	Fair	Fair	Fair	included bark, slight lean, limb rot
1314	Blue Oak	1	17	17	35	Fair	Poor-Fair	Fair	lean, asymmetrical canopy, included bark, burls
1315	Blue Oak	1	13	8	25	Poor	Poor	Poor	trunk failure, trunk rot, hollow trunk, burls, lean, woodpecker damage
1316	Blue Oak	1	27	35	42	Fair	Fair	Fair	included bark, lean, asymmetrical canopy
1317	Blue Oak	1	11	15	20	Fair	Poor-Fair	Fair	asymmetrical canopy, lean, epicormic growth, included bark
1318	Blue Oak	1	11	12	30	Fair	Fair	Fair	included bark, epicormic growth
1319	Blue Oak	1	21	35	47	Fair	Fair	Fair	included bark, slight lean, burls
1320	Blue Oak	1	9	4	25	Poor	Poor	Poor	trunk rot, leader death, epicormic growth
1321	Blue Oak	1	15	20	47	Fair	Fair	Fair	included bark, slight lean
1322	Blue Oak	1	17	30	37	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, included bark, epicormic growth, lean, trunk death, woodpecker damage, asymmetrical canopy
1323	Blue Oak	2	15,13	30	37	Fair	Fair	Fair	codominant trunks, included bark, limb rot
1324	Blue Oak	1	28	22	50	Fair	Fair	Fair	limb rot, limb death, included bark
1325	Blue Oak	1	27	25	52	Poor-Fair	Fair	Fair	included bark, slight lean, limb death, limb rot, nest cavity
1326	Blue Oak	1	27	35	42	Fair	Poor-Fair	Fair	included bark, lean, limb rot, asymmetrical canopy
1327	Blue Oak	1	11	15	27	Fair	Poor-Fair	Poor-Fair	limb rot, lean, asymmetrical canopy, included bark
1328	Blue Oak	1	8	17	22	Fair	Poor-Fair	Fair	lean, asymmetrical canopy, limb rot, burls
1329	Blue Oak	1	7	12	20	Poor-Fair	Poor	Poor-Fair	trunk rot, woodpecker damage, trunk scar, trunk cavity, lean, epicormic growth
1330	Blue Oak	1	26	30	47	Fair	Fair	Fair	included bark
1331	Blue Oak	1	23	27	40	Fair	Poor-Fair	Poor-Fair	lean, asymmetrical canopy, included bark, limb rot, burls, trunk cavity
1332	Blue Oak	2	23,18	25	45	Fair	Fair	Fair	asymmetrical canopy, slight lean, included bark
1333	Blue Oak	1	28	20	47	Fair	Fair	Fair	burrow at the base of the trunk, included bark, burls, limb rot
1334	Blue Oak	1	27	20	45	Poor-Fair	Fair	Poor-Fair	included bark, limb rot, trunk rot, trunk cavity, burls
1335	Blue Oak	1	15	25	35	Fair	Poor-Fair	Poor-Fair	limb rot, asymmetrical canopy, lean, included bark
1336	Blue Oak	2	10,11	15	30	Poor	Poor	Poor	almost dead
1337	Blue Oak	1	18	27	47	Fair	Fair	Fair	asymmetrical canopy, included bark, lean
1338	Blue Oak	2	19,8	15	25	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, trunk death, included bark, woodpecker damage ,epicormic growth, lean, asymmetrical canopy
1339	Blue Oak	1	14	22	45	Fair	Fair	Fair	asymmetrical canopy, slight lean, included bark
1340	Blue Oak	2	10,11	22	30	Fair	Poor-Fair	Fair	included bark, lean, burls, epicormic growth
1341	Blue Oak	2	15,11	27	35	Fair	Poor-Fair	Fair	included bark, lean, asymmetrical canopy
1342	Blue Oak	3	12,10,14	22	30	Fair	Fair	Fair	limb rot, included bark
1343	Blue Oak	1	16	15	50	Poor-Fair	Fair	Fair	limb rot, included bark
1344	Blue Oak	1	13	20	50	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, trunk cavity, epicormic growth, limb death
1345	Blue Oak	1	18	27	30	Poor-Fair	Poor-Fair	Poor-Fair	limb rot, trunk rot, lean, included bark
1346	Blue Oak	1	18	30	50	Fair	Fair	Fair	included bark, bark damage
1347	Blue Oak	1	13	32	37	Poor-Fair	Poor	Poor-Fair	asymmetrical canopy, lean, trunk rot, limb rot, trunk cavity, included bark
1348	Blue Oak	1	17	22	47	Fair	Fair	Fair	asymmetrical canopy, included bark, slight lean, limb rot

Appendix D
Tree Survey Data

Tree Number	Tree Species	No. of Trunks	DBH (inches)	DLR (feet)	Height (feet)	Health	Structure	Vigor	Notes
1349	Blue Oak	1	30	32	47	Fair	Fair	Fair	limb rot, included bark
1350	Blue Oak	1	23	27	42	Fair	Fair	Fair	included bark, limb rot
1351	Blue Oak	1	17	15	37	Poor-Fair	Fair	Fair	trunk cavity, limb rot, included bark, trunk rot
1352	Blue Oak	1	19	22	45	Fair	Fair	Fair	included bark, pruning cuts, burls, bark damage
1353	Blue Oak	2	17,25	30	45	Fair	Poor-Fair	Fair	epicormic growth, included bark, lean, limb rot
1354	Blue Oak	1	27	27	47	Poor-Fair	Poor-Fair	Poor-Fair	asymmetrical canopy, lean, trunk rot, included bark, bark damage, trunk scar
1355	Blue Oak	1	33	22	42	Fair	Fair	Fair	basal cavity , included bark, slight lean, asymmetrical canopy
1356	Blue Oak	2	11,18	15	25	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, trunck cavity, included bark, lean, asymmetrical canopy, burls
1357	Blue Oak	1	21	22	47	Poor-Fair	Fair	Fair	epicormic growth, limb rot, included bark, nest cavity
1358	Blue Oak	1	22	25	30	Poor	Poor-Fair	Poor	burls, trunk rot, included bark, limb death, limb rot
1359	Blue Oak	1	31	20	50	Fair	Fair	Fair	exposed roots, included bark
1360	Blue Oak	1	22	30	50	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, exposed roots, limb rot, included bark, slight lean
1361	Blue Oak	1	26	25	55	Poor-Fair	Fair	Poor-Fair	trunk rot, trunk death, included bark, limb rot, epicormic growth
1362	Blue Oak	2	13,15	30	37	Poor-Fair	Fair	Fair	included bark, burls, limb rot, limb death, epicormic growth
1363	Blue Oak	2	13,18	22	55	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, included bark, limb rot, limb death, lean, asymmetrical canopy
1364	Blue Oak	1	9	12	15	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, trunk cavity, lean, included bark
1365	Blue Oak	1	15	25	50	Poor-Fair	Poor-Fair	Poor-Fair	exposed roots, included bark, lean, burls, limb rot
1366	Blue Oak	1	24	30	55	Fair	Fair	Fair	limb rot, included bark, lean
1367	Blue Oak	2	23,22	40	47	Poor-Fair	Poor-Fair	Poor-Fair	included bark, lean, trunk rot, limb rot
1368	Blue Oak	2	12,16	20	40	Poor-Fair	Poor-Fair	Poor-Fair	included bark, burls, epicormic growth, limb rot
1369	Blue Oak	1	9	8	27	Fair	Poor-Fair	Poor-Fair	growing into another tree, included bark, limb rot, epicormic growth, burls
1370	Blue Oak	2	20,12	20	55	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, trunk death, included bark, limb rot, epicormic growth
1371	Blue Oak	1	21	25	55	Poor	Poor	Poor	almost dead
1372	Blue Oak	1	14	35	45	Fair	Poor-Fair	Fair	epicormic growth, slight lean
1373	Blue Oak	1	19	30	50	Fair	Fair	Fair	included bark, lean
1374	Blue Oak	2	12,23	25	42	Poor-Fair	Poor-Fair	Poor-Fair	epicormic growth, included bark, codominant trunks, limb rot, asymmetrical canopy, lean, trunk rot, trunk cavity
1375	Blue Oak	1	16	27	35	Fair	Poor-Fair	Fair	asymmetrical canopy, lean, epicormic growth
1376	Blue Oak	2	22,11	30	25	Poor-Fair	Poor-Fair	Poor-Fair	trunk death, trunk rot, woodpecker damage, included bark, lean, asymmetrical canopy, limb rot
1377	Blue Oak	1	6	10	15	Fair	Fair	Fair	included bark
1378	Blue Oak	2	5,1	8	15	Fair	Fair	Fair	included bark, codominant trunks
1379	Blue Oak	4	4,4,4,5	10	17	Fair	Fair	Fair	included bark, multiple trunk
1380	Interior Live Oak	7	6,6,7,7,8,2,9	12	20	Fair	Fair	Fair	included bark, exposed roots
1381	Blue Oak	2	5,3	10	15	Fair	Fair	Fair	included bark, slight lean
1382	Blue Oak	1	7	8	17	Fair	Fair	Fair	included bark, epicormic growth
1383	Blue Oak	4	2,2,2,2	6	12	Fair	Fair	Fair	included bark, multiple trunk
1384	Blue Oak	4	5,5,2,1	8	12	Fair	Fair	Fair	included bark, epicormic growth

Appendix D
Tree Survey Data

Tree Number	Tree Species	No. of Trunks	DBH (inches)	DLR (feet)	Height (feet)	Health	Structure	Vigor	Notes
1385	Blue Oak	3	6,3,3	8	10	Fair	Fair	Fair	slight lean, included bark
1386	Blue Oak	4	3,4,3,2	5	12	Fair	Fair	Fair	multiple trunk, included bark
1387	Blue Oak	3	2,4,6	8	12	Fair	Fair	Fair	included bark, slight lean, multiple trunk
1388	Blue Oak	2	4,3	8	15	Fair	Fair	Fair	codominant trunks, included bark, epicormic growth
1389	Blue Oak	7	4,3,2,1,2,1,1	8	10	Fair	Poor-Fair	Fair	burrow at the base of the trunk, included bark, lean, asymmetrical canopy, epicormic growth, multiple trunk
1390	Interior Live Oak	7	4,4,5,3,4,11,11	15	20	Fair	Fair	Fair	riprap at base of the tree, multiple trunk, included bark
1391	Blue Oak	2	4,3	6	17	Fair	Fair	Fair	included bark, codominant trunks
1392	Blue Oak	4	4,3,1,1	8	17	Fair	Fair	Fair	multiple trunk, included bark
1393	Blue Oak	7	4,4,4,2,1,1,1	10	15	Fair	Poor-Fair	Fair	bark damage, included bark, multiple trunk, epicormic growth
1394	Blue Oak	1	33	27	37	Poor-Fair	Fair	Fair	asymmetrical canopy, included bark, limb fail, limb rot
1395	Blue Oak	1	19	30	22	Fair	Poor-Fair	Poor-Fair	sevever lean, asymmetrical canopy, epicormic growth, included bark
1396	Blue Oak	1	27	25	37	Fair	Fair	Fair	included bark, epicormic growth, limb rot, bark damage, burls
1397	Blue Oak	1	10	15	25	Fair	Poor-Fair	Poor-Fair	lean, epicormic growth, asymmetrical canopy, included bark
1398	Blue Oak	1	27	37	25	Fair	Poor-Fair	Poor-Fair	lean, asymmetrical canopy, limb rot, included bark
1399	Blue Oak	1	9	10	17	Poor	Poor-Fair	Poor-Fair	trunk rot, lean, included bark, rope on trunk
1400	Blue Oak	1	39	30	42	Fair	Poor-Fair	Fair	included bark, weighted limbs, asymmetrical canopy, burrows at the base of the trunk, limb rot
1401	Valley Oak	2	9,6	10	15	Fair	Fair	Fair	included bark, codominant trunks
1402	Valley Oak	2	4,3	4	10	Fair	Fair	Fair	included bark, codominant trunks
1403	Blue Oak	5	9,3,2,2,3	12	17	Fair	Fair	Fair	included bark, multiple trunks, asymmetrical canopy
1404	Valley Oak	2	4,6	10	22	Fair	Fair	Fair	slight lean, included bark, codominant trunks
1405	Valley Oak	1	9	10	25	Fair	Fair-Good	Fair	included bark, bark damage
1406	Blue Oak	2	3,6	8	12	Fair	Fair	Fair	included bark, codominant trunks
1407	Blue Oak	3	4,3,2	5	8	Fair	Fair	Fair	included bark, multiple trunk
1408	Blue Oak	1	7	10	15	Fair	Fair	Fair	included bark
1409	Valley Oak	2	5,2	8	20	Fair	Fair	Fair	included bark, codominant trunks
1410	Blue Oak	1	8	12	15	Fair	Fair	Fair	lean, included bark
1411	Blue Oak	3	5,4,4	6	12	Fair	Fair	Fair	included bark, codominant trunks, nest
1412	Blue Oak	1	6	8	10	Fair	Fair	Fair	included bark, slight lean
1413	Blue Oak	2	5,1	6	12	Fair	Fair	Fair	included bark, nest, epicormic growth
1414	Valley Oak	1	8	8	25	Fair	Fair	Fair	included bark
1415	Valley Oak	1	8	8	20	Fair	Fair-Good	Fair	included bark, epicormic growth
1416	Valley Oak	2	5,4	8	17	Fair	Fair	Fair	included bark, codominant trunks
1417	Blue Oak	2	5,3	8	17	Fair	Fair	Fair	included bark, codominant trunks
1418	Blue Oak	1	6	10	25	Fair	Fair	Fair	slight lean, included bark
1419	Blue Oak	3	8,3,4	12	15	Fair	Fair	Fair	included bark, codominant trunks , asymmetrical canopy, epicormic growth
1420	Blue Oak	3	2,8,3	8	10	Fair	Fair	Fair	included bark, multiple trunk

Appendix D Tree Survey Data

Tree Number	Tree Species	No. of Trunks	DBH (inches)	DLR (feet)	Height (feet)	Health	Structure	Vigor	Notes
1421	Blue Oak	1	9	10	22	Fair	Fair	Fair	included bark, epicormic growth
1422	Blue Oak	2	6,4	8	12	Poor	Poor-Fair	Poor	included bark, fire damage, woodpecker damage, exfoliating bark, trunk rot
1423	Blue Oak	4	4,2,1,2	10	15	Poor-Fair	Fair	Fair	bark scar, included bark, multiple trunks, pruning cuts, bark damage
1424	Blue Oak	1	12	15	27	Fair	Fair	Fair	included bark
1425	Blue Oak	3	3,2,8	12	17	Fair	Fair	Fair	included bark, slight lean
1426	Blue Oak	3	4,6,2	10	20	Fair	Fair	Fair	included bark, codominant trunks, trunk scar, bark damage
1427	Blue Oak	2	5,3	6	10	Fair	Fair	Fair	lean, bark damage, included bark, codominant trunks
1428	Blue Oak	2	6,5	10	25	Fair	Fair	Fair	included bark, codominant trunks
1429	Blue Oak	3	4,2,2	6	8	Fair	Fair	Fair	included bark, multiple trunks, trunk scar
1430	Blue Oak	3	4,5,8	10	20	Fair	Fair	Fair	included bark, multiple trunks, bark damage
1431	Blue Oak	1	34	40	35	Poor-Fair	Poor	Poor-Fair	asymmetrical canopy, included bark, lean, limb failure, trunk rot, wood plank
1432	Blue Oak	1	30	30	45	Poor-Fair	Poor	Poor-Fair	trunk rot, limb failure, asymmetrical canopy, lean, limb rot
1433	Blue Oak	1	12	10	25	Fair	Poor-Fair	Fair	slight lean, asymmetrical canopy, bark damage
1434	Blue Oak	1	15	37	27	Fair	Poor-Fair	Poor-Fair	asymmetrical canopy, lean
1435	Blue Oak	1	29	30	65	Fair	Fair	Fair	included bark, limb rot
1436	Blue Oak	1	35	35	45	Poor-Fair	Poor-Fair	Poor-Fair	included bark, lean, asymmetrical canopy, limb rot, limb fail
1437	Blue Oak	2	21, 32	35	32	Poor-Fair	Poor-Fair	Poor-Fair	lean, asymmetrical canopy, included bark, codominant trunks, bark damage, limb rot, wood plank
1438	Blue Oak	1	20	22	15	Poor-Fair	Poor	Poor-Fair	lean, asymmetrical canopy, limb rot, trunk rot
1439	Blue Oak	1	33	40	57	Fair	Fair	Fair	included bark, limb rot, bark damage
1440	Blue Oak	1	39	30	42	Poor-Fair	Fair	Fair	wood plank, included bark, slight lean, limb rot
1441	Blue Oak	1	38	42	60	Poor-Fair	Poor-Fair	Poor-Fair	trunk rot, included bark, slight lean, limb rot, limb fail
1442	Blue Oak	1	49	42	65	Poor-Fair	Fair	Poor-Fair	limb failure, limb rot, included bark
1443	Blue Oak	1	47	27	42	Poor	Poor-Fair	Poor-Fair	trunk rot, included bark, limb failure, trunk rot, limb rot
1444	Blue Oak	1	29	27	50	Fair	Poor-Fair	Fair	lean, limb rot, burrow at the base of the trunk , included bark, asymmetrical canopy
1445	Blue Oak	1	38	27	35	Poor-Fair	Poor-Fair	Poor-Fair	included bark, burl, trunk rot, trunk fail, asymmetrical canopy
1446	Blue Oak	1	38	25	27	Poor-Fair	Poor	Poor-Fair	topped, power lines, weight lmb, included bark, lean
1447	Blue Oak	1	43	27	32	Fair	Fair	Fair	limb rot, included bark
1448	Blue Oak	1	34	27	30	Fair	Fair	Fair	included bark, topped, utility lines
1449	Blue Oak	1	34	30	35	Poor-Fair	Poor-Fair	Poor-Fair	nails in the trunk, included bark, topped, utility lines, burls, pruning cuts
1450	Blue Oak	1	41	25	32	Poor-Fair	Poor-Fair	Poor-Fair	limb rot, trunk rot, included bark, burls, epicormic growth, utility lines
1451	Blue Oak	1	39	30	45	Fair	Fair	Fair-Good	utility lines, included bark, weighted limbs, asymmetrical canopy
1452	Blue Oak	1	24	15	30	Fair	Fair	Fair	sapsucker damage, dieback, slight lean, included bark
1453	Blue Oak	1	18	17	25	Fair	Fair	Fair	dieback, included bark, slight lean
1454	Blue Oak	3	17,32,26	32	45	Fair	Poor-Fair	Fair	multiple trunk at base, lean, included bark, dieback, epicormic growth, trunk fail, trunk rot
1455	Blue Oak	1	18	40	20	Fair	Poor-Fair	Poor-Fair	lean, dieback, lean, asymmetrical canopy
1456	Blue Oak	1	30	50	25	Poor	Poor	Poor	partially uprooted, trunk rot, trunk death, included bark, dieback, exposed roots, lateral trunk

Appendix D Tree Survey Data

Tree Number	Tree Species	No. of Trunks	DBH (inches)	DLR (feet)	Height (feet)	Health	Structure	Vigor	Notes
1457	Blue Oak	1	14	45	8	Poor	Poor	Poor	limb rot, trunk rot, lateral limb, epicormic growth, dieback, included bark
1458	Blue Oak	1	29	27	42	Poor-Fair	Poor-Fair	Poor-Fair	asymmetrical canopy, bark damage, limb rot, trunk rot, exfoliating bark
1459	Interior Live Oak	2	6,3	10	12	Fair	Fair	Fair	lean, included bark, dead tree limbs on trunk
1460	Interior Live Oak	4	8,9,14,19	20	27	Fair	Fair	Fair	multiple trunk, bark damage, lean, exposed roots, dieback
1461	Interior Live Oak	6	3,6,5,8,2,10	20	20	Poor-Fair	Fair	Fair	bark damage, exfoliating bark, multiple trunks, lean, included bark, dieback, limb rot
1462	Interior Live Oak	5	5,6,7,7,7	15	22	Fair	Fair	Fair	multiple trunks, included bark, dieback, slight lean
1463	Blue Oak	1	24	27	35	Fair	Fair	Fair	limb rot, included bark, exfoliating bark, dieback
1464	Blue Oak	1	19	30	37	Fair	Fair	Fair	dieback, included bark, lean, asymmetrical canopy
1465	Blue Oak	1	34	25	27	Poor-Fair	Poor	Poor-Fair	lean, weighted limbs, included bark, asymmetrical canopy, dieback, limb rot
1466	Blue Oak	1	33	22	47	Fair	Fair	Fair	included bark, dieback
1467	Blue Oak	1	40	30	42	Fair	Fair	Fair	burrow at the base of the trunk, slight lean, included bark, limb rot
1468	Blue Oak	1	36	40	35	Poor-Fair	Poor-Fair	Poor-Fair	severe lean, included bark, dieback, limb rot, weighted limbs
1469	Blue Oak	1	32	25	32	Fair	Poor-Fair	Fair	included bark, lean, asymmetrical canopy, epicormic growth
1470	Blue Oak	1	30	27	35	Fair	Poor-Fair	Fair	lean, included bark, limb rot, asymmetrical canopy
1471	Blue Oak	1	29	25	45	Poor-Fair	Fair	Fair	lean, asymmetrical canopy, limb rot, fire damage
1472	Blue Oak	1	40	30	27	Poor	Poor	Poor	trunk fail, severe trunk rot, trunk cavity
1473	Blue Oak	1	43	30	47	Fair	Fair	Fair	asymmetrical canopy, included bark, limb rot
1474	Blue Oak	1	39	30	42	Fair	Poor-Fair	Fair	included bark, old wood duck nest box, epicormic growth, limb rot, fused limbs, weighted limbs
1475	Blue Oak	5	7,3,3,2,2	8	12	Fair	Fair	Fair	included bark, bark scar
1476	Blue Oak	1	40	27	37	Fair	Poor-Fair	Fair	weighted limbs, included bark, pruning cuts, burls, limb rot
1477	Blue Oak	1	42	27	35	Fair	Fair	Fair	included bark, limb rot, epicormic growth, pruning cuts, burls
1478	Blue Oak	1	42	25	37	Fair	Poor-Fair	Poor-Fair	included bark, weighted limbs, limb rot, bark scars, epicormic growth
1479	Blue Oak	1	28	27	37	Fair	Fair	Fair	included bark, burls, epicormic growth
1480	Blue Oak	1	33	30	47	Fair	Fair	Fair	included bark, limb rot,
1481	Blue Oak	1	38	22	35	Fair	Fair	Fair	included bark, weighted limbs
1482	Interior Live Oak	1	6	6	12	Fair	Fair	Fair	lean, included bark, dieback
1483	Blue Oak	3	3,3,2	5	10	Fair	Fair	Fair	multiple trunks, included bark, slight lean
1484	Blue Oak	1	8	6	12	Fair	Fair	Fair	included bark, epicormic growth
1485	Blue Oak	5	2,2,1,1,4	6	12	Poor	Poor	Poor	bark scars, exfoliating bark, included bark, multiple trunks, trunk rot
1486	Blue Oak	1	42	30	32	Fair	Poor-Fair	Fair	burls, included bark, weighted limbs, limb rot
1487	Blue Oak	1	51	27	40	Poor-Fair	Poor-Fair	Poor-Fair	limb fail, trunk rot, woodpecker damage, included bark
1488	Blue Oak	1	40	27	47	Fair	Poor-Fair	Fair	limb rot, included bark, trunk rot, burls
1489	Blue Oak	1	25	25	42	Fair	Poor-Fair	Fair	burls, limb rot, included bark, bark damage
1490	Blue Oak	1	41	20	32	Fair	Fair	Fair	included bark, burls, limb rot
1491	Blue Oak	1	38	27	32	Poor-Fair	Poor-Fair	Poor-Fair	burls, included bark, limb rot, trunk rot, nest cavities
1492	Blue Oak	1	33	25	45	Fair	Fair	Fair	bark damage, included bark, limb rot

Appendix D
Tree Survey Data

Tree Number	Tree Species	No. of Trunks	DBH (inches)	DLR (feet)	Height (feet)	Health	Structure	Vigor	Notes
1493	Blue Oak	1	23	25	20	Poor	Poor	Poor	trunk rot, hollow trunk, trunk fail, woodpecker damage
1494	Blue Oak	1	35	25	47	Fair	Fair	Fair	dead tree on trunk, included bark, burls, limb rot
1495	Blue Oak	1	19	20	35	Fair	Fair	Fair	asymmetrical canopy, included bark, limb rot
1496	Blue Oak	1	15	22	27	Fair	Poor-Fair	Fair	lean, included bark, asymmetrical canopy, epicormic growth
1497	Blue Oak	1	31	22	42	Fair	Fair	Fair	asymmetrical canopy, included bark, limb rot
1498	Blue Oak	1	43	22	47	Poor-Fair	Fair	Fair	included bark, limb rot, trunk rot, exfoliating bark, woodpecker damage
1499	Blue Oak	1	46	32	42	Poor-Fair	Poor	Poor-Fair	lean, trunk rot, wood planks on trunk, included bark, trunk fail, woodpecker damage, weighted limbs
1500	Blue Oak	1	50	25	40	Poor	Poor	Poor	partially uprooted, lateral trunk, hollow trunk, trunk split, included bark

Appendix C

Summary of Regulatory Agency Coordination

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Appendix C

Summary of Regulatory Agency Coordination

U.S. Fish and Wildlife Service

The design alternatives were reviewed with U.S. Fish and Wildlife Service (USFWS) staff on October 1, 2020. Since the concept of a trail through the Study Area was included in the OSPOMP, further consultation with the USFWS is not required unless a vernal pool is directly impacted. Since the vernal pools in the Study Area were preserved as part of previously permitted projects, any impacts to these features may require a higher than usual mitigation ratio so that the total mitigation incorporates this project and that required for the previous project. Consultation with the USFWS for impacts to vernal pools would be done through the Section 10 process by developing a small-project Habitat Conservation Plan. Consultation with the USFWS for impacts to VELB may be done through the Section 10 process or through Section 7 as part of a permit from the U.S. Army Corps of Engineers (USACE), depending on whether the impact to VELB is a result of impacts to federally jurisdictional waters (USFWS 2020).

U.S. Army Corps of Engineers (USACE)

Under the current Navigable Waters Protection Rule, which was adopted January 23, 2020 and went into effect June 22, 2020, the creeks and drainages and immediately adjacent wetlands may be considered waters of the U.S. and subject to federal jurisdiction. The vernal pool and seasonal wetland complexes may not be waters of the U.S. Although the USACE did review and approve the OSPOMP at a time when vernal pools were subject to federal jurisdiction, their interest in any future projects in the open space preserve will be limited to waters within their jurisdiction (USACE 2020). Any impacts to creek channels or other jurisdictional waters will require a permit under Section 404 of the Clean Water Act. Since these impacts are expected to be small, they are expected to qualify for a Nationwide permit.

California Department of Fish and Wildlife

The design alternatives were reviewed with California Department of Fish and Wildlife (CDFW) staff on September 30, 2020. If there are impacts to riparian areas and creeks, the standard Lake and Streambed Alteration Agreement (LSAA) application will be required. Additionally, if any state listed special-status species are identified in the Study Area prior to construction, CDFW should be consulted to determine appropriate avoidance measures or if an Incidental Take Permit (ITP) might be necessary (CDFW 2020).

Regional Water Quality Control Board

The Regional Water Quality Control Board (RWQCB) regulates impacts to waters of the state. Under the State Wetland Definition and Procedures for Discharges of Dredged or Fill Material to Water of the State, adopted on April 2, 2019 which went into effect on May 28, 2020, all surface waters in the Study Area, including vernal pools, seasonal wetlands, and drainages are considered waters of the state. An application will be required to be filed with the RWQCB prior to impacting any water of the state.

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Appendix D

Summary of Second Survey Results

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Introduction

The City of Roseville is studying the feasibility of developing a paved multi-use trail within Mahany Park open space which will ultimately connect with existing and proposed paved trails nearby. Part of the Mahany Park open space project area is a public park, but most of the area is considered an open space preserve. Currently, when visitors walk or bike through the area, they create dirt paths that can damage the endangered plants and wildlife within the open space preserve. The study will evaluate factors such as creeks, sensitive habitats and wildlife, topography, safety, aesthetics, and land use impacts. The open space has use limitations and trail suggestions will be considered within those constraints.



Map of the Mahany Park open space study area

In [May 2020](#) as part of the feasibility study, the project team offered community members an initial opportunity to provide important input to help inform the feasibility study. Based upon technical analysis and community input from the online community survey, the project team developed several alternative trail alignments. From October 31 – November 13, 2020, the project team hosted a subsequent online community survey to understand community preferences for the draft western and eastern alignment options using a contextual map-based questionnaire. The survey featured three options for western trail segment and two options for the eastern segment. The project team received more than 320 responses from community members.

Methodology

The online community survey provided participants an opportunity to learn more about the feasibility study and provide their thoughts on the proposed trail alignments. The project team received 326 submissions from community members. A full list of the comments submitted is available in the Appendix.

To build awareness about the feasibility study and the online community survey, the project team in collaboration with the City's Public Information Officer, promoted the survey via the City's existing communication links (email, newsletters and social media). Promotional lawn signs with the URL address were also placed within the public right-of-way of the trail and neighboring community.

Based upon the following metrics, significant community awareness was created:

- More than 1,200 webpage impressions
- Instagram more than 2,500 impressions/Facebook more than 3,800 impressions
- Nextdoor more than 1,900 impressions
- Twitter more than 5,800 impressions

The online survey consisted of western and eastern alignments maps and a series of questions asking participants to rank their favorite alignment.

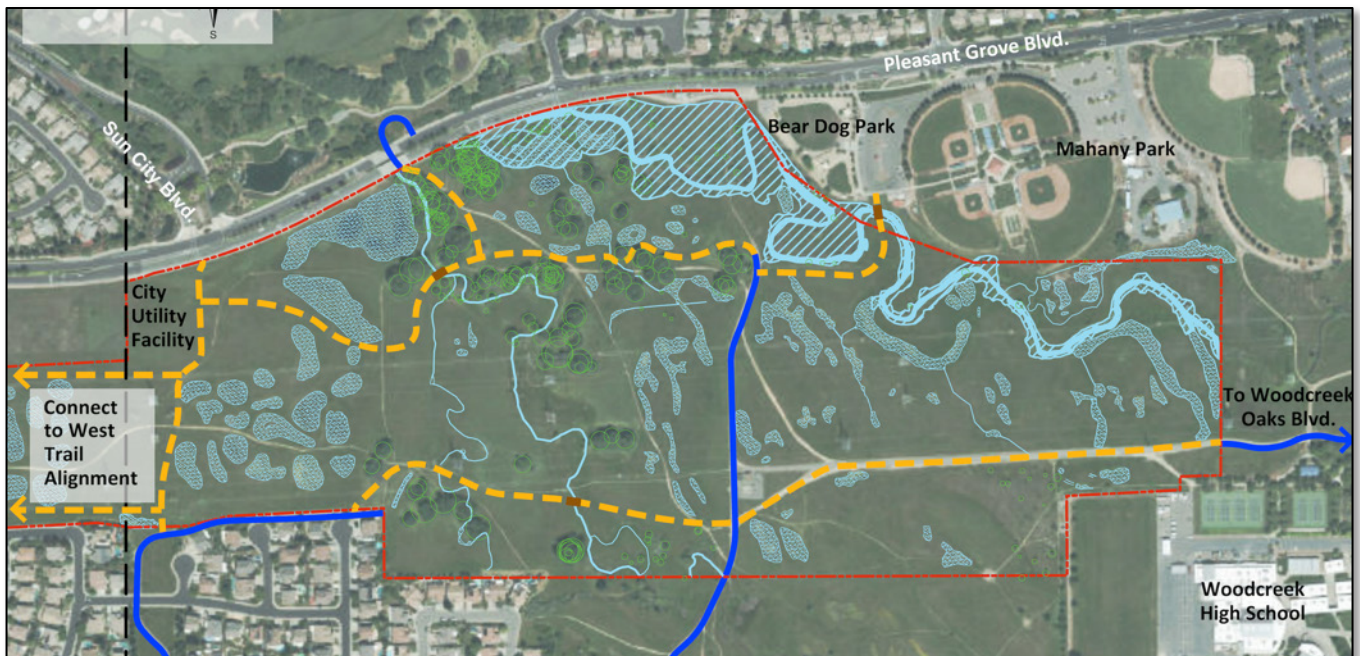
Western Trail Alignment Preference: **West Option A**

Respondents liked the connection to Fiddymment Road, the north-south connection, and the overall alignment.



Eastern Trail Alignment Preference: **East Option B**

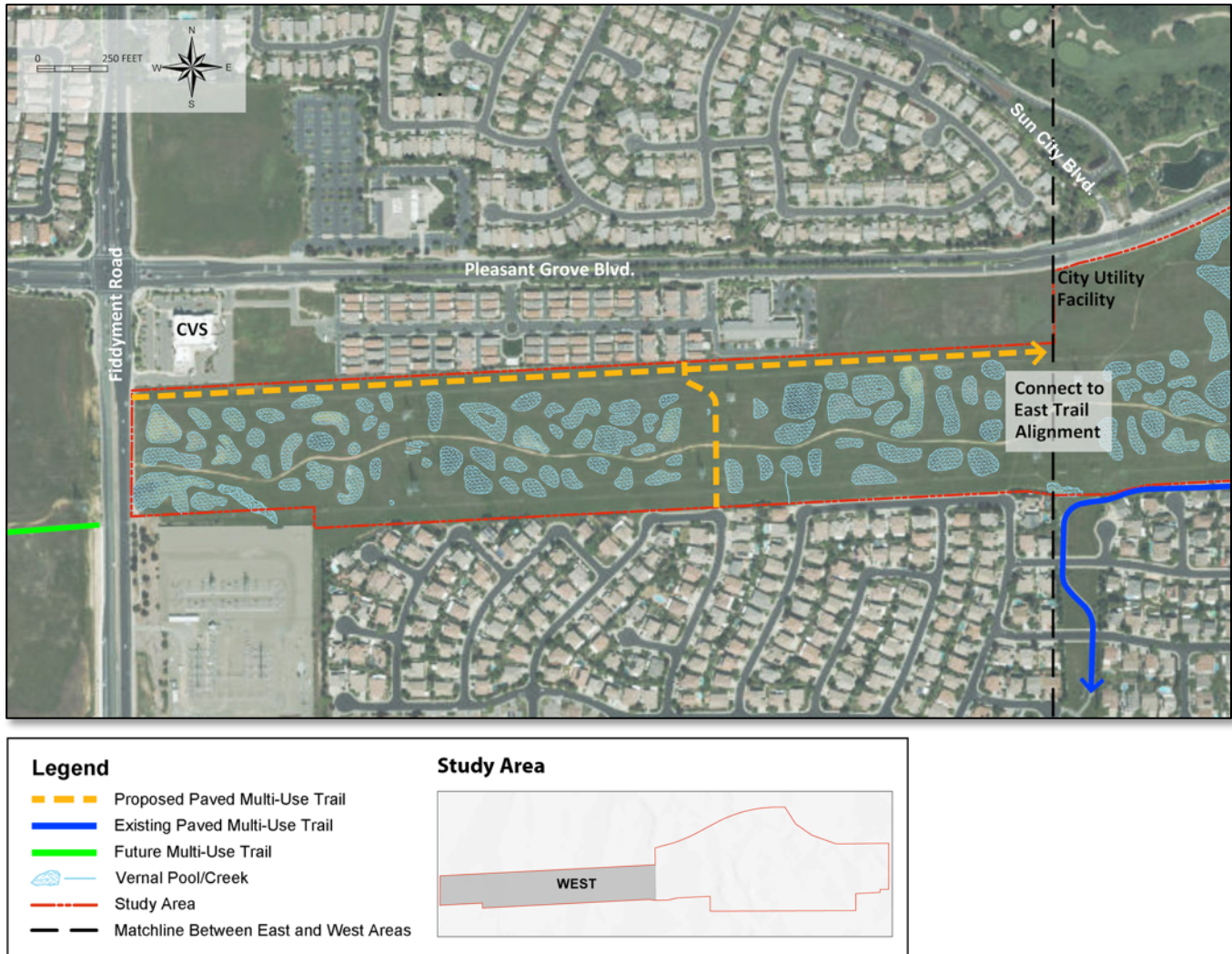
Respondents liked that East Option B would add a paved trail network in the open space that connects to the existing access from Pleasant Grove Boulevard.



Trail Alignment Options

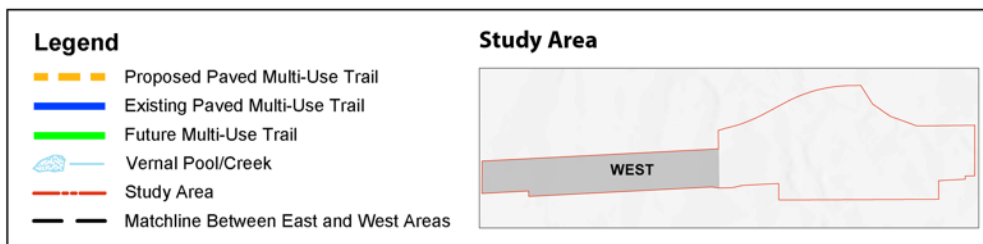
Below are all of the trail alignment options presented in the survey, how they were ranked by participants, and reasons that participants liked or disliked the options.

West Option – A: First Preferred Option



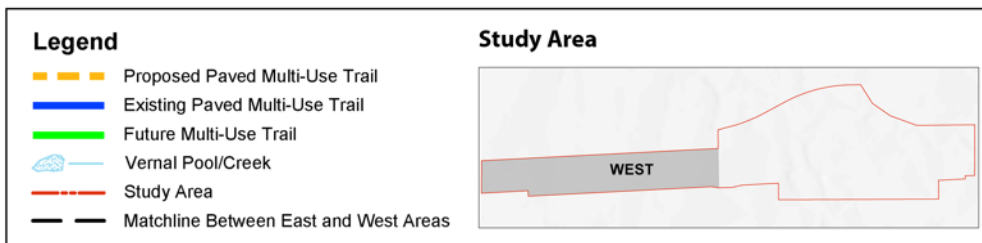
- Participants liked that the trail connects to the sidewalk on Fiddymont Road and is closest to the signalized Pleasant Grove Boulevard Intersection crosswalk
- Some respondents disliked the connection to Fiddymont Road.
- Participants liked the north-south connection between neighborhoods and that construction is expected to be most cost-effective due to straight alignment and avoidance of sensitive habitats.
- Some participants disliked that the trail is on the north side of the study area near adjacent neighborhoods.

West Option – B: Second Preferred Option



- Participants liked that the trail is on the south side of the study area
- Participants also liked that West Option B has minimal effect on sensitive habitats.

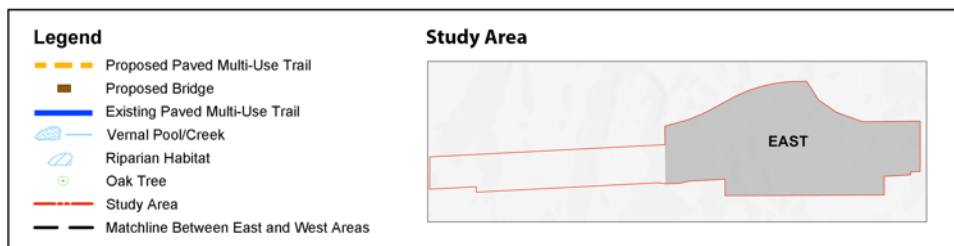
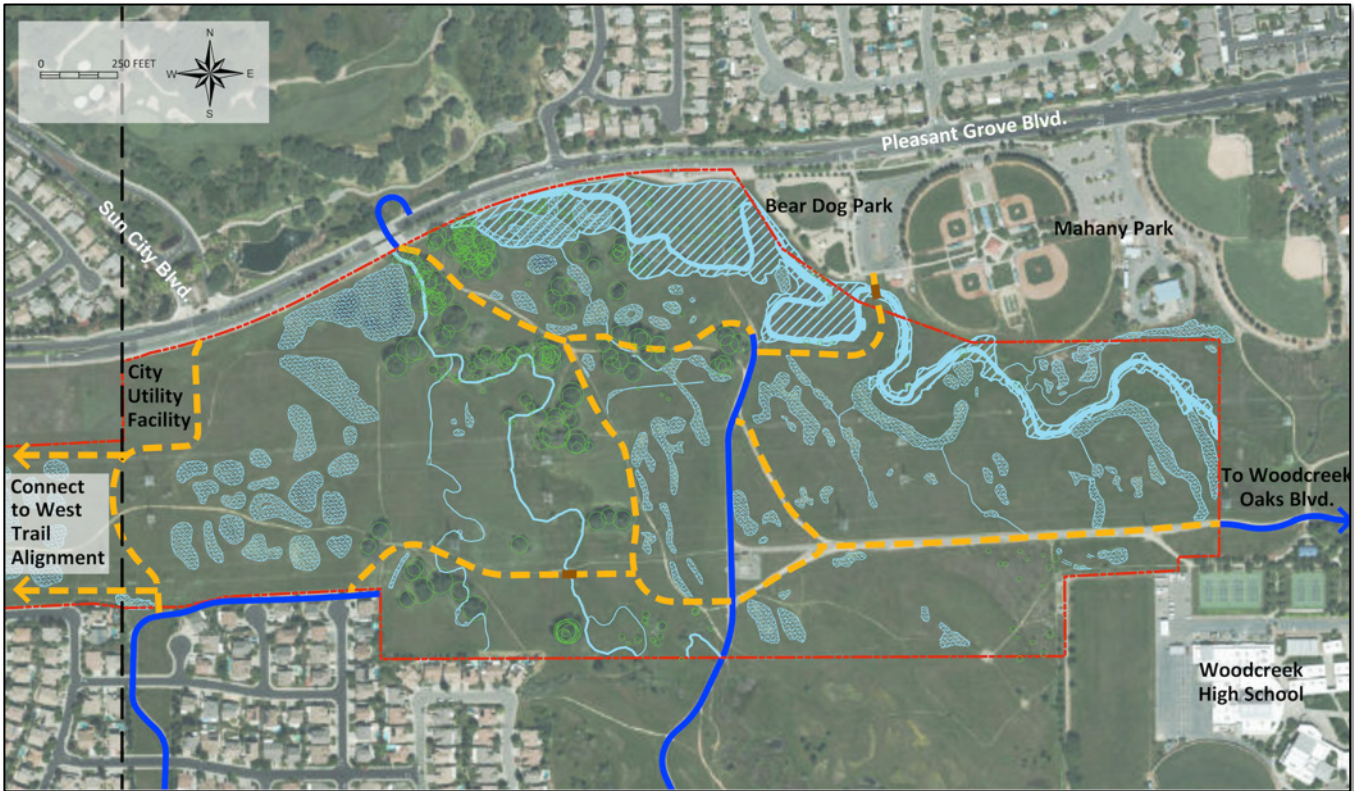
West Option – C: Third Preferred Option



- Some participants liked this option because it would require bike/pedestrian mid-block crossing improvements on Fiddymont Road (e.g., signals, pavement markings, lighting, etc.), allowing for a direct trail connection.
- Participants did not like that this alignment will affect a vernal pool and sensitive habitats and that the alignment is longer
- Participants also disliked that this option would be more costly to construct.

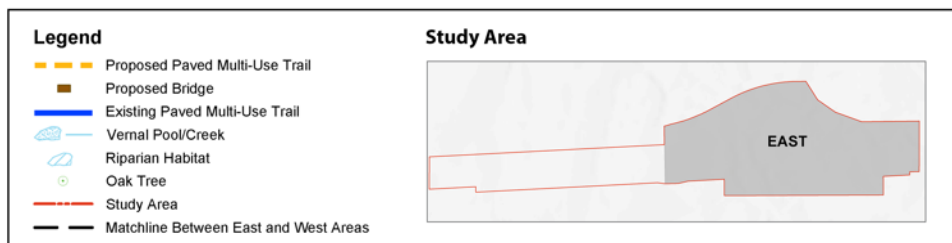
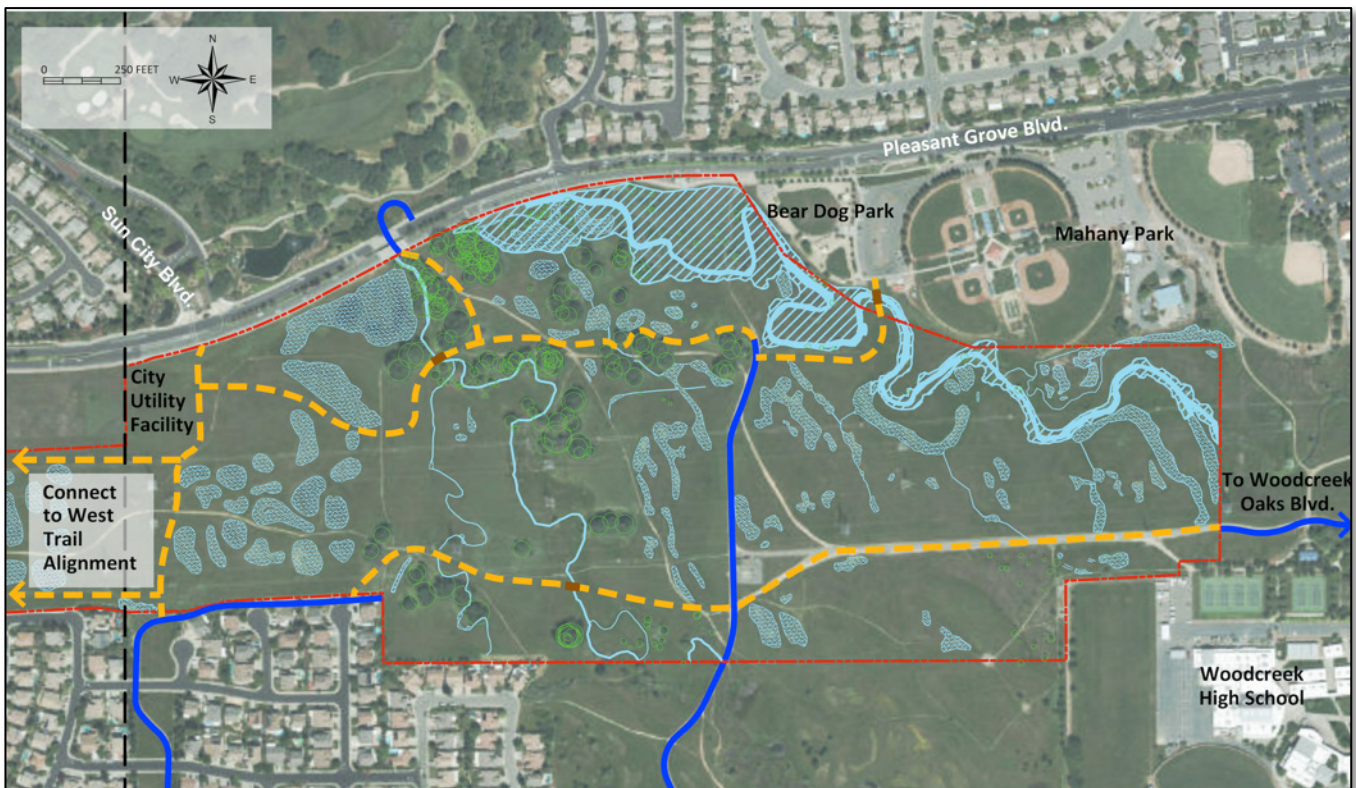
Next, participants reviewed and ranked the eastern alignments.

East Option – A: Second Preferred Option



- Participants liked the additional bridge.
- Participants also liked that portions of trail travel through oak woodland, offering shade.
- Some participants liked the north-south connection through the center of the loop.
- Some participants did not like that trail users would need to travel along Pleasant Grove Boulevard to connect to the trail.

East Option – B: First Preferred Option

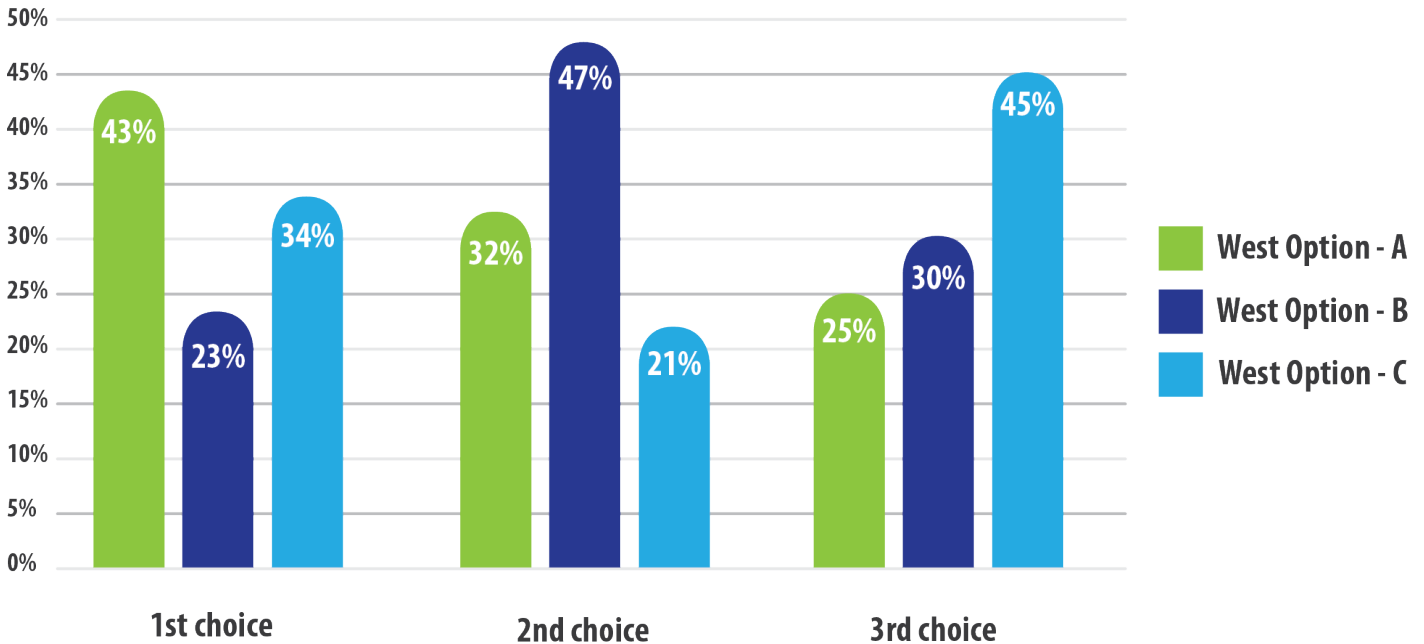


- Participants liked that this option provides a longer recreational “loop” trail.
- Participants also liked the two additional bridges over creeks.
- Participants liked that the trail would allow for trail users to stay off of Pleasant Grove Boulevard and that more portions of trail travel through oak woodland, offering shade.

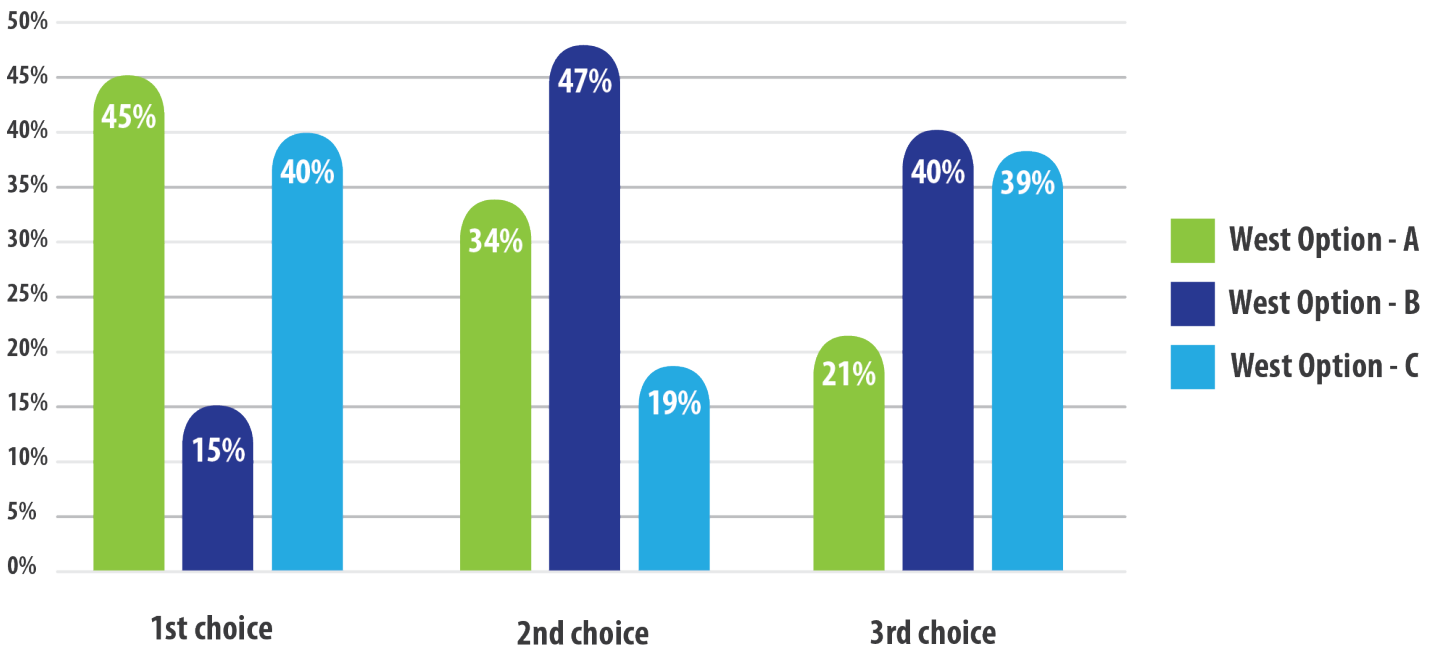
Overview of Results

Below is a compilation of the feedback received.

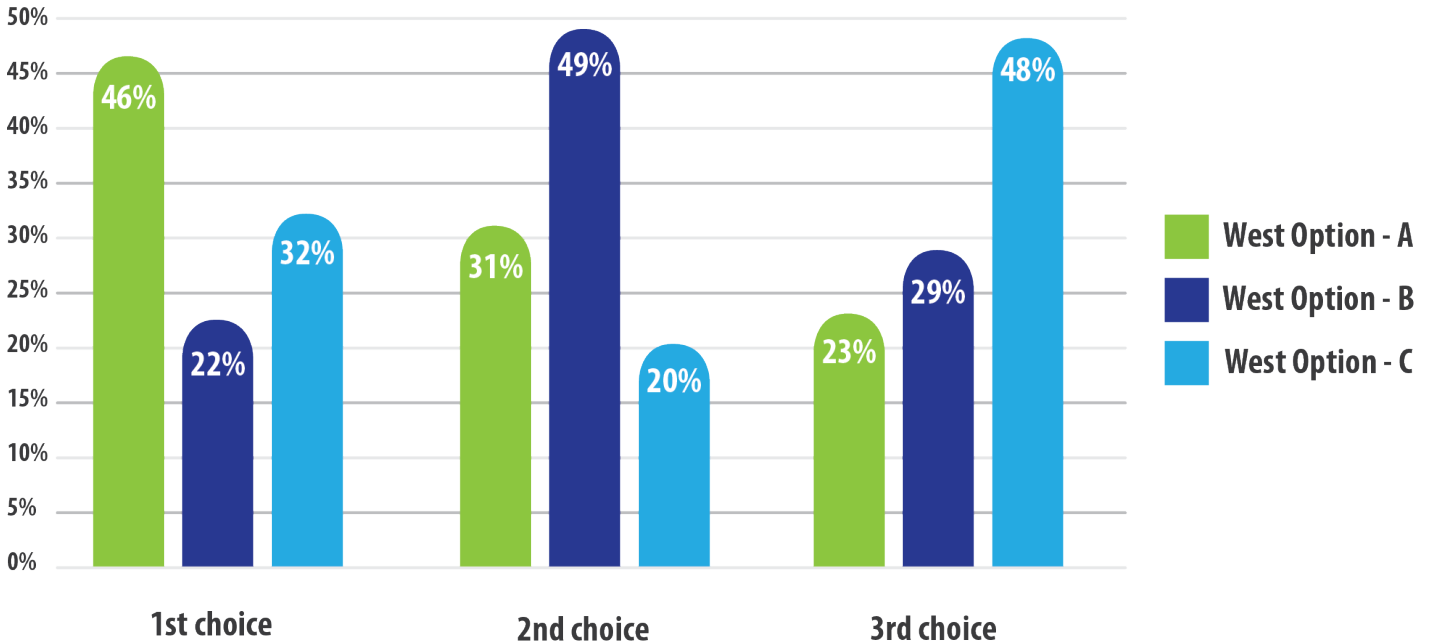
Question 1: Which connection to Fiddymment road do you like the most? (Ranking question)



Question 2: Which north-south connection do you like the most? (Ranking question)



Question 3: Which alignment do you like the most? (Ranking question)



Question 4: Do you have any comments about the West Options?

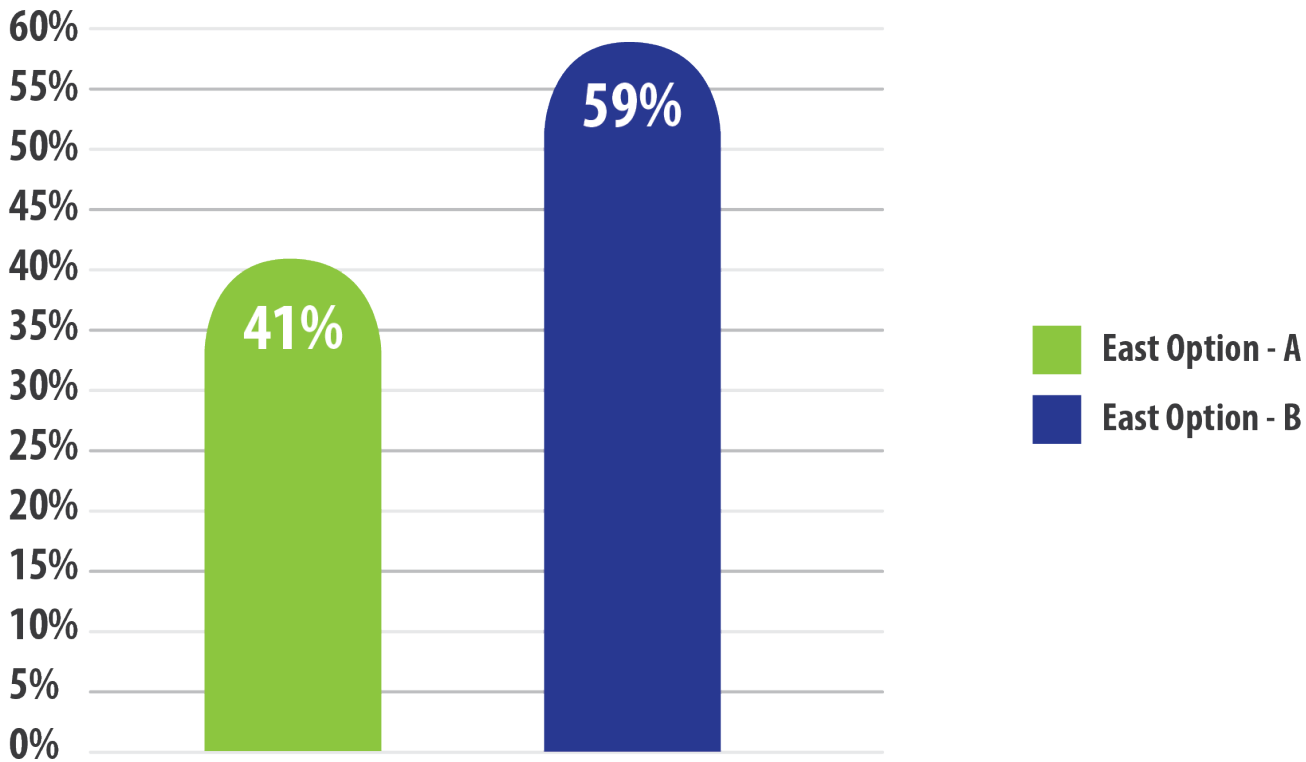
Those who were proponents of West Option C liked the midblock crossing at Fiddymment Road and felt it would be the safest for pedestrians and cyclists. Respondents noted that Option A and B might lead to more unsafe crossings since trail users might be less likely to travel north to the Pleasant Grove Boulevard intersection to cross Fiddymment Road. Respondents also liked that Option C will directly connect to future trails. Those who were against Option C disliked that it was the most expensive option presented, and that it might take longer to construct than other options.

Besides trail user safety, community members were also most concerned with choosing an option that would minimize damage to nearby wetlands and vernal pools. Some comments noted that Option B seemed to be the best option for mitigating impacts to nearby sensitive habitats.

Commentors also showed concern over the paved trail being too close to the northern and southern neighborhoods, and that trail users might disrupt nearby residents. Other concerns listed were that the straighter trail options would not be exciting or interesting for runners and cyclists. Respondents also listed concerns over whether trail users would continue to use the dirt paths, even after a paved trail is constructed.

Finally, respondents wrote about wanting to include other amenities along the trail such as fencing near the entrances for more privacy, benches, bathrooms, dog waste stations, signage and trees or structures to provide shade. A few respondents suggested keeping some dirt paths for runners and people using mountain bicycles.

Question 5: Which option do you prefer?



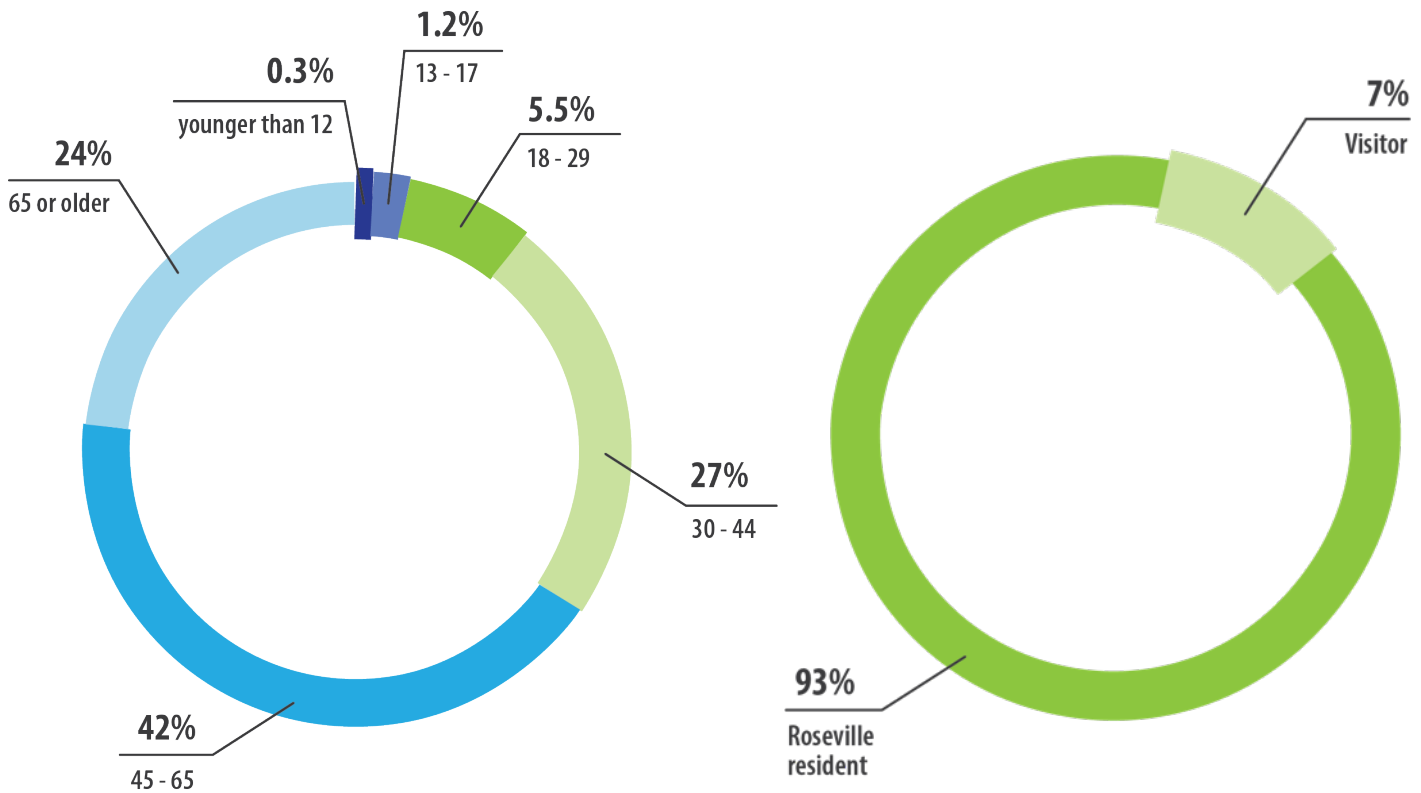
Question 6: do you have any comments about the East Options

Community members who supported East Option B liked that the paved trail on the north side of open space would allow trail users to stay off of Pleasant Grove Boulevard. Respondents also noted that the paved trail should minimize the impacts to the surrounding wetlands and vernal pools. Many respondents also showed excitement about the bridges and expressed their desire for more ways to cross the creeks in the open space.

Some community members wrote that they liked certain aspects of both Option A and Option B and suggested that the City incorporate some traits from each alignment. Respondents noted that the north-south connection in Option A would be beneficial for overall connectivity within the open space and would reduce the chance of trail users traveling off of the paved trail.

Finally, people also mentioned a number of other amenities that they would like to see implemented along a paved trail such as exercise stations, benches, signage, a basketball court, and increased shade from trees.

On the final page of the survey, respondents could optionally answer some questions about demographics.



If people answered that they were a Roseville visitor, they were also asked to identify which city they are from. Below are the answers:

- Rocklin (4)
- Colfax (2)
- Antelope (1)
- Auburn (1)
- Citrus Heights (1)
- Davis (1)
- Diamond Oaks (1)
- Granite Bay (1)
- Sheridan (1)
- Lincoln (1)
- Loomis Basin (1)
- Sacramento (1)

Communication

- The City of Roseville posted the online community survey on the Mahany Park Open Space Trail Project website, roseville.ca.us/MahanyTrail. Project webpage impressions since survey launch: **1,247**
- Emails to project, trail alert, and main city email newsletter lists: **54,927 recipients total**
- Instagram story and posts: **2,573 impressions, 129 engagements**
- Facebook story and posts (city, parks, and transit accounts): **3,842 impressions, 275 engagements**
- Nextdoor post: **1,968 impressions**
- Twitter posts (city, public works, parks, and transit accounts): **5,810 impressions, 156 engagements**



Informational H-stake signage posted around the open space

Informational H-stake signs were also placed around the Mahany Park open space.

Appendix

- List of community member comments

Appendix of Comments

Social Media Comments

- City of Roseville Facebook:
 - I really love this plan
 - Great idea! Let's do it
 - Great project!
 - I love Roseville's paved trails! My kids and I made use of many of them over the summer as we began an exercise routine. There are some beautiful places in this city! Mahany park would greatly benefit from one of these, as that is a really nice place to walk, but the dirt paths are hard to walk on and hard to see. I would absolutely make good use of a paved trail back there if it were put in! Thanks!
- City of Roseville Instagram:
 - Yes!
 - I'm into it, but I do like the dirt paths for off road biking too.
 - This would be great! We need more trails
 - Yes! As a cyclist, Roseville needs so many more paved bike paths. Folsom has so many more than us!
 - Keep it unpaved
 - No leave it dirt
 - Great idea.
 - Yes please!
- City of Roseville Twitter:
 - What kind of pavement material? Possibly recycled tires would be my choice.
 - If it was up to me, I would just leave it the way it is. We love riding our bikes on the dirt trails and checking out the wildlife. With all of the building that's going on in Roseville, I'm starting to see more and more wildlife making their homes in this area.

Do you have any other comments about the West Options?

- Option A would be a safer alternative to Pleasant Grove, particularly for commuters and errands. Also, may be more viable to plant shade trees.
- Option West B is the best choice for everybody since it connects to existing paths!
- There should be a loop. Bikers, and joggers may like the straight long distances, but disabled, people with strollers and dog walkers tend to go shorter distances and need some shade. Pavement is hot, especially in that big open field in the spring, summer and fall. Since there is none of that in that area a shorter, quicker walk would be more satisfying, hence a loop.
- Use the North to South connection you have on Option A. Use Option A's trail from Fiddymont to the North South connection, but then when the trail reaches the neighborhood have it continue alongside the neighborhood (south) until it meets the pre-existing trail (going around the small vernal pond). I

think that will avoid most vernal ponds and give some variation to the path.

- Alignment should be on the south as this would be more visible and help make it feel safer. Should connect with future trail with mid-block crossing at Fiddymment otherwise there will be too many illegal crossings which would be dangerous.
- Power line crews will continue to use an unpaved path through the area to inspect and maintain the lines. This necessary access will then ensure the continued presence of an unpaved path through the area. For many activities (biking and trail running/hiking) the softer natural surface is desirable, and this alternative dirt trail will be attractive. The city should consciously plan improvements to the unpaved maintenance corridor that would stabilize the soil and support the use of this more natural trail environment instead of assuming that the dirt alternative will naturally disappear when asphalt becomes available. See the example of an uncontrolled dirt path alongside the paved path in the Morgan Creek area between Cook Riolo and Wallerga Roads.
- Please have a mid-block crossing at Fiddymment for safety reasons.
- No power lines above trail is a plus, as is avoiding sensitive habitats. Keeping the connection closer to the Fiddymment Road and Pleasant Grove intersection may keep jaywalking to a minimum.
- Add fencing to prevent people from cutting corners at the path entrances.
- Lease amount of damage to wildlife areas is key.
- Being redirected to the corner signal is definitely out of the way. Any chance for future planning a walkway over Fiddymment? That would make the alignment of C better except for power lines.
- Please add a signal bike crossing on Fiddymment. Pleasant Grove and Fiddymment is too busy for bikes and walking. Also, even though straight paths are cheaper, curves are much more fun for all.
- I would like a path that isn't as straight and winds around some of the pools or creek if possible. Also, if it can connect or have close connection to existing trails that would increase use in total.
- Rather than a non-porous paved trail, how about a gravel trail?
- Consideration of how to connect to the trail when coming from the Pleasant Grove and Fiddymment intersection for bicycles needs to be addressed. It would be dangerous to ride a bike south on Fiddymment against the flow of traffic to access the trail. There is not a safe place to cross Fiddymment to get to the trail for bicyclists riding in the bike lane with southbound traffic on the west side of Fiddymment. The future connection and streetlight are likely years away from being installed.
- Please consider bridges over creeks.
- Please keep existing dirt trail for mountain biking and trail running
- Trail needs to be on south side to prevent countless people trails cutting across vernal pool habitat from the large development.
- I like the direct trail connection to future trails.
- Honestly, I don't like any of the east-west layouts. Why not just pave down the existing dirt trail under the power lines? I run this trail at least once a week and I'd probably keep running the dirt trail, even if any of these 3 paved trail options existed. The existing dirt trail has numerous bends and slight elevation changes. This is more "interesting" to run than a boring straight path.
- If money was not an issue, Option West-C would be my first choice.
- Curious how you keep people from still using the old trail. It's really nice how it's in the middle. Feels more secluded and peaceful.

- No pavement.
- Seems the least impacted currently, needs more pet waste mitigation if it will be more accessible/heavily trafficked.
- Please do not have impact on the vernal pools!! That's one of the charming aspects of this area.
- Connecting at Fiddymment with future multi-use trail is also key (option West C). A big part of the problem with some of Roseville's trails is not having a clear connection between sections.
- I oppose the designated area. I think the designated area needs to adjoin the library and creek area. Not service the new development area. The area you suggest should be paid for by the developers of the new subdivisions W. Roseville Area.
- I do not agree with this project at all and voiced my opinions and concerns on the first survey. Many were of the same opinion about how this will damage the open space beyond repair. Option West C is the worst option and I do not know why it is even considered, given the increases cost and disruption of fragile vernal pools and wildlife areas.
- We live in the houses on Pleasant Grove near CVS that this walking path may go by. I am absolutely opposed to this path going by our tract. While there are fences up for the individual homes that are along the nearby path, I foresee people walking or riding through our neighborhood. So please consider putting this path on the other side like Option B.
- I think the city should seriously consider connecting trail segments that are divided by major roads (e.g., Fiddymment) with pedestrian/bike bridges. Crossing streets such as Fiddymment or Pleasant Grove at cross walks is a harrowing experience, especially during rush hour when drivers are anxious to get to their destination. I'm especially uncomfortable making use of the cross walks with my young children. Having lived in the Valencia/Santa Clarita area in Southern California my family and I made use of the many miles of trails and paseos that were connected via pedestrian bridges across major thoroughfares. This allowed us to access parks, open space, restaurants, grocery stores, and even the mall without ever stepping into a busy road with heavy traffic. The bridges also allowed the city to place holiday decorations, patriotic decorations, and community announcements across roadways which beautified the already visually pleasing bridges and allowed the city to communicate important announcements and city specific messages to every commuter that drove under each bridge. I think the investment in public safety alone would make pedestrian bridges a worthwhile investment. The more our trails are connected the better they will be utilized by both young and old in our community.
- Please quit allowing building and drilling to take place on what was once a protected wetland. This path would not be an issue if apartments, senior living and a CVS were not built in the first place. Protected should be protected.
- Just don't damage the fragile ecosystem, it very important and must be protected. Trash cans must be added to help get trash off the ground and in a place it's supposed to be.
- Wish a nice park with more ziplines and more variety of playgrounds.
- I want whatever has the smallest impact on plants and wildlife in the area.
- would be nice to have signage and shade, at least a little.
- Connecting to the West Park - "future multi-use trail" is extremely important in opting for an alignment project. Fiddymment is a dangerous, large roadway that is not conducive to pedestrian/bike traffic in order to walk all the way down to the

signal crosswalk and then walk back up to the connecting trail. It would have been nice to have a curved trail option but appears not feasible with the vernal pools.

- C option affects the Vernal pools so it shouldn't be done even though it is nice to have more north and south options.
- Why can't there be a continuation of the paved path from where it is (vernal pools) along the black line to Pleasant Grove? Getting to PG without having to jump a stream is key.
- I would do a combination of the options. The trail that runs down the middle of the area makes the most sense for a new paved trail. Minimal disruption, already graded, most likely. Easy to punch in some access points from the neighborhoods to the north and south. It would also be an easy connection to the trail on the east side of Fiddymment Road.
- Need Nighttime lights on trails.
- Trail should lead to crossing Fiddymment again existing signal to optimize bike and per safety.
- Why can't the north/south path just be direct and connect to the road besides the upside down "T" shaped building? It just seems more practical and less invasive to those families living right there on that street where it's designed to come out currently. If straightened it could come out into the parking lot of that building even so people could use their parking lot too for easier, off street access to the trail.
- Honestly this is not what I was expecting for a "Mahany Trail" I was thinking of trails behind the Mahany library and beyond but not all the way to Fiddymment. I live at pleasant grove and Woodcreek oaks and that's where I walk not down near Fiddymment. This is not useful to me.
- Option A in my opinion is the best choice.
- Please make a basketball court :)
- We shouldn't pave this area. People will go off the paved path and we will do more harm by bring people and vehicles into this area to pave it.
- I think it's very important to consider input from those whose homes are adjacent to these trails. We don't use the west side of the trail very much, but I feel it's important to connect it to the future trail heading west.
- I'm not sure that paving a trail will help the nature preserve. People like to walk, bike, and run on dirt paths. We have paved surfaces everywhere. This project seems unnecessary.
- Any bridges or paths need to be fire department accessible, and bridges weight rated for fire department apparatus, etc.
- Excited we are putting this together. Another terrific investment in the great city of Roseville
- Alignment C is my favorite but I'm choosing other options based on environmental impact. My concern is that a trail will be developed that is more environmentally friendly, but that people will continue creating their own paths since the trail doesn't go where they want it to go. Perhaps there will be less enviro impact in the long run if paths are built based on where people go.
- This proposed trail must connect to the trail on the other side of Fiddymment Rd, and not rely on the huge intersection that is Fiddymment Rd and Pleasant Grove Blvd. This would give all the neighborhoods south of Pleasant Grove Blvd. quick, easy, and safe access to this proposed Mahany Trail. Additionally, we need to make a safe way for trail users to cross Fiddymment Rd by using a tunnel or bridge, and not by having to stop traffic or creating a crosswalk style crossing, even if it were with a traffic signal. This is because traffic on Fiddymment Rd often exceeds 50

mph and other parts of West Roseville, such as the Pleasant Grove Creek Trail on Fiddymment Rd just north of Blue Oaks, uses a tunnel underneath an overpass.

- The best thing about the exiting dirt trail is that it has some movement/ curves. All the proposed paths appear to be straight. I understand the balance required to protect the environment, but strictly straight paths are boring to ride. The blue oaks to veterans park is a beautifully planned paved trail. I would have liked to see an option more similar to that one.
- I'm concerned that peeps won't walk to the signalized Pleasant Grove intersection crosswalk and will instead try to cross Fiddymment Rd causing road hazards. The closer you can get to a signal will increase the likelihood that peeps will use it. I like Option C the best because it will have a dedicated crosswalk right where it's needed.
- Don't put the trail on the sides near homes. One of the reasons we like this dirt trail is it allows my children and myself to feel out of the city by going through the middle of a wetland or tree covered area. Putting the trail near the home lines will cause noisy walkers near back yards that have always been quiet. There must be an option D that goes through the middle.
- Are these really the only options you're going to give us?
- West Option C for direct connection to trail west of Fiddymment is crucial for ease of users. Diverting to Pleasant Grove is out of way and unlikely to be used.
- I like C for the better connection to future trail west of Fiddymment - though cars speed quite a bit on Fiddymment so would be somewhat concerned with cars, unless there is an actual stoplight there.
- I live in the neighborhood along pleasant grove. How can you put an entrance way, which is right in front of someone's house and down their driveway to the trail? I wouldn't want a bunch of random people walking down my drive and house front!!! so, to me none of those options are acceptable. or maybe your map is not showing where people would enter the trail--it looks to me that in a, b and c some of the entrance ways are off Camino real.
- It's hard to favor any of these options when I live on the west side of Fiddymment. One of my main concerns is the traffic that turns south onto Fiddymment from PGB. Most motorists are too focused on the green light when trying to get south regardless if there are pedestrians walking in crosswalks. What kind of viable option would be available to connect the path from west park neighborhood? I am a cyclist that on average rides 1-2 hundred miles a week. Please consider looking into social media fitness apps as far a current frequently ridden route.
- Boring straight trail will become a fast speedway for bikes. The cost savings will translate into a safety nightmare.
- The most critical thing is that we have paths that connect to one another. Building short little paths that will "eventually" connect to the larger system is a tactic that has been going on for two decades. From North/West Roseville, there is no safe way to commute by bike into Rocklin, Sacramento or certain places within our own city. While we support anything that benefits our environment and the ecosystems of specific parcels, the City of Roseville need to connect existing pathways and focus on making pathways safe through public outreach and adequate signage (walkers/bikers on the left/right).
- Is it possible to accommodate trail runners by putting signage on approved/safe for the local environment dirt trails? This comment applies to any of the open spaces in Roseville.
- Protect the vernal pools.

- Option B seems like a good way to cross from neighborhoods with the least impact for the venial pools yet giving you the opportunity to be the middle and absorb their beauty. Keeping costs down. The only thing I don't like is being under the power lines.
- The most cost effective and least impactful to sensitive areas design is best. One concern is whether people will cut through areas from the north if an actual trail isn't nearby. People will often take (or make) the path of least resistance.
- Please provide public bathrooms.
- Easy connection to other existing or future trails is really appreciated. The ability to use a trail without having to go to a streetlight crossing is preferred.
- I'm not sure a north-south connector is indicated at all; or maybe more are needed. Bikers, walkers and dog walkers are going to enter the wildlife area at access point within a few blocks of their home, regardless of whether it's paved. I would NOT put benches or potties in the area - they will be magnets for after-dark mischief.
- C is too long.
- Where is the bridge located? Ask the kids that go to Woodcreek they ride their bikes that way every day.
- Don't pave it! Please do what bay area does and used a more natural look like crushed granite.
- There is no picture depicting option C....but it sounds awful since it affects sensitive areas, is under power lines, and will cost more. Option B...is not good because it's under power lines and people with some heart issues are affected by being close to power lines. Option A is the best, and only reasonable option because it is not under power lines and will be along a short number of neighbors. I think the less impact on residents (from noise on trail) and less impact on sensitive areas makes this option A much better choice.
- This will be a nice addition to the super nice trails in Roseville. You have and continue to add trails we will really enjoy using in the future. I wish other cities were as willing and proactive in having great parks and multi-use trail. We love them. Keep up the great work.
- I like that the path entrance on Option west B allows access for all neighborhoods to the paved access points, so one single neighborhood street isn't the only spot for access.
- Are there any trees along any of the routes? If not, could some native trees be planted along the south and west sides of the trail to provide shade?
- Option West-C should be eliminated due to having to unsafe crossing of Fiddymment, especially when there are two other existing safe crossing options.
- My main concerns are Fiddymment is too busy to add a new crossing, so I suggest only using the existing light. Also, the fences seem like a natural privacy barrier on choice C. I think it's bad idea to direct foot traffic so close to the homes that are along Pleasant Grove.
- The existing service road through the middle of the west segment would be the best solution (not A, B or C) for the following reasons. Corridor already disturbed and with a paved path the width of the roadway it can and should be maintained by the entity that owns the power line corridor. Adding another trail alignment will simply split the users into two zones creating more human disturbance within the preserve area. Linkages can be made north-south to connect the neighborhoods. Cost may be slightly higher initially however long term maintenance would be absorbed by others.

- Why not pave the existing foot path already created?
- I don't want to have to go in front of someone's garage to access the trail. None of the north side connections are good. Alignment A would allow multiple north side connections at more public places. On the south side, please connect to the middle of the parallel segment of St Basil instead of in front of someone's home. Maybe consider a second south side connection at Apple Way.
- I like B the best. It connects the best with trail that is already there. And has minimal impact on the environment.
- Multiple access points would benefit neighboring housing.
- I like option C the best, but if the cost is prohibitive (no grant money), then I would go with whatever is cheapest and fastest to construct.
- They are all going to be parking issues. Hopefully most users are those who live in the area and walk to the open space
- Occasional benches would be nice along the paved part.
- Keep the connection close to future multi-use trail.
- Impact on natural habitats (vernal pools/sensitive habitat) should be none to extremely minimal! Having some inconvenience to the human user of this trail is worth saving these crucial environments!!!
- Two connections need to be considered strongly to the community that is to the north or the south. Community connectivity is key for users of the facility. Alternative A appears to be the least connective to all the communities and should not be consider any further.
- Keeping a separate dirt path is something that should also be considered. As a runner I like having the option to go off pavement. The city of Lincoln's bike paths are cut wide to allow side areas of unpaved gravel. Such paths allow for a variety usage.

Do you have any other comments about the East Options?

- All unacceptable.
- Don't hurt the environment, the dirt trails are better on our joints and won't make it so out in the summer, and spring; it needs to be as cool as possible, paint the trail if paved
- Do not neglect the demand for dirt trails. Woodcreek High School has a mountain bike team that practices on the dirt trails that are currently in this area and there are many other uses who prefer to have dirt surfaces to recreate on.
- Please make 2 proposed bridges since they are really need! Especially useful during times of rain when the creek water rises and makes it safer for pedestrians to walk. In option A you have a north south connection that should still remain in option B. Bicyclists/joggers go longer distances. Then casual walkers...that large loop needs to be cut in the middle as option A. The trails have been cut by people who use and love that park Because of the necessity.
- They both look like they cut up the habitat. Is it possible to go around?
- More paving are more options for bikes, which is great!
- Consider non-paved trails in addition to paved trails. I understand the need for a paved trail to connect the bike paths, but not all established trails need to be paved.

- A connector trail on the north end of the park would result in high bike traffic where many people like to enjoy nature and walk dogs. It would be good to keep most of the main bike path on the south end of the park where it already is.
- I think there's potentially a better option than either of these for the East.
- Love the idea of loops.
- I prefer B because I think it is important to have the bridge in the oak trees because people will still attempt to cross there and continue to break down the stream slopes, but people will also continue to use the other trails on the east side of the stream, so you should plan on paving those as well. Those trails would have minimal impacts.
- I like having a loop trail, I would like to have multiple avenues crossing the creeks though.
- I oppose the W. Fiddle-mart Area, designated area. I think the designated area needs to adjoin the library and creek area. Not service the new development area. The area you suggest should be paid for by the developers of the new subdivisions W. Roseville Area.
- I just want whatever has the smallest impact on the wildlife there.
- I bicycle in this area a lot. I do it for exercise and to ease stress. I never plan to go shopping on my bicycle. I do stop for ice cream rarely.
- I like the longer loop trail. Good for bike riding.
- Very pleased this project is under consideration. Thank you for listening to the residents! This will be super helpful for children traveling to school and the park!
- These are both good options, But I like A option a little better.
- Thank you for the bridges.
- It is smart to use existing dirt trails as a basis for the paved multi use trails. People already know where they go and how to access them.
- I prefer more direct north-south connection between Junction and Pleasant Grove.
- Comment was made about one trail having more shade...you could use the acorns shed and plant them alongside the trails after establishing them, that way they improve the trail, and are native. I also hope there are distance measurements on a sign/map somewhere on site. Maybe a few benches under those trees and a fountain at the street, near the map, to fill bottles before starting.
- I appreciate the desire to minimize impact to oak trees and riparian habitat, however East Option B is more like the trails that are currently used and will continue to be used even once the paths are paved. A longer path with shade will be appreciated by the community. The bridges will be a wonderful addition to allow year-round access to the wilderness area.
- We shouldn't pave this area. People will go off the paved paths anyway. We are going to do more harm to the environment by paving the area. People and vehicles will have to go off the path to pave it. Not paving is the best option.
- Make a basketball court it will get a lot of people
- I actually like both of these options. But I like that option A has minimal impact to riparian habitats and oak trees. Could plan C be like A but without the north south portion in the middle? Just have the blue existing trail.
- Same comments about fire department accessibility.

- It would be great to have some outdoor exercise stations along the trails!
- There should be pull-up bars, dips bars, pushup bars, ab stations, and other outdoor calisthenics equipment scattered throughout the trail system.
- A smaller loop would be better for small children and those with limited mobility.
- B avoids having to travel a short stretch along Pleasant Grove.
- People love bridges ... especially in this social media world!
- I regularly run through this area. Although I like the idea of some paved paths, I also really enjoy running on the dirt paths through the oaks - it's one of my favorite parts of my run. I would figure out what ad-hoc paths are being created that are causing problems for habitat and put paved trails in such that they would deter people from these ad-hoc paths, while leaving main dirt paths intact.
- The trail connection to Del Web from the open area needs be fixed. It is always muddy from drainage.
- Again, whichever pathway minimizes environmental impact and maximizes the networking of trails.
- Is it possible to accommodate trail runners by putting signage on approved/safe for the local environment dirt trails? This comment applies to any of the open spaces in town.
- Key point for me is more portions of trail trail through ok woodland, offering shade.
- Please provide public bathrooms.
- Like the bridges that will allow year-round use. Also, like going through oak woodland.
- Option B allows for loop completely internal to the area - this is more preferable than having to be on the Pleasant Grove sidewalk for part of the loop. It would be great if the paved trail could have dirt-gravel 'shoulders' for those wishing a lower-impact walk or run. A few trash cans and dog stations would be awesome, but benches and potties will just facilitate the after-dark substance abuse and mischief.
- Ask high school kids what they prefer? East option B-leaves the middle protected for the little animals. What about the beavers? Are you relocating them?
- Option B is good because a family can stay in the park on the trail the entire time...i.e., not have to go to pleasant grove to make a loop (required in option A). Note: it would be nice if option B had a second trail between the north and south trails, like option A has.
- Don't pave it, used a more natural look like crushed granite.
- In the summer the shade on both options a & b will be nice to have. I also like that the recreational loop will be longer in option b.
- Same comments as I made for the West options.
- A longer trail through the trees is great for bikers, which is how we would use the trail from our home in Sun City.
- North-south connections important because those are currently established routes that will continue to be used.
- Please keep some of the existing dirt roads / paths as unpaved designated jogging tracks (pedestrians only).
- Honestly, these are both good options.
- Good that you are keeping paved connection to commuter buses stop

- The missing paved sections in B will still be heavily used. The logical plan is to provide multiple pathways through points for the amount of traffic on the trails.
- Option A provides the most connectivity as well as paths along what appears to be unpaved paths already. The section of Option B that is from the "City Utility Facility" and Pleasant Grove Connection where the Blue U-Turn is located should be include as part of Option A. This would allow for users to have two separate looped routes without having to access Pleasant Grove Blvd which is a high traffic stress facility for alternative modes of transit.

Please share any additional comments or questions about the Mahany Park Open Space Trail Project.

- Not pleased with any development within this entire area. Leave it alone.
- I walk the trail a lot. Will be glad to see more paved path. I am a Sun City resident.
- Please keep any traffic away from the homes on Pleasant Grove.
- Just be Conscious about your surroundings, they environment is the best part about Roseville, and it needs to be kept clean and healthy. I'm an athlete these things are very important to me!
- Roseville has a very large population of cyclists who prefer off-road type riding using mountain bikes as well as many trail-runners who prefer the reduced physical impact that dirt trails provide. Currently, Roseville offers ZERO officially planned or sanctioned trails for this use. This has led to Roseville citizens traveling away from the city for other locations in Granite Bay, Lincoln, Auburn and Folsom to ride and run on dirt trails, as well as the "spontaneous" creation of trails like those that currently crisscross the Mahany Park Open Space and "Wildlands" to the west of the hospital. While adding to the paved trail network is important, it is not the only way to improve citizens access to quality recreation in our city.
- New to the area...just found the ravine trail from old town to Sierra College Rd. Based on that trail I wholeheartedly support this project. It will be a wonderful addition to our neighborhood and city.
- Did you know coyotes come into that field at night and pass under the bridges on Pleasant Grove into Sun City? Occasionally they can be seen early morning returning to the golf course. Also, thank goodness, we still might Hear and see a pheasant. Early in the spring a great horned owl had a nest with her 2 babies in this area. A lot of people responsibly use the area, but I fear encouraging Even more people with PAVED trails might scare these beautiful animals away. Can't it just stay the way it is with the exception of those bridges??
- Please provide water fountain, including lower connection for dog water too.
- Curves, inclines, declines, bridges, loops, trees, creeks, all of these features create a fun trail to recreate on. Don't avoid the features that are already there. Put as much of the trail next, in, over and through them.
- Please add a restroom.
- Let's keep it as natural habit as possible. That's why people attend the area. Keep it simple.
- Again, PLEASE consider a variety of pave/non-paved trail options.
- Would be nice to have trail connect somewhere to parking lot in front of Riley Library where there is plenty of parking that doesn't compete with the dog park and Pony League baseball fields.
- Please maintain some non-paved trails in the for easy mountain biking. My kids are learning to mountain bike in this area and it is great to have a few miles of dirt trail so close by. I am also in favor of

paved multi-use trail(s) as well for walks and running, especially to connect the new neighborhoods with the trail system.

- Please create the main bike path on the south end of the park where the most traffic already is, and trail would have little to no environment impact.
- The idea of additional trails in the area is always a big plus for Roseville residents.
- However, the trails are built, they will add greatly to the recreational value of the adjacent communities for me and fellow bikers/hikers, this will expand our options, especially during wet weather months. And I favor finding ways to protect habitat and undo the ways that social trails have impacted the habitat. Are there volunteer groups interesting in being ""friends of Mahany Park?"" Perhaps a volunteer organization could help with certain maintenance and improvement. Examples: restoring signs that explain the habitat, adding rest stops, doing fund raising for other maintenance.
- I am just hoping that people on bikes will stop creating their own paths through the sensitive habitat areas. I love the idea of making the area more accessible, especially since I often have a stroller.
- It would be really cool if you could build fun flowy mountain bike trails with jumps
- So excited. Roseville is such a great place to live.
- How will this be paid for. Developers W. Subdivisions should be paying for this green belt park.
- I didn't see the first survey, but this is one of my favorite areas to ride my bike through. One of my favorite things about Roseville is the great bike lanes and paths that make it easy for me and my family to go by bike.
- Love this. Looking forward to riding from West Park to Mahany on these trails very soon!
- Please, please choose to protect our wildlife first.
- If option C for the west side is selected, there should be a pedestrian/bicycle bridge to safely cross Fiddymont road since vehicles pass at high speeds.
- I am against any of these projects. The open space should be left as it is - natural for all of the creatures that inhabit the area to have their habitat and for the few people that walk on the natural paths or ride a bicycle to enjoy nature as it is.
- It sure would be nice if there were cross walks across the main streets where the trails terminate. Just to give the cars a heads up that there may be pedestrian traffic. I'm going to cross weather there is a cross walk or not (I do walk my bike). I do not like riding my bicycle the wrong direction on the road and I am not going to walk 1500 yards to the corner to cross at a light.
- Can you do anything to beautify that old pumping station? It's a decrepit eyesore and it stinks.
- As stated, this project is much needed and very appreciated! This will assist greatly with our children's access to schools and park areas! Thank you for creating an easily understood survey and summary of results!
- Don't forget garbage cans for dog waste and at least two benches.
- This project is long overdue - glad to see it is moving again!
- Need more trees for shade.
- I would hope that the trail being made would be made from as natural a material as possible, perhaps recycled tire shreds? Does it absolutely have to be paved? Natural as possible is best and as little intrusion into the wetlands as possible, the better, as we're already surrounded by plenty of concrete and asphalt. Maybe seek help with native

plantings by getting ahold of the Placer Co. Extension Master Gardeners who can help or direct you to help from college students or other groups promoting native plantings. They can be beautiful!

- Really hard to make a connection to the west end without seeing a map without seeing how it all for together or if I could access the trails safely now and what it would look like.
- It should be built in the least invasive way, so the habitat is protected.
- I love this area because it isn't paved. It's unfortunate that there are power lines there, but we all use electricity, so I get it. I don't see the benefit to paving when people go off trail regardless of a paved path and they are is going to be trampled so we can by construction workers so we can pave it.
- Once again, this project seems unnecessary. People like being in places that look more natural (although the power lines pretty much ruin that).
- It would be great to have some outdoor exercise equipment for the community, such as pull-up bars, parallel bars, and ab stations. Would really help encourage healthy lifestyle fitness practices for the community and for Woodcreek high students. The cost and maintenance would be very low but provide a lot of value to residents.
- Benches!
- Please create an undercrossing on Fiddymment Rd to create a safe way to cross Fiddymment Rd by connecting the proposed Mahany Trail to the future trail just on the other side of Fiddymment Rd serving the West Park and Sierra Vista neighborhoods south of Pleasant Grove Blvd.
- Though I live in Citrus Heights, I frequently use the multi-use trail systems in Roseville.
- In addition to Option A, there should be a bridge going over the Riparian habitat to connect to the existing path that stops just short of the creek. A paved path can then connect the Pleasant Grove sidewalk to the bridge. Currently, people bring make-shift materials to build their bridge...
- This would be wonderful! I'm a runner, and I much prefer the trails to running along busy streets.
- Very much looking forward to the improvements - thank you so much for doing this and for allowing community input!
- It's hard to favor any of these options when I live on the west side of Fiddymment. One of my main concerns is the traffic that turns south onto Fiddymment from PGB. Most motorists are too focused on the green light when trying to get south regardless if there are pedestrians walking in crosswalks. What kind of viable option would be available to connect the path from west park neighborhood? I am a cyclist that on average rides 1-2 hundred miles a week.
- Please make connecting the existing trails within Roseville a priority.
- Repeating my earlier comment here, but basically you have a decent amount of trail runners and off-pavement dirt trail users in the open spaces. This applies to current spaces, and future plans. If these users are unknowingly impacting the local species and environments, is it possible to have them accommodated in the plans for new trail work? Meaning, include in the plan for dirt trails that are of commensurate length to the paved trails with similar amenities (access to shade, logical routing, enough distance to be useful for runners, signage)? Also, recommend including enough groomed dirt trail directly adjacent/off the side of the paved trail so users can pass each other while maintaining more reasonable social distance. When the paved trails of this size are busy it is hard to maintain a social distance...except when there is enough room to step off the trail by four to six feet and keep running on

the side gravel/dirt. Hope that makes sense.

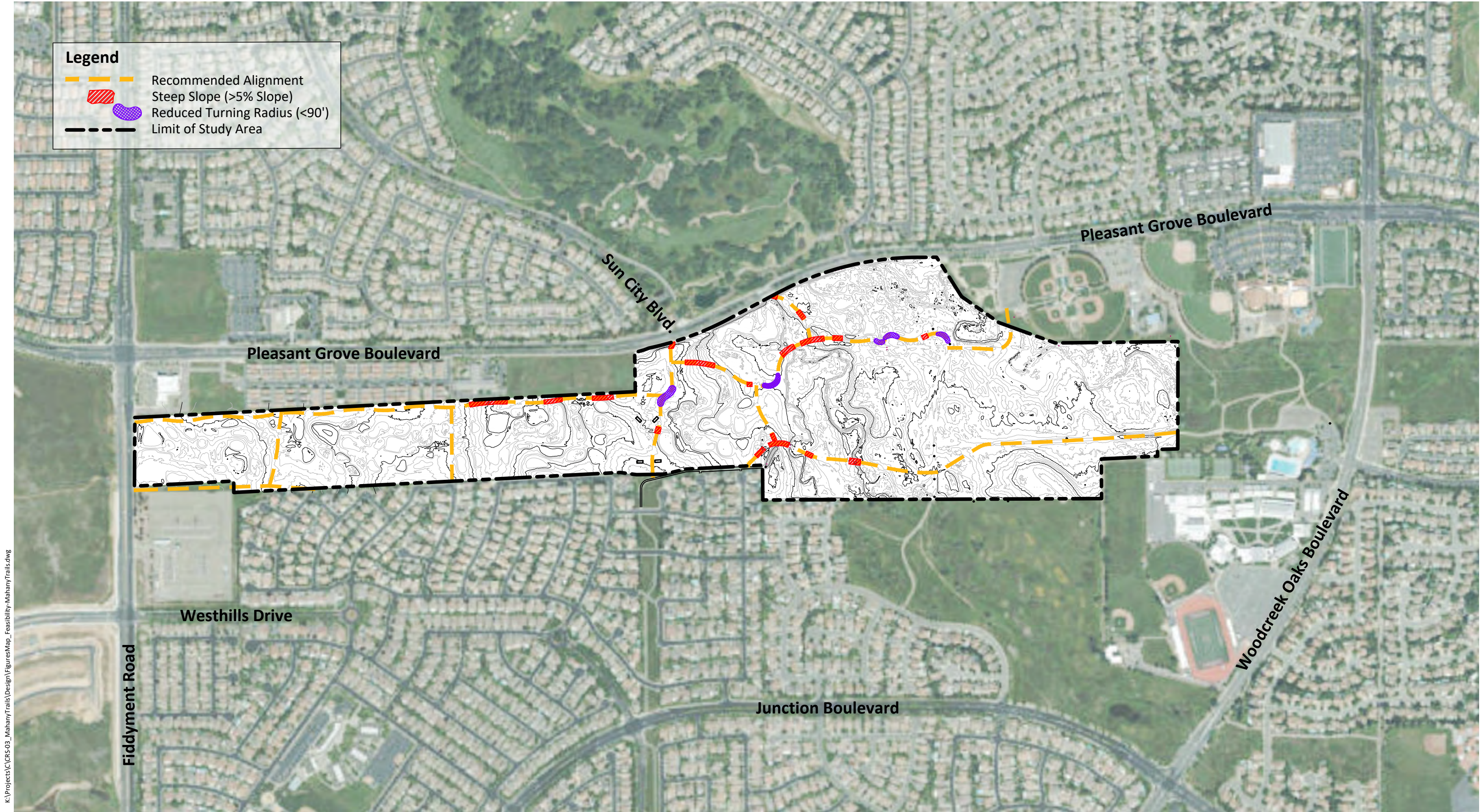
- I like to option you have proposed. It will be a great place to ride or walk when it is complete.
- It would be helpful if the plan also provided for a multi-use trail adjacent and parallel to the sidewalk(s) along Pleasant Grove Avenue, instead of depending on the use of sidewalks along Pleasant Grove Avenue. It is important that the plan provides for public bathrooms.
- For the west side, I would oppose any option that presages a new stoplight on Fiddymment. Please see previous comments in favor of a Dirt/gravel walk/run shoulder to the new paved trails for lower impact walking; and in opposition to benches and potties that encourage after-dark substance abuse & mischief. A few well-placed trash cans and dog stations would be awesome! Am concerned about the use of strollers on these trails - I recently had to detour around a group of three. Strollers that completely took up the trail, necessitating off-trail passage by everyone else.
- Please have the high school students put their input in, I think they would be honored to be included
- I think Roseville is great in how it creates these parks and trails for people. Families included. Though I think more porta-potti's would be nice...especially for families with kids. Adding trails in this park is a wonderful idea!
- A parallel dirt trail for runners and the Woodcreek HS MTB team would really be appreciated. I run in parks to avoid pavement.
- I am so happy this is finally getting done.
- The west option is boring. People are not going to walk along a fence line. They are going to continue to use the trail right thru the middle. There are NO parking options for getting on the trail in the Fiddymment area. The Eskaton apt lot is private and we already have scofflaws from the Camino Real homes parking in our lot because they don't have enough parking for their residents. CVS won't want people parking in their lot. The vacant land behind CVS is already a nightmare with abandoned cars, motorhomes on the dirt etc. and the city won't do anything about it. The trailer has been there 3 years and there are unregistered cars that have been there 2-3 years!
- This plan is long overdue and would create an environmentally conscious trail access for everyone.
- I'd love to see the trail eventually connect easily to the trail that goes through Diamond Oaks to get to the Fountains.
- I run early morning. I live between Junction and Baseline and use the bike path to head over to the Mahany area. I also will use the same area to do banking and light groceries. I also cross Woodcreek at Mahany Pool and use the bike paved area up there. I would love additional bike/paved space to connect over to Pleasant Grove and the Sun City area.
- I use the Bear Dog Park very often and appreciate trails connecting the communities to this park to ensure the continued use of the park. Please consider lighting along this path as users who would use the trail late at night may not feel safe.

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Appendix E

Grading Constraints

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TRANSPORTATION COMMISSION COMMUNICATION

Title: Fiscal Year 2020/21 Semi-Annual Transit Performance Report

Contact: Ed Scofield ecscofield@roseville.ca.us 916-869-9109

Meeting Date: 5/18/2021

Item #: 6.3.

RECOMMENDATION

No action is requested. This item is an informational update regarding the status of Roseville Transit operations and planning activities.

BACKGROUND

The Roseville Short Range Transit Plan 2018-25 (SRTP) was adopted by the City Council on May 1, 2019. The 2018-25 SRTP includes goals, objectives, and performance standards that provide a basis for evaluating the performance of the City's transit services during each fiscal year. The performance standards in the 2018-25 SRTP are updated (when compared to the prior SRTP). The FY20/21 semi-annual Transit Performance Report uses the updated performance standards as the basis for evaluating transit performance.

For this semi-annual report, staff will focus on ridership numbers and current planning projects. Financial performance measures are not part of this report and will be provided to the Transportation Commission as part of the Year-end Transit Performance Report. Roseville Transit's operating revenues are received as installments and reimbursements throughout the fiscal year. Because of this, ridership numbers are received sooner than revenues, which prevents staff from determining actual revenue statistics until later in the year. However, staff's current estimates indicate that revenues are coming in as budgeted, except that passenger revenues may be lower than anticipated. This is the result of continued low ridership due to the pandemic and free boarding offered on Local and Dial-a-ride services for the first quarter of FY20/21.

Ridership

The COVID pandemic continued to impact ridership numbers during the first two quarters of FY20/21. The statewide stay-at home order was issued in mid-March 2020 and continued through the 1st and 2nd quarters of FY20/21, resulting in continued low transit ridership and fare collection compared to previous years.

Overall Roseville Transit ridership for the first two quarters of FY20/21 was 62,022. FY19/20 pre-COVID ridership during this same period was 170,385. This represents an approximately 64%

drop in ridership from the previous year. This number is consistent with impacts felt by transit agencies throughout the United States. According to the American Public Transit Association (APTA), public transit ridership dropped by nearly 80% in April 2020 and remained more than 60% below 2019 levels through the rest of the calendar year.

Ridership results for the first two quarters of FY20/21 are shown in Attachment 1 and summarized below:

- **Overall** – The first two quarters of FY20/21 ridership consisted of 31,980 riders in the 1st quarter and 30,042 in the 2nd quarter. FY19/20 ridership (pre-COVID) consisted of 86,392 riders in the 1st quarter and 83,993 riders in the 2nd quarter. As stated previously, this ridership decline is largely attributable to the Statewide stay-at-home order.
- **Dial-A-Ride (DAR) (including ADA Paratransit)** – The first two quarters of FY20/21 DAR ridership consisted of 6,867 total DAR riders. FY19/20 ridership during the first two quarters (pre-COVID) consisted of 13,867 total DAR riders. This represents an approximately 50% decline from the previous year.
- **Local Fixed Service** - The first two quarters of FY20/21 Local Fixed Service ridership consisted of 49,029 total riders. FY19/20 Local Fixed Service ridership during the first two quarters (pre-COVID) consisted of 84,581 total riders. This represents an approximately 42% decline from the previous year.
- **Commuter Service** – The first two quarters of FY20/21 Commuter service consisted of 6,126 total riders. FY19/20 Commuter service ridership during the first two quarters (pre-COVID) consisted of 71,482 total riders. This represents an approximately 91% decline from the previous year. This significant reduction in ridership is in large part because most government office workers in Downtown Sacramento were teleworking.

While ridership continues to be well below recent pre-COVID numbers, FY20/21 overall ridership numbers for the first two quarters showed a 20% increase over FY19/20 4th quarter ridership numbers. This represents an encouraging sign that riders will slowly return to using transit as the stay-at-home order is lifted. However, staff expects public health and safety concerns associated with the pandemic to continue to impact overall travel patterns. According to the American Public Transportation Association (APTA), it is anticipated that ridership will remain at current levels through the third quarter of 2021 and slowly grow as the vaccine roll out continues. Ridership in 2022 and 2023 is expected to remain lower than 2019 pre-COVID levels due to relatively high unemployment rates and some employers allowing workers to continue to work remotely on a full-time or partial basis.

Service Quality

Service quality is measured by the number of preventable and non-preventable accidents per 1,000 miles traveled, on-time performance, and the number of road calls per mile traveled. As shown in Attachment 1, the average number of all accidents (preventable and non-preventable) has fallen slightly below the standards established for Roseville Transit. On the plus side, the number of road calls per mile traveled is almost 25,000, which is well within the established standard of one road call per 20,000 miles.

Roseville Transit's on-time performance is one of the most important numbers as it provides an indication of the reliability of the service offered to Roseville residents. Staff is happy to report that on-time performance for all three services has improved over FY19/20 levels. On-time performance for local service is 93%. On-time performance for commuter service is approximately 95%. While on-time performance DAR is 97%. Commuter and local route service is above or close to the standard of 95%, but consistent with prior year performance.

The FY19/20 Year-end Transit Report issued to the Commission in January reported that DAR's on-time performance was 69%. However, it has been determined that the actual number was approximately 96%, which is in line with the number for this quarter. The mix-up in DAR percentages is because DAR is an estimated pick/drop process in which passengers book their return trip farther out not knowing when their appointment may finish. In many cases, the appointment finishes earlier than anticipated and the passenger will often call Dispatch and request an earlier pickup time than what was scheduled. Although not always possible, we often accommodate their request and pick them up earlier than what was scheduled. However, by picking the passenger up earlier, the software interprets this as missing our pick-up window - even though we are providing a higher level of service. For this reason, our DAR on-time performance was shown to be much lower than what the actual number should have been. Staff has corrected this number and it now shows the on-time performance for DAR last year and this quarter to be well above the established performance standard of 90%.

COVID Update

COVID continues to have a significant impact on transit agencies throughout the United States. While it is not yet clear what the long term impacts COVID will have on transit, Roseville Transit continues to take precautions to maintain safety aboard Roseville Transit buses. These precautions include the following:

- Face coverings remain a state requirement for passengers and drivers.
- Social distancing aboard the bus is also a state recommended practice and is enforced on Roseville Transit.
- Roseville Fleet Maintenance staff finished installing driver barriers on all Roseville Transit buses in October of 2020.
- Buses continue to be disinfected every day.
- City staff and bus operators conduct temperature checks and exposure surveys each day before beginning a work shift.
- We inform passengers of potential exposure risks if we become aware of any COVID positive passengers (none identified to date) or drivers.

We know that some of the safety precautions described above will continue into the near future. However, some other COVID impacts, such as teleworking, may continue longer term and have a continued impact on ridership. Although uncertain, we are continuing to prepare for the future through transit planning activities at the regional, County, and local levels. We will keep the Transportation Commission updated as these planning activities progress.

Looking Forward

In addition to providing bus service to Roseville residents, staff is also managing a number of transit planning and capital projects. Here are some highlights of ongoing transit projects:

Reinventing Transit – Microtransit Pilot Program

Beginning in July of 2020, Placer County Transportation Planning Agency (PCTPA) staff began meeting monthly with Roseville Transit and other Placer County transit operators to evaluate the potential for microtransit service in Placer County. Microtransit is a form of demand responsive transportation that offers a flexible routing and/or flexible scheduling of buses or vans shared with other passengers. As a part of PCTPA's Reinventing Transit effort, City staff was tasked with identifying potential microtransit opportunities within the City. Three possibilities were identified:

1. Route L - Modify Route L by eliminating service east of Eureka Boulevard and replacing

service in the area with a microtransit option that provides on-demand service in east Roseville (Eureka Road, Sierra College Blvd. and Douglas Blvd.).

2. Route S – Modify or replace Route S with microtransit between the Santucci Justice Center and the Galleria.
3. Route M – Modify Route M (and possibly Route D) by terminating the route at Mahany Park and then provide microtransit options in the West Roseville/Sun City area.

The next steps in the process will be to hire a company specializing in microtransit services to analyze the potential locations for Roseville and Placer County Transit. Following the analysis, the selected company will then implement one two-year pilot program for Roseville Transit and one pilot program for Placer County Transit. If successful, staff will then plan on expanding microtransit opportunities to other locations throughout the City. The target date to implement this pilot program is in the fall of this year. Staff will periodically report back to the Commission with updates on this program.

South Placer Express Project – Staff continues to work out the details of the South Placer Express Project. This service will provide express bus service from Lincoln to Roseville (The Galleria, Sutter Hospital and Kaiser Hospital) to Light Rail at Watt/I-80. The City has received grants to purchase 5 battery-electric buses and their associated chargers. Grant funding is also available to run this service on a pilot basis for 3 years. The City expects to enter into a contract to purchase the chargers and buses this fall. Meanwhile, route details are being finalized with our partners with the goal of starting service in 2023.

Commuter Bus Electrification and Charging Station Project – The City has received federal grants to purchase 5 battery-electric buses to replace older diesel commuter buses, and state and local grants to purchase chargers and construct a charging station at the City's corporation yard. The contract for charging infrastructure engineering design has been awarded and 30% design of the charging infrastructure is complete. The Contract Award to purchase the 5 battery-electric buses is anticipated by June 30, 2021.

Respectfully Submitted,

Ed Scofield, Transit Operations Analyst

Jason Shykowski, Public Works Director

ATTACHMENTS:

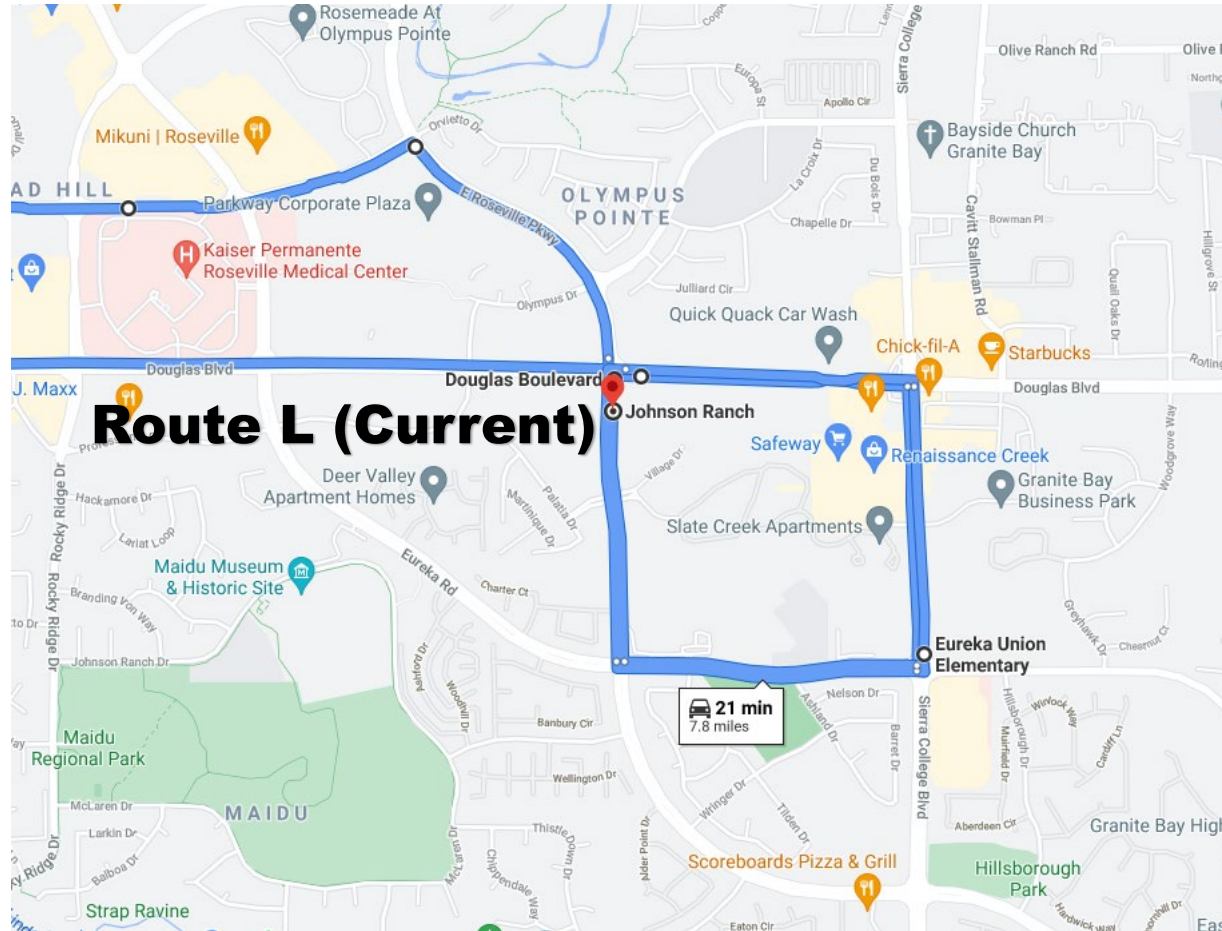
Description

Microtransit Route Option Maps

Rider and Reliability Report PDF

Preliminary Potential Microtransit Route Options

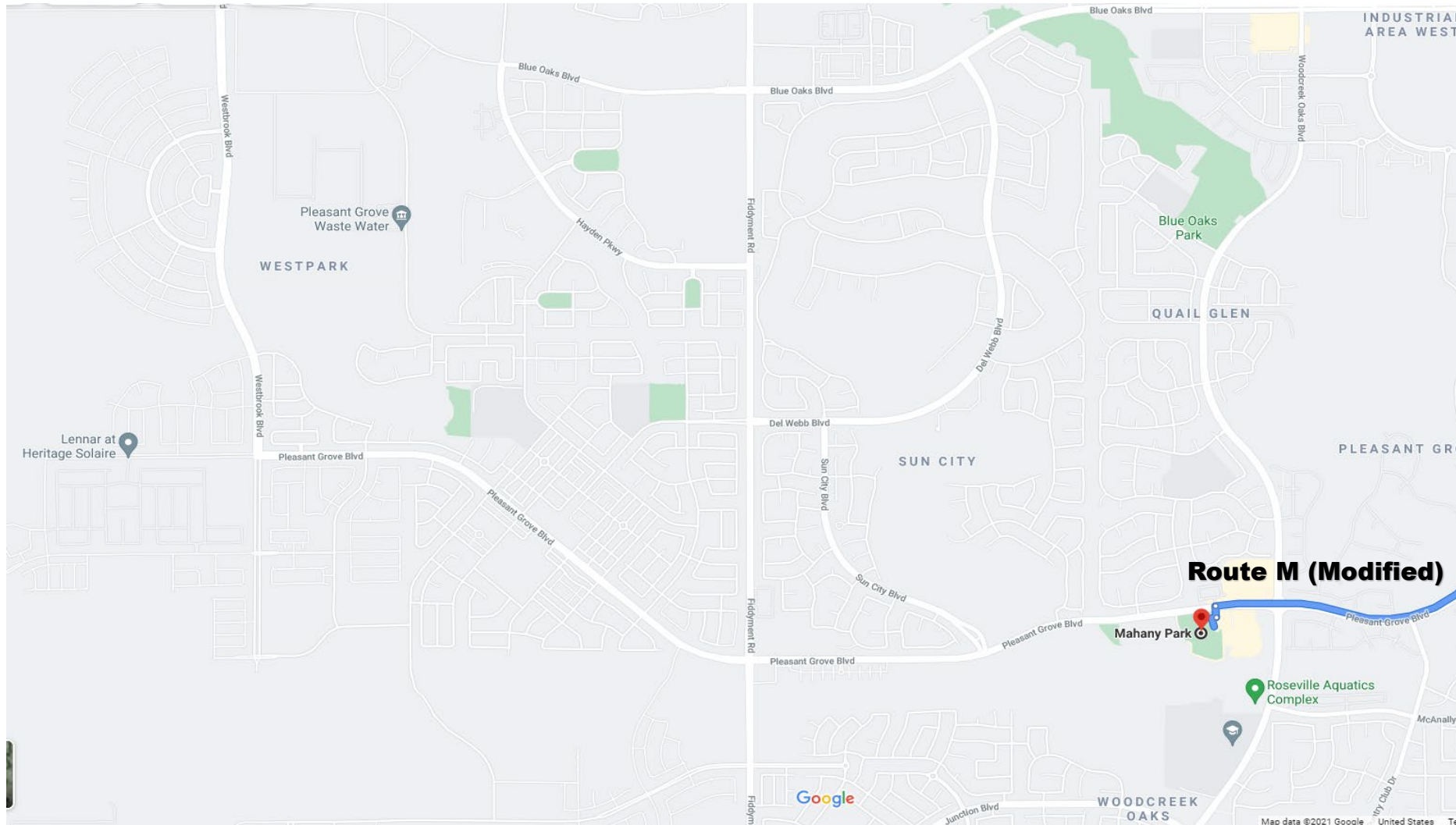
Option #1 – East Roseville



Option #2 – Route S



Option #3 – West Roseville



FY20/21 Quarterly Performance Report

All Services Systemwide

Objective	Performance Measure
Increase Transit Passengers	
	Total Ridership for All Services - Standard Growth Exceeding Annual Population
	FY20/21 Quarter
	FY19/20 Quarter
	Total Ridership Increase/Decrease
	Passenger Trips per VRH (All Services) - Standard 7/VRH
	Total Ridership
	Divided by Total Vehicle Revenue Hours (VRH)
	Total Passenger Trips per Vehicle Revenue Hour
	Passenger Trips per VRM (All Services) - Standard .5/VRM
Provide Service Safely	Total Ridership
	Divided by Total Vehicle Revenue Mile (VRM)
	Total Passenger Trips per Vehicle Revenue Mile
	Preventable Accident - Standard <1/50,000 miles
	Total Service Miles (All Services)
	Divided by Total Preventable Accidents
	Total Service Miles per Preventable Accident
	All Accidents - Standard < 1/25,000
	Total Service Miles (All Services)
	Divided by Total Accidents
	Total Service Miles per Accident
Reliable Transit Service	Maintenance - Standard > 1/10,000 miles between Road Calls
	Total Service Miles (All Services)
	Divided by All Road Calls (average)
	Total Service Miles per Road Calls
	On-Time Performance
	Commuter - Standard 95% of all trips on-time
	Fixed - Standard 95% of all trips on-time
	Dial A Ride - Standard 90% pickup in 30 minute window

*COVID 19 Timespan |

Actual Performance

1st Quarter	2nd Quarter	3rd Quarter	4th Quarter*	Year To Date
ation Growth Rates				
31,980	30,042			62,022
86,392	83,993			170,385
-63.0%	-64.2%	#DIV/0!	#DIV/0!	-63.6%

31,980	30,042	0	0	62,022
11,276	11,050			22,326
2.8	2.7	#DIV/0!	#DIV/0!	2.8

31,980	30,042	0	0	62,022
148,011	141,282			289,293
0.2	0.2	#DIV/0!	#DIV/0!	0.2

176,322	166,570			342,892
3	5			8
58,774	33,314	#DIV/0!	#DIV/0!	42,862

176,322	166,570	0	0	342,892
5	9			14
35,264	18,508	#DIV/0!	#DIV/0!	24,492

176,322	166,570	0	0	342,892
11	6			17
16,029	29,223	#DIV/0!	#DIV/0!	20,532

97%	94%			
93%	93%			
97%	98%			

- * Covid 1st and 2nd quarters
- * Covid 3rd and 4th quarters



TRANSPORTATION COMMISSION COMMUNICATION

Title: Public Works Capital Improvement Projects for Fiscal Year 2022
Contact: Jason Shykowski, (916) 774-5331, jshykowski@roseville.ca.us

Meeting Date: 5/18/2021
Item #: 6.4.

RECOMMENDATION

No action is requested. This item is an informational update regarding the status of Public Works Department Capital Improvement Projects for Fiscal Year 2022.

BACKGROUND

The Public Works Department includes the Engineering, Street Maintenance, Building Maintenance, Fleet Maintenance and Alternative Transportation Divisions. Each of the divisions is at times responsible for developing and managing Capital Improvement Projects (CIPs). Most of the CIPs will be roadway, bikeway, transit or City building projects, and may also include maintenance projects for all of the above. Public Works Director Shykowski will provide an informational update on Public Works CIPs for FY2022.

Respectfully Submitted,

Jason Shykowski, Public Works Director

ATTACHMENTS:

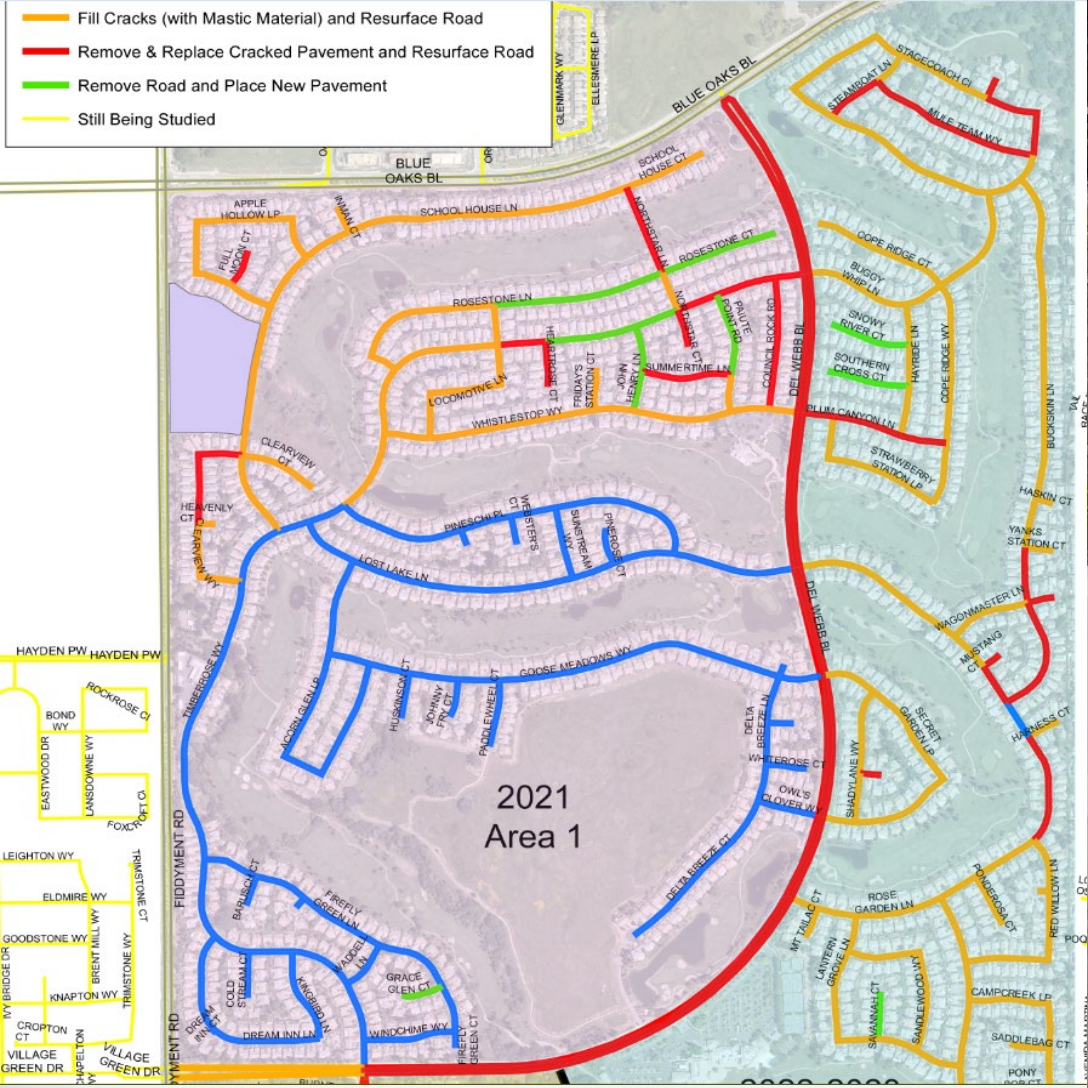
Description

Powerpoint Presentation

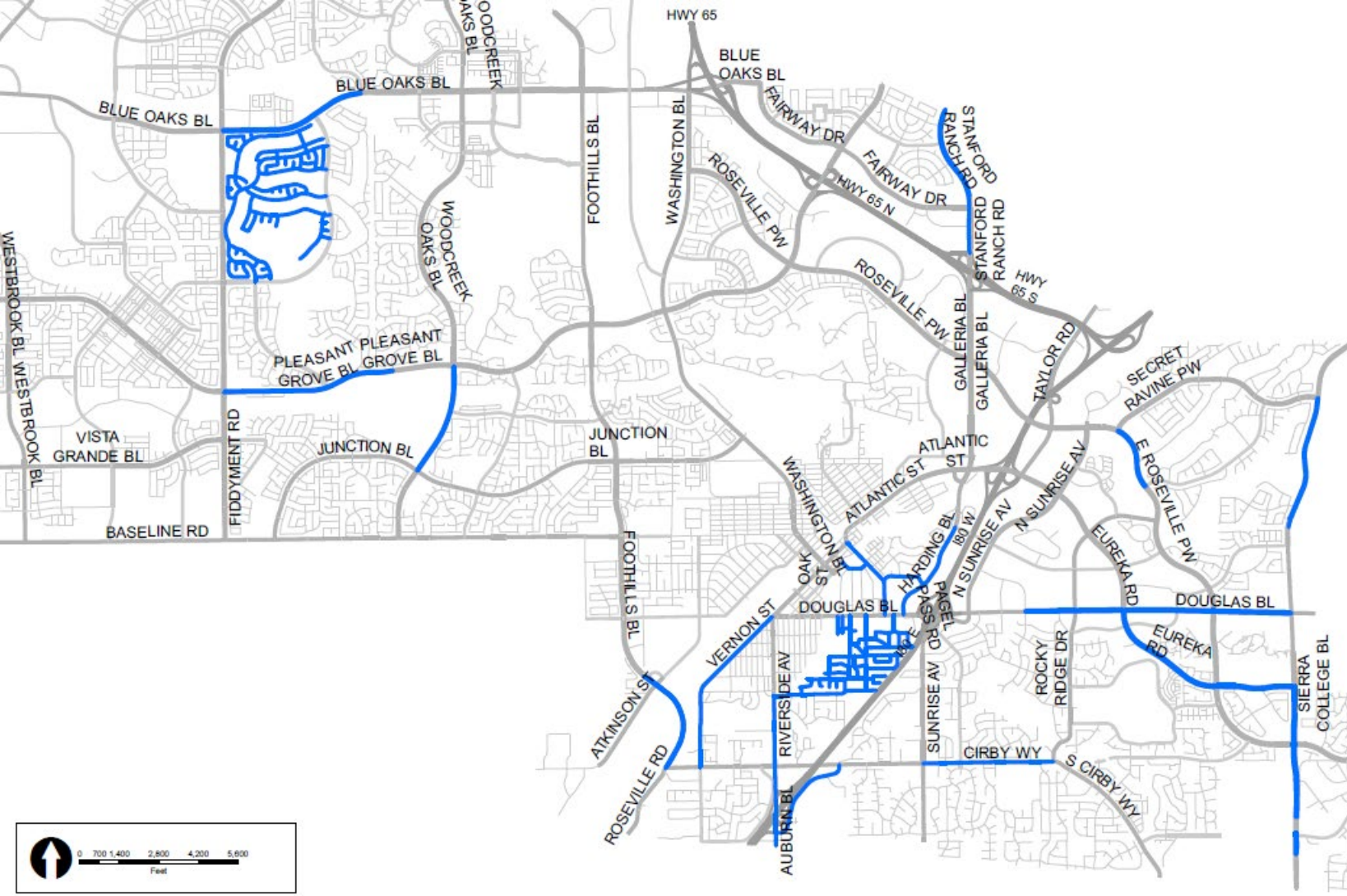


Public Works Capital Improvement Projects for Fiscal Year 2022

Jason Shykowski, Public Works Director



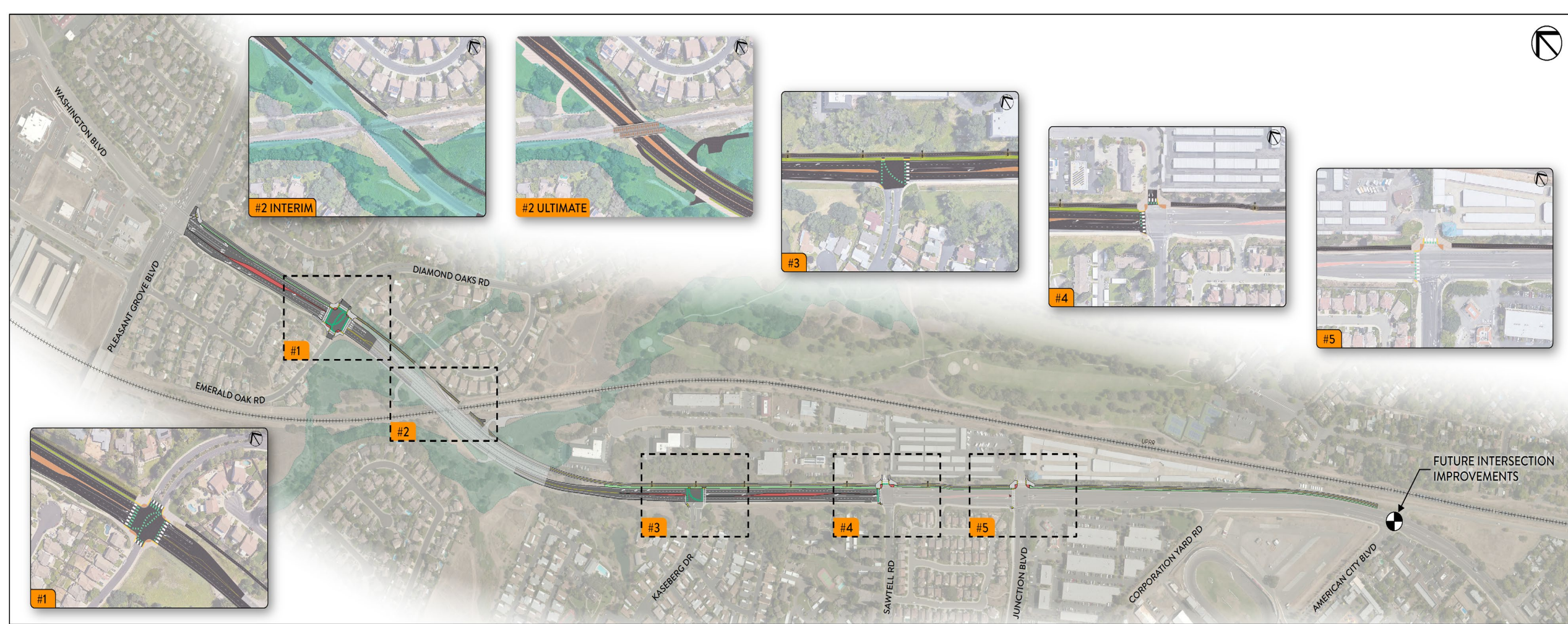
Public Works: Sun City Crack Repair & ADA/Residential Resurfacing



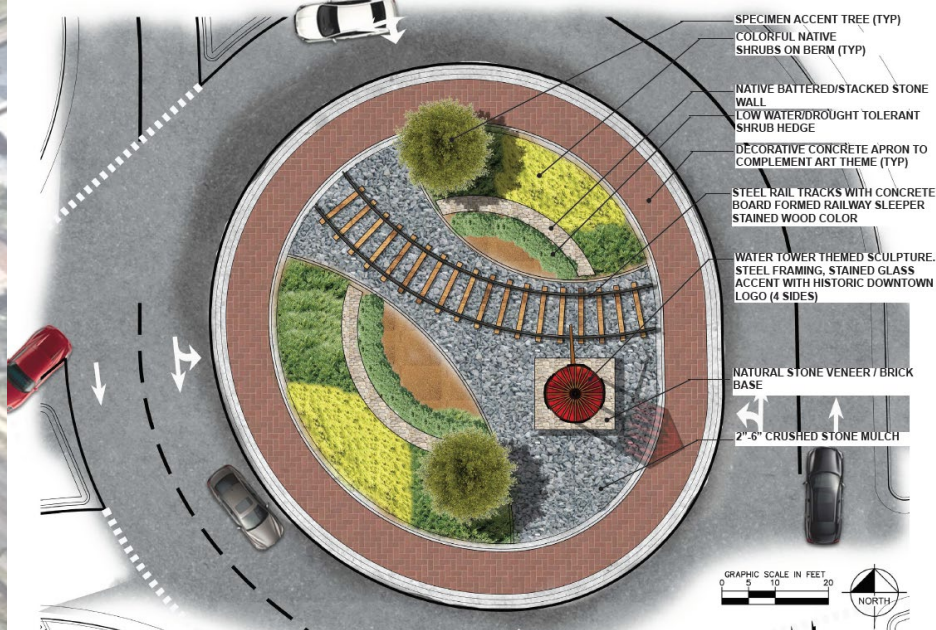
Public Works: FY 22 Arterial & Residential Roadway Resurfacing



Public Works: Bridge Preventative Maintenance Project



Public Works: Washington Bike and Pedestrian Path (Andora Phase 1)



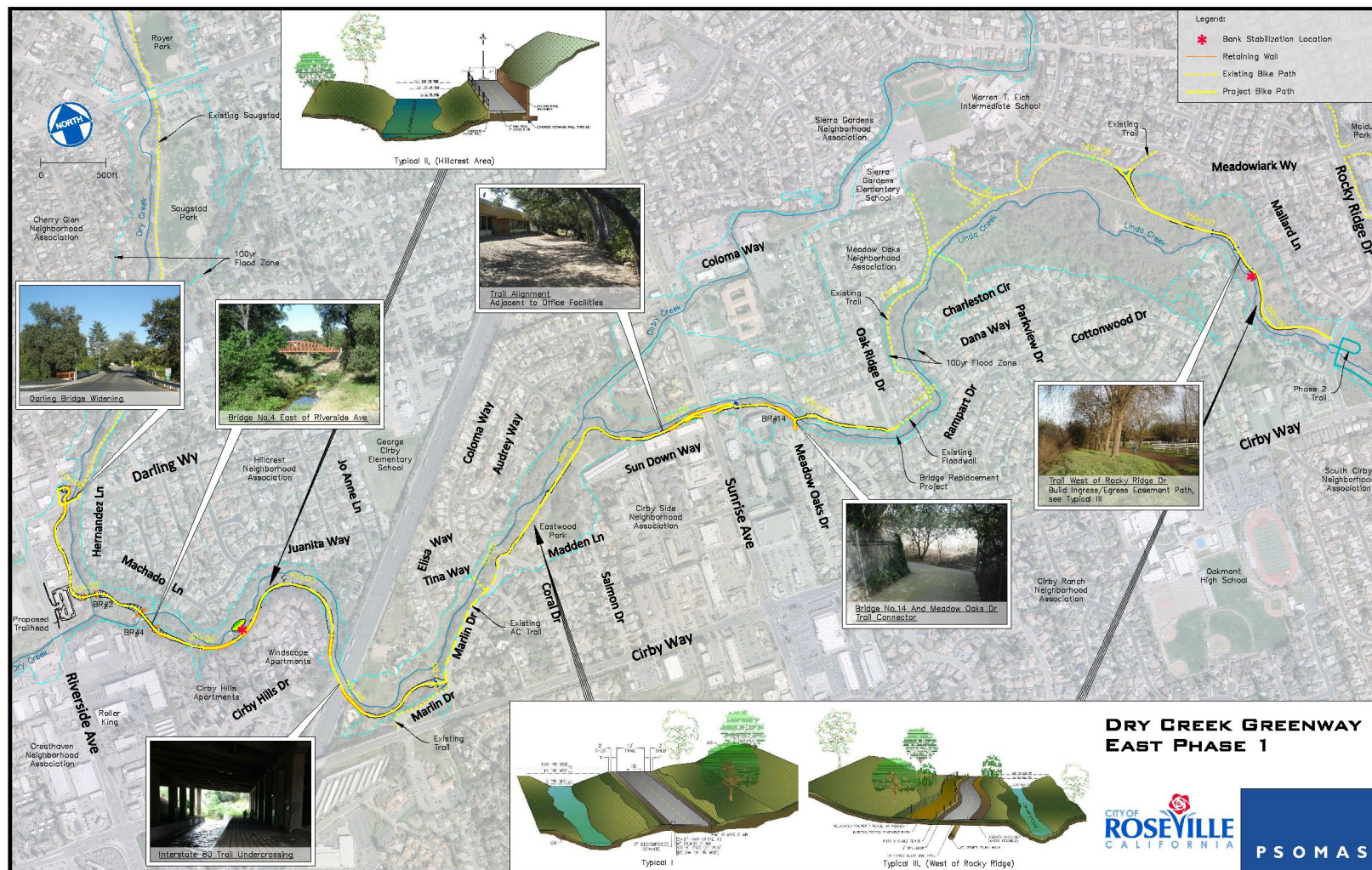
Public Works: Washington Blvd/All America City Roundabout



Public Works: Roseville Parkway Extension



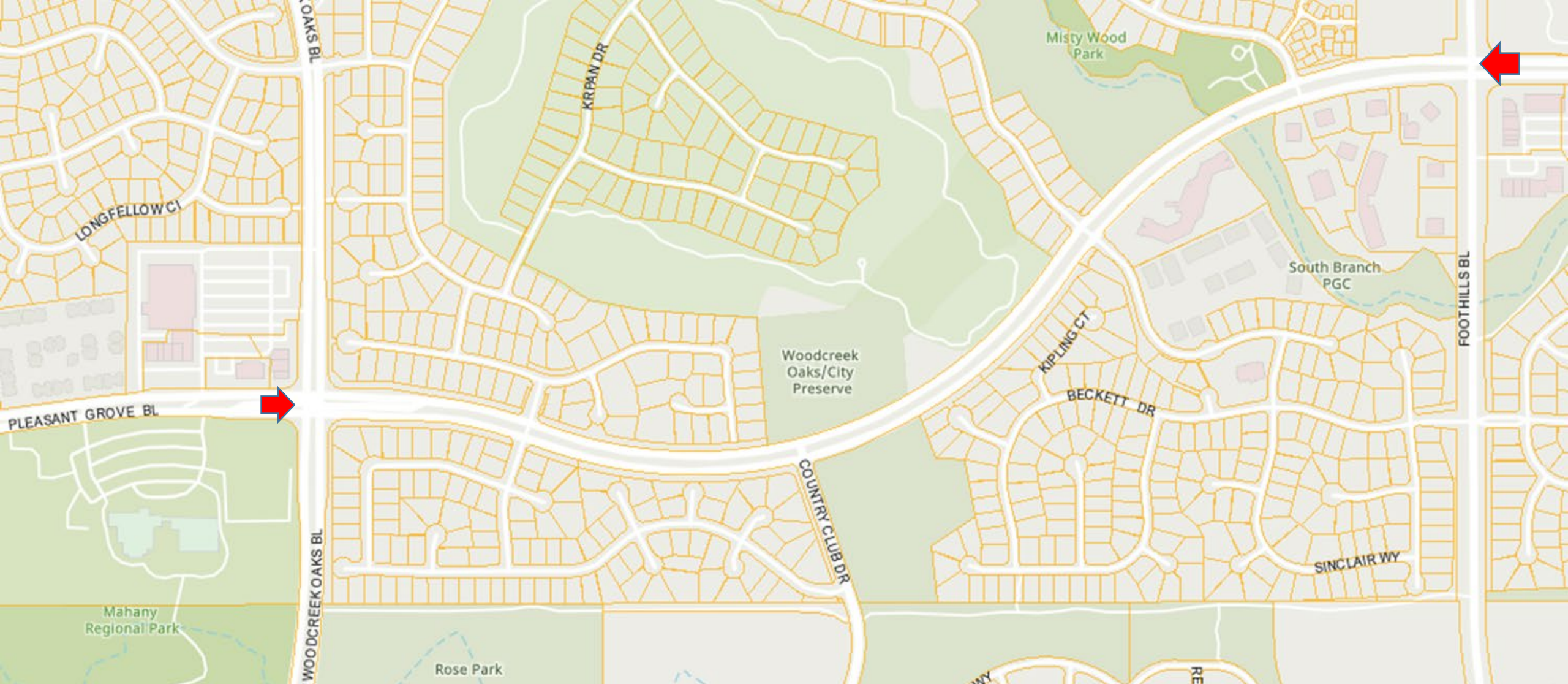
Public Works: Zero Emissions Bus Charging Station



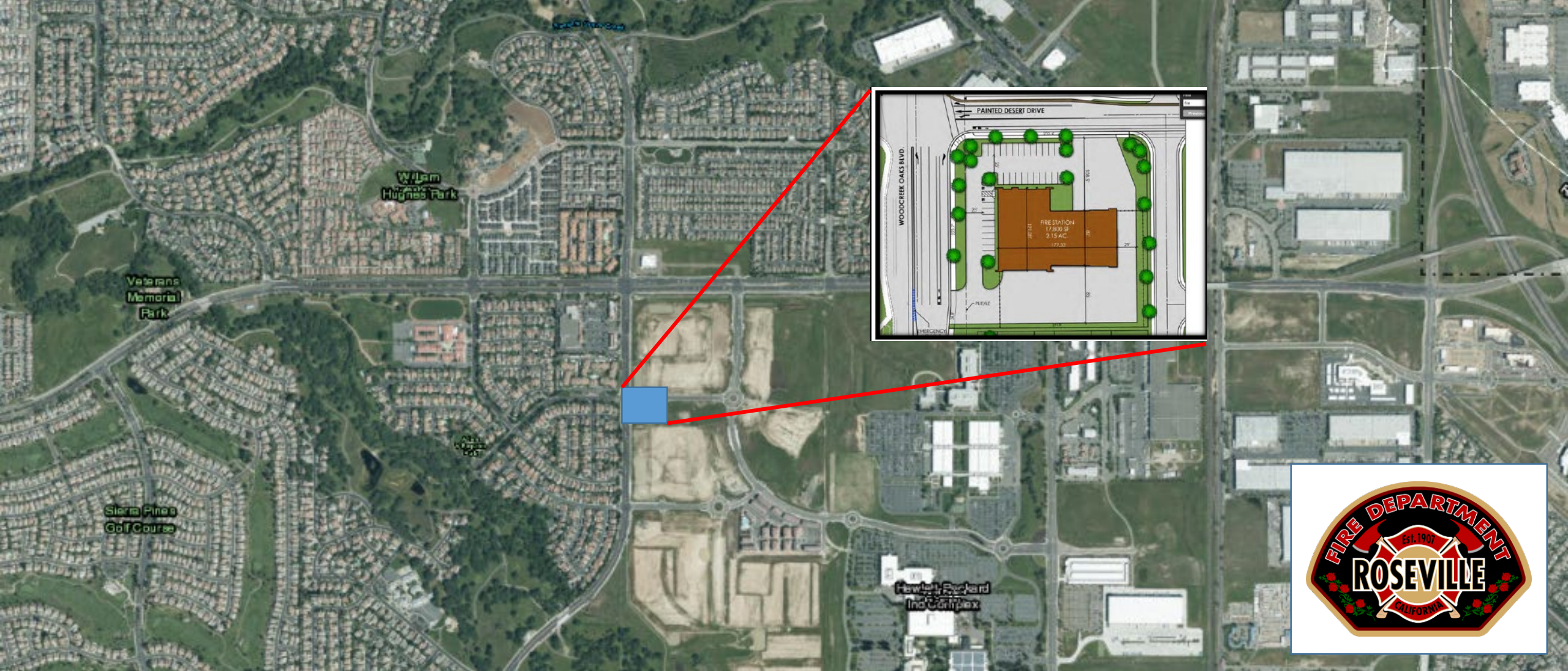
Public Works: Dry Creek Greenway Bike Trail Phase 1



Public Works: Roseville Parkway Widening & Pleasant Grove Triple Left Turns



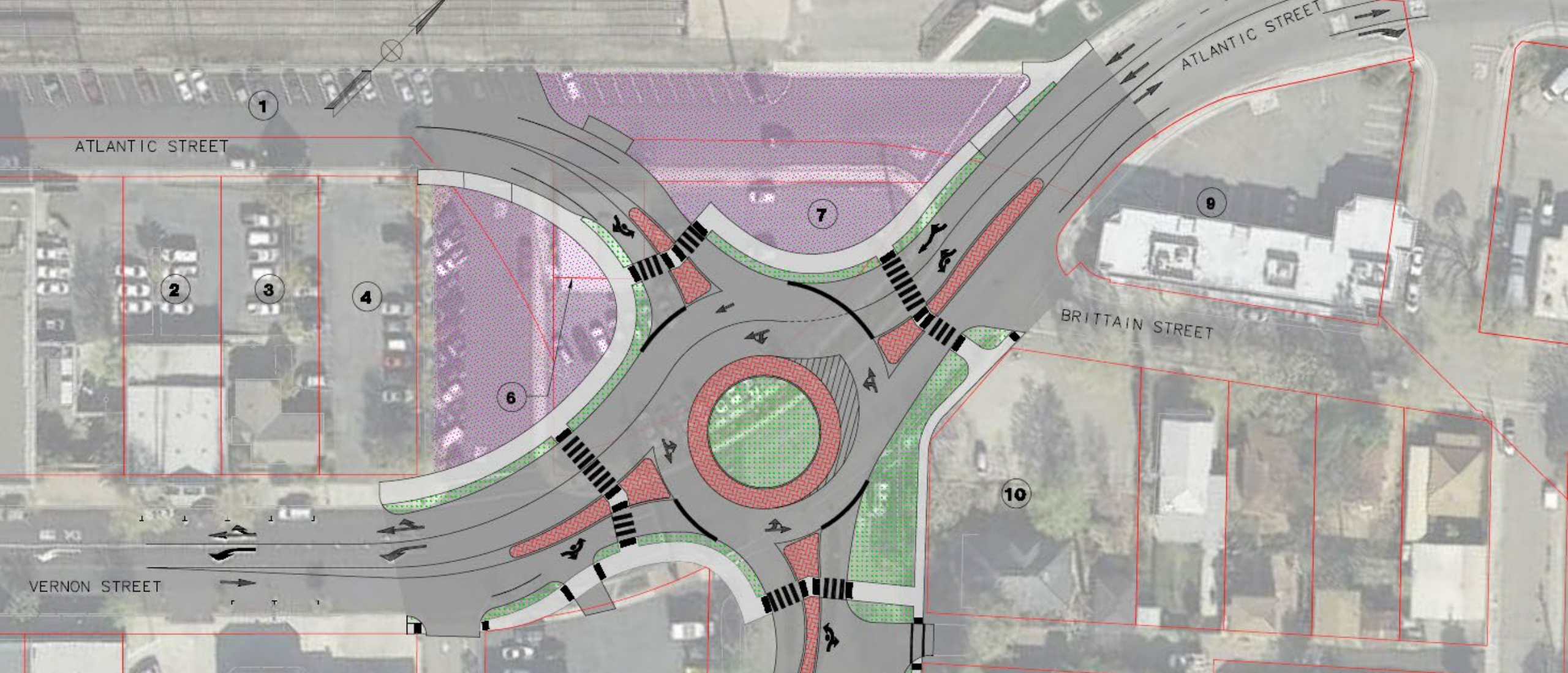
Public Works: Pleasant Grove Widening



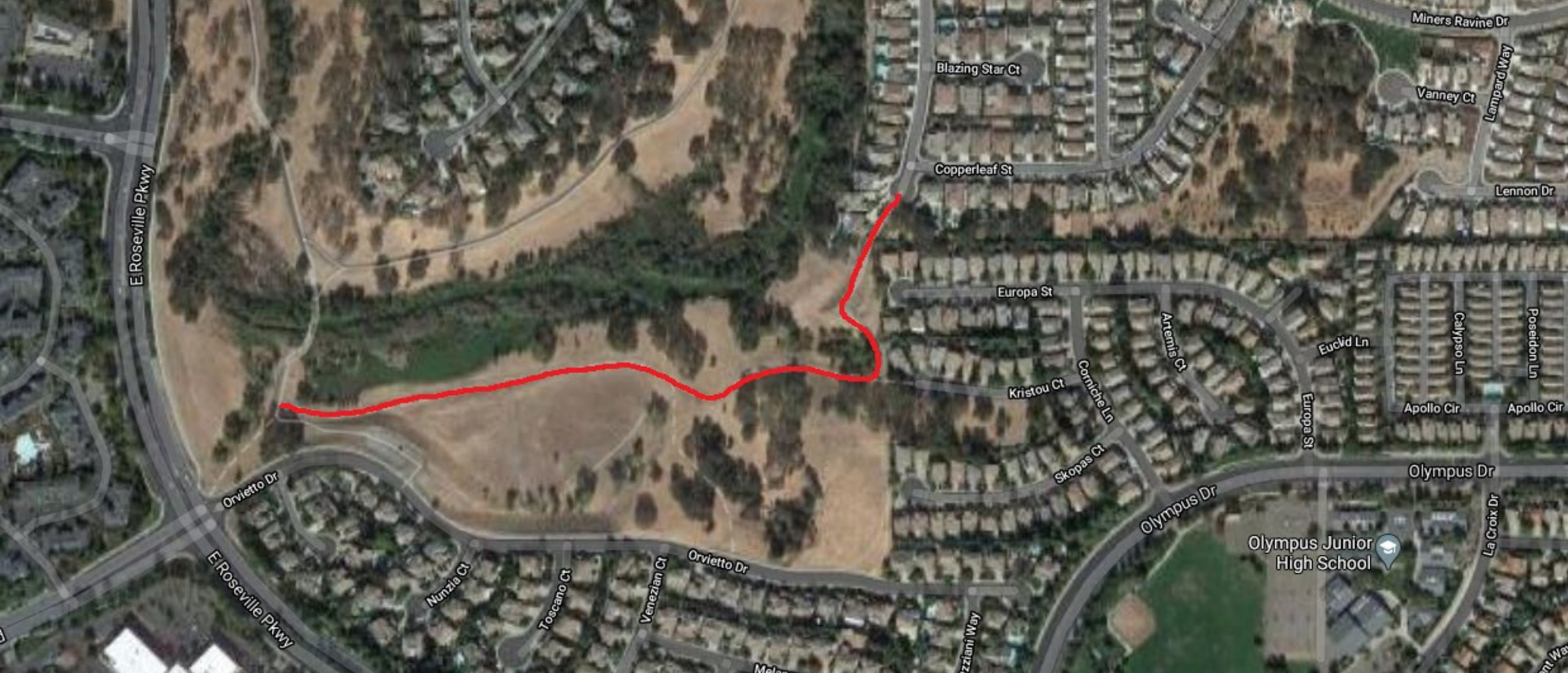
Public Works: Fire Station 8



Public Works: Mahany Multi- Use Trail Project



Public Works: Vernon Street and Folsom Road Roundabout



Public Works: Miners Ravine Drive to Orvietto Drive

Under funded projects – local and regional

Local

- Road Rehabilitation
- Blue Oaks Widening
- Andora Widening Phase 2

Regional

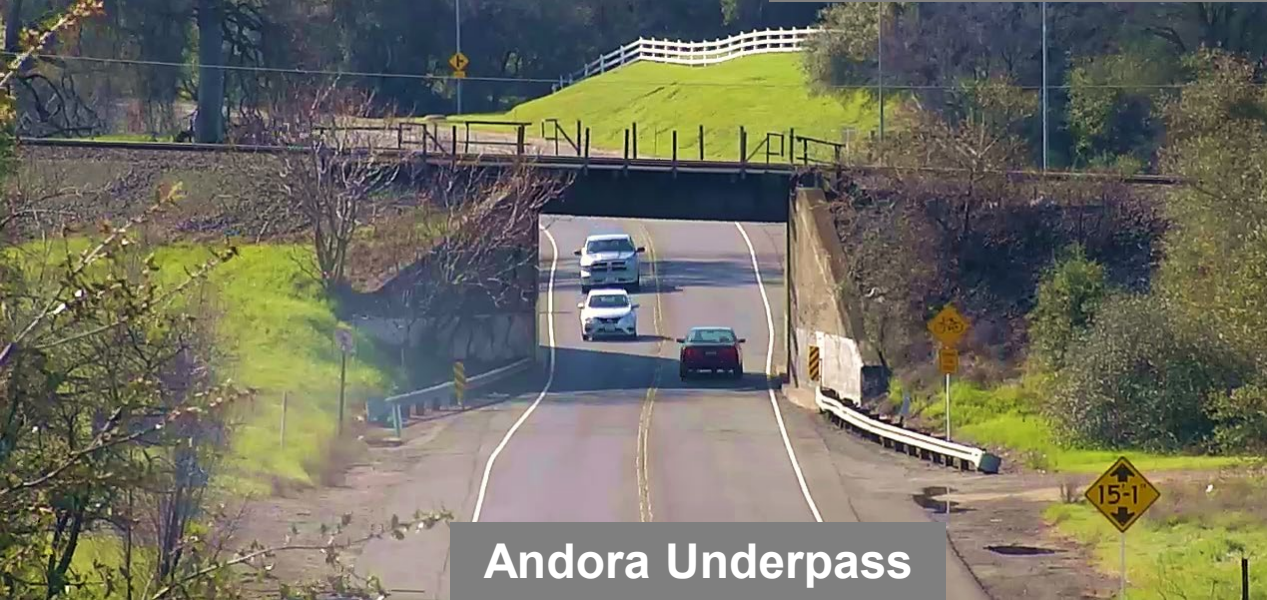
- Baseline Road Widening
- Placer Parkway
- Highway 65 Widening
- 80/65 Interchange Phase 2



Road Rehabilitation



Baseline Widening



Andora Underpass



Blue Oaks Widening

Regional funding strategy



Questions?