

Del Rio Trail Project



Draft Environmental Impact Report

Federal Project No.: ATPL-5002(189)

Submitted to:

City of
SACRAMENTO
Community Development

300 Richards Boulevard, Third Floor
Sacramento, California 95814

Prepared by:

Dokken Engineering
110 Blue Ravine Road, Suite 200
Folsom, California 95630

NOVEMBER 2018

THIS PAGE IS LEFT INTENTIONALLY BLANK

INTRODUCTION

The City of Sacramento (City) proposes to construct approximately 4.8 miles of Class I multi-use trail along the abandoned railway corridor west of Freeport Boulevard from south of Meadowview Road/Pocket Road to the Sacramento River Parkway north of Sutterville Road as part of the Del Rio Trail Project (proposed Project). The California Environmental Quality Act (CEQA) requires public agencies to identify, disclose, and consider the potential environmental impacts of proposed discretionary actions that an agency is considering for approval. A Project that may have a significant impact on the environment cannot be approved unless the Lead Agency makes the approval contingent upon the implementation of mitigation measures that would reduce or avoid that impact to the extent feasible. When a Project may have significant environmental impacts, the Lead Agency must prepare an environmental impact report (EIR) before it considers whether to approve the Project.

PROPOSED PROJECT

The proposed Del Rio Trail Project consists of a Class I multi-use trail (12 to 16 feet of pavement with unpaved shoulders ranging from 2 to 3 feet) and when feasible, an adjacent 5 to 6-foot wide unpaved walking trail. The Del Rio Trail would include at-grade crossings and intersection modifications at each location where the trail intersects a vehicular roadway (see Figures 1 through 3).

The proposed Project begins approximately 0.4 mile south of Pocket Road near the Freeport Water Tower adjacent to the Interstate-5 (I-5) bridge over Freeport Boulevard and extends approximately 4.8 miles north along the abandoned railway corridor within the City of Sacramento. At the southern entry, the bike trail would connect directly to the newly constructed Freeport Shores Trail and the South Sacramento Parkway West. The route would then cross at Meadowview-Pocket Road and continue north through the South Land Park neighborhood towards William Land Park and the Sacramento River Parkway. North of Sutterville Road, the trail connects to the Sacramento River Parkway via two alignments: west along Sutterville Road with Class II bike lanes and northwest adjacent to the existing abandoned railway corridor.

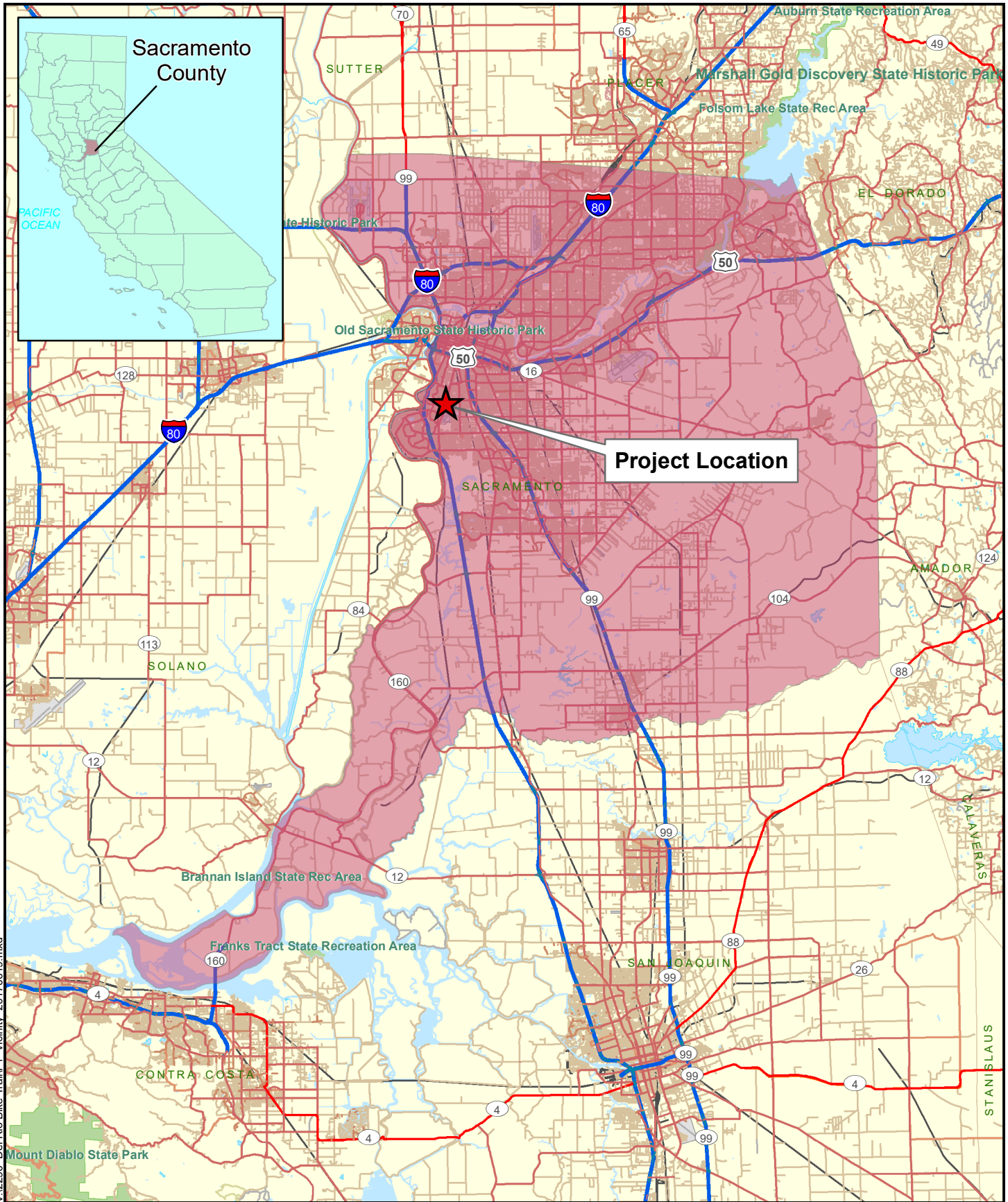
Permanent right-of-way acquisitions and temporary construction easements are needed where the trail passes through Sacramento Regional Transit and State-owned parcels along the trail.

This proposed Project is Federally funded through the Active Transportation Program (ATP) grant and, therefore, requires compliance with the National Environmental Policy Act (NEPA) in addition to CEQA. The Lead Agency for CEQA compliance is the City; the Federal Lead Agency for NEPA compliance is the California Department of Transportation (Caltrans).

PROJECT PURPOSE AND NEED

The purpose of the Del Rio Trail Project is to:

- Advance and complete the planned connection between the Sacramento River Parkway and the Freeport Shores Bikeway in accordance with the City of Sacramento Bikeway Master Plan utilizing public right-of-way and public agency parcels;
- Connect logical origins and destinations proximate to the trail alignment by improving pedestrian and bicycle access throughout the South Land Park, Freeport Manor, Z'berg Park, Land Park, Meadowview, and Pocket communities; and
- Provide an American's with Disabilities Act (ADA)-compliant, active transportation connection to adjacent communities throughout the south Sacramento area for pedestrians and bicyclists of all ages and abilities to access schools, retail, jobs, and recreational amenities.



V:\2290 Del Rio Bike Trail\F1_Vicinity_20170619.mxd

Source: ESRI 2008; Dokken Engineering 8/30/2018; Created By: aasaro

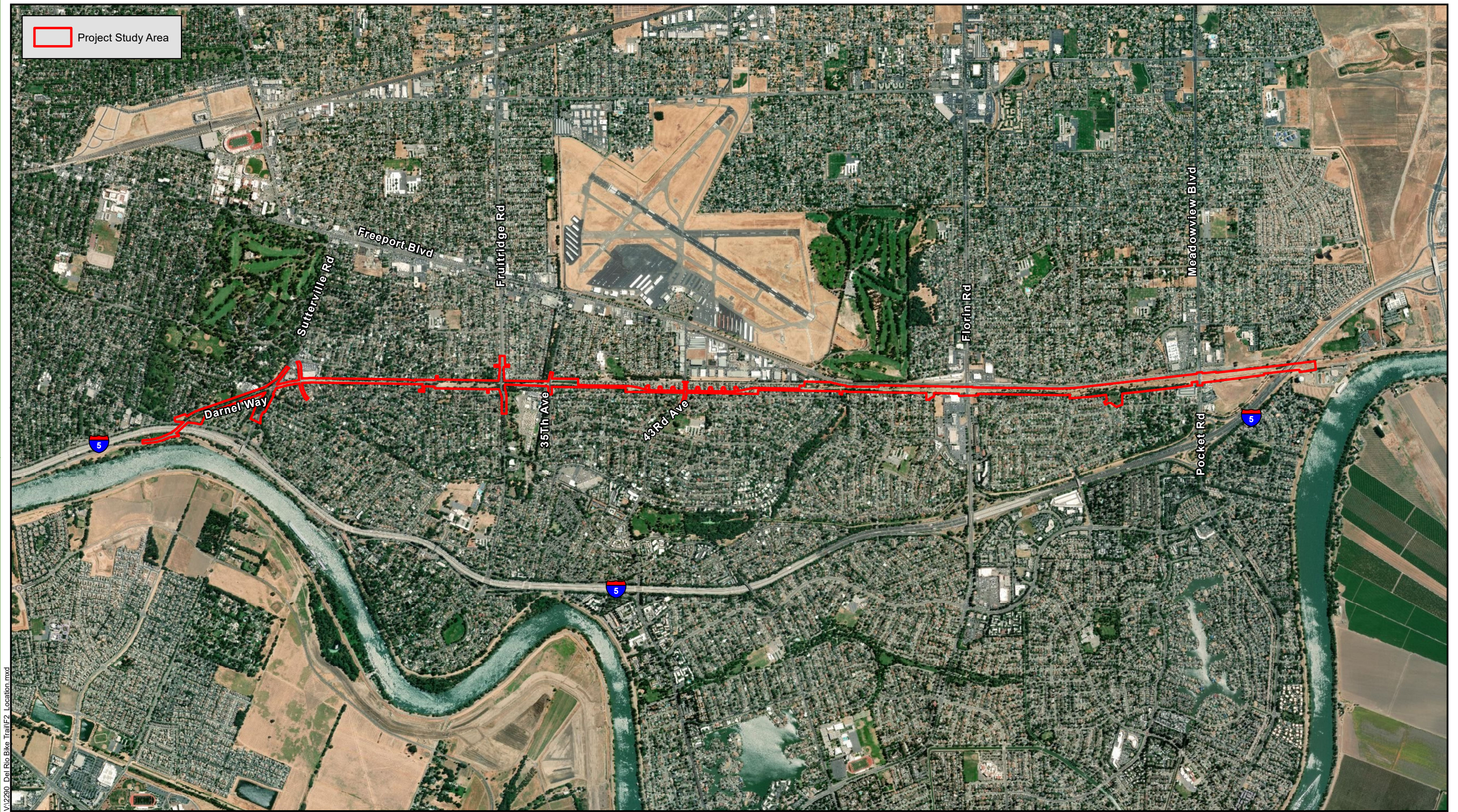


0 5 10 15 Miles

FIGURE 1
Project Vicinity

ATPL-5002(189)
Del Rio Trail Project
City of Sacramento, Sacramento County, California

Project Study Area

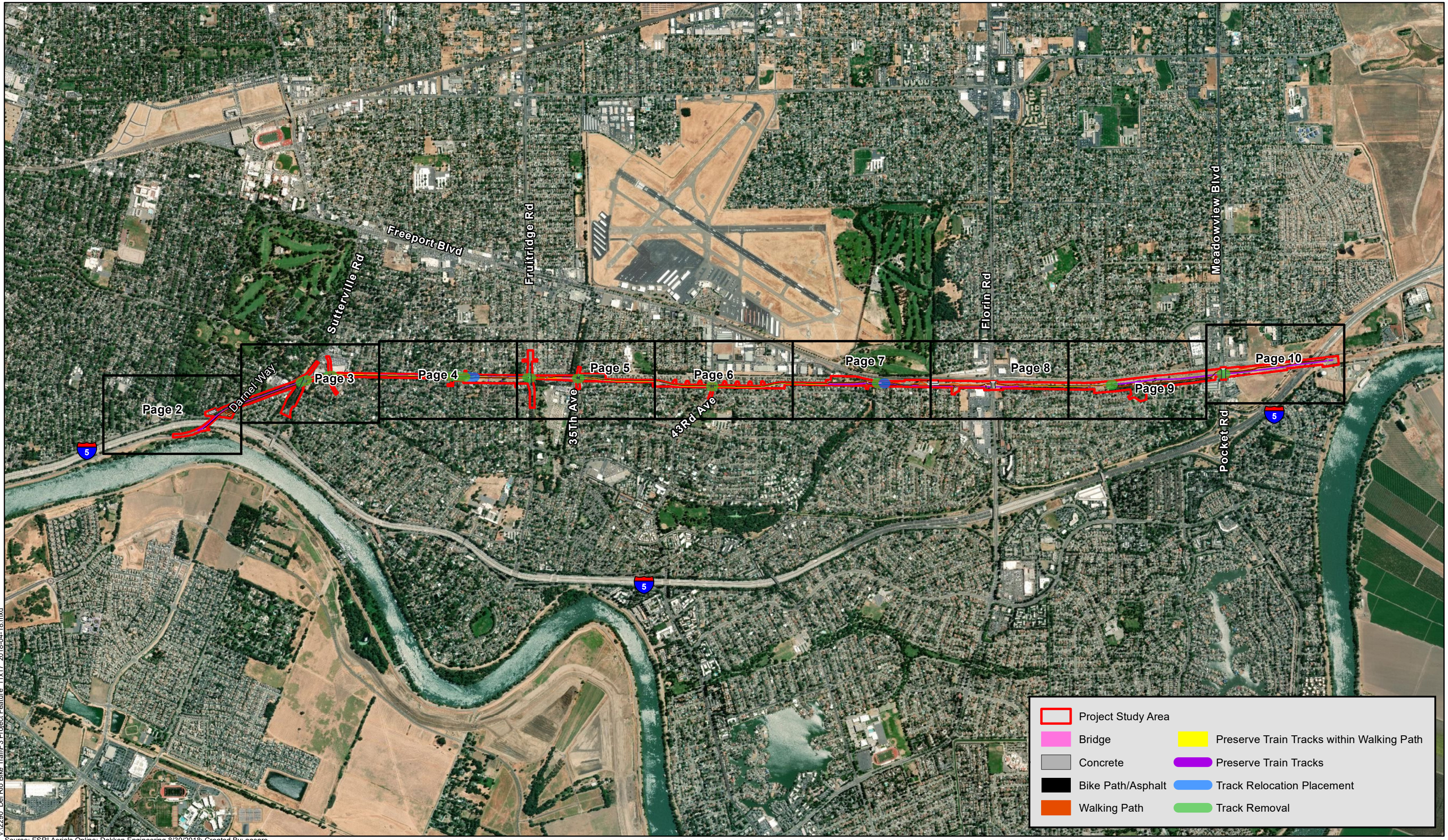


V:\2290_Del Rio Bike Trail\F2_Location.mxd
Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



0 0.5 1 Miles

FIGURE 2
Project Location
ATPL-5002(189)
Del Rio Trail Project
City of Sacramento, Sacramento County, California



VA2290_Del Rio Bike Trail\F3 Project Feature_11x17_2018-04-18.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

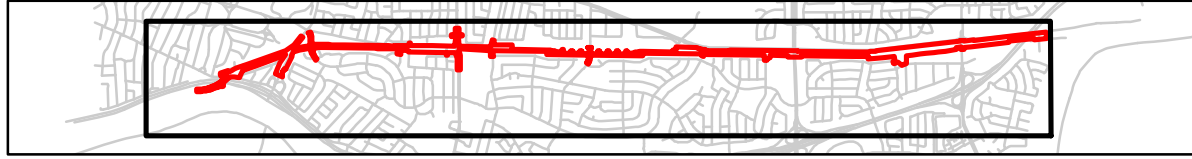
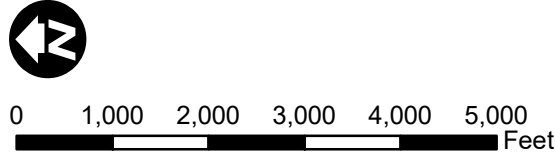
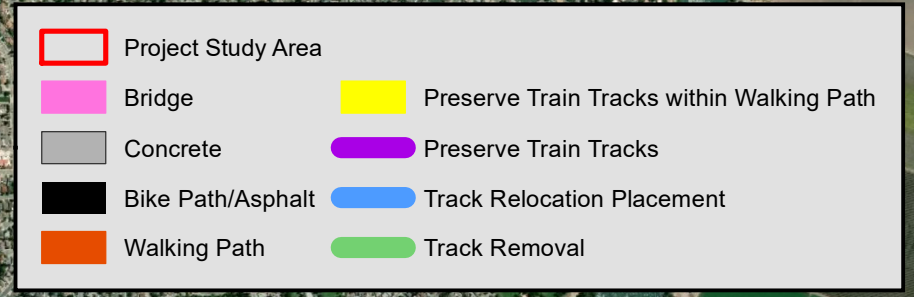
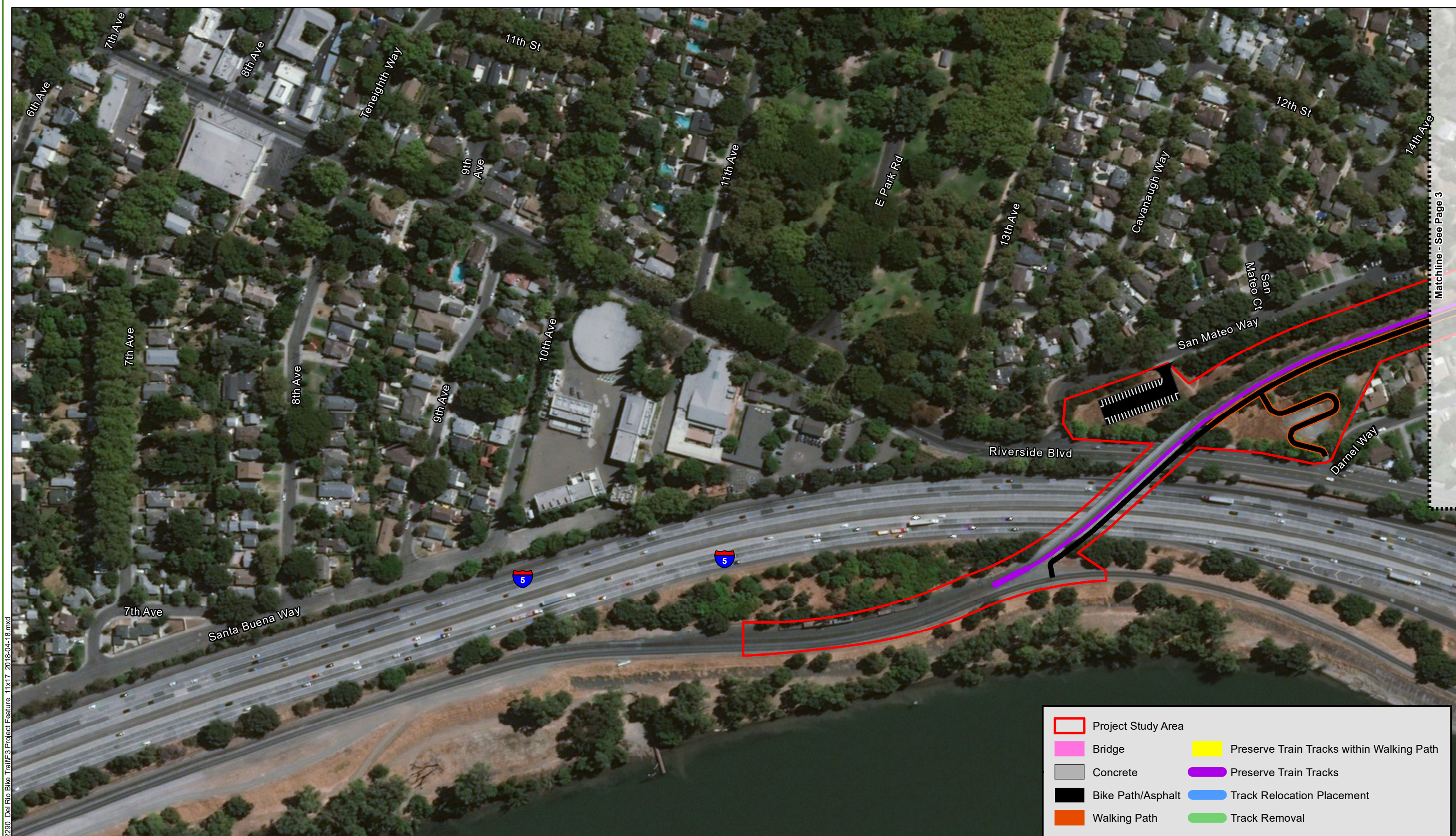
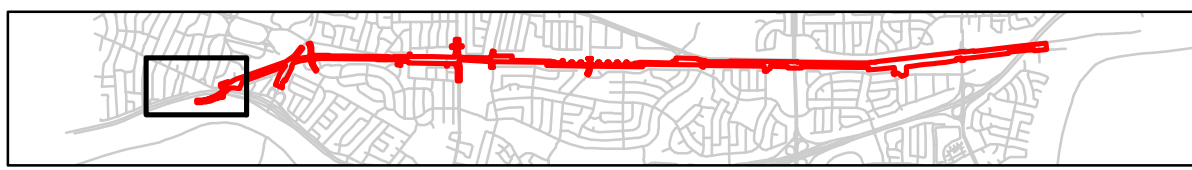
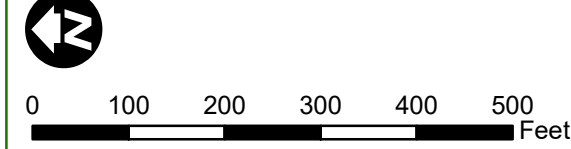


FIGURE 3
Conceptual Project Features
 Page 1 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



VA2290_Del Rio Bike Trail\F3 Project Feature_11x17_2018-04-18.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



	Project Study Area		Preserve Train Tracks within Walking Path
	Bridge		Preserve Train Tracks
	Concrete		Track Relocation Placement
	Bike Path/Asphalt		Track Removal
	Walking Path		

FIGURE 3
Conceptual Project Features
 Page 2 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Matchline - See Page 3



Matchline - See Page 2

Matchline - See Page 4

VA2290_Del Rio Bike Trail\F3 Project Feature_11x17_2018-04-18.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

	Project Study Area		Preserve Train Tracks within Walking Path
	Bridge		Preserve Train Tracks
	Concrete		Track Relocation Placement
	Bike Path/Asphalt		Track Removal
	Walking Path		

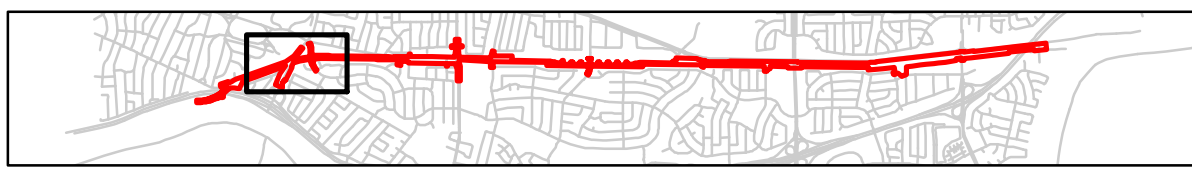
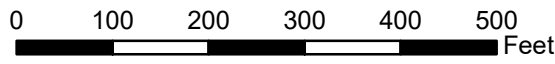
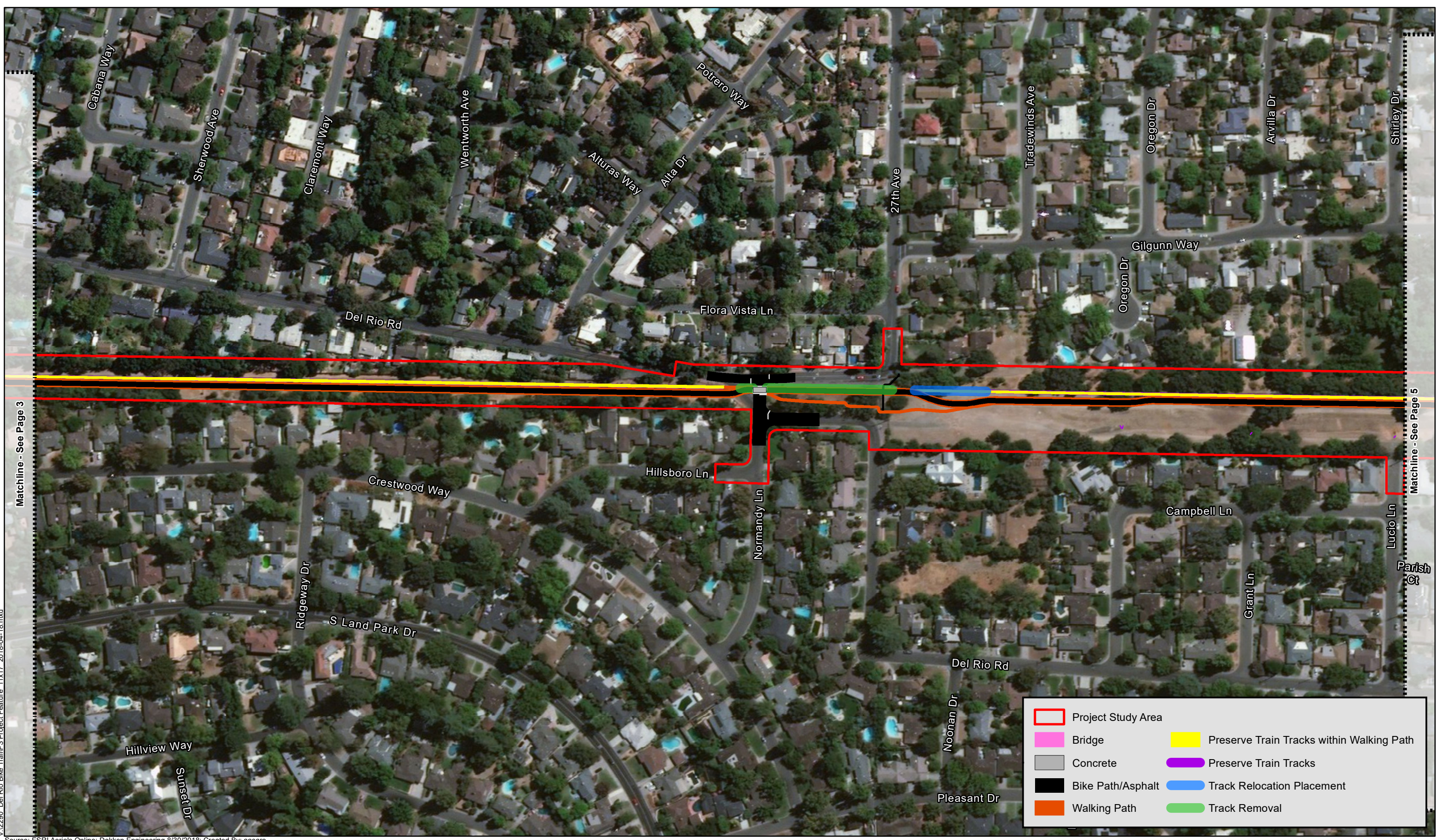


FIGURE 3
Conceptual Project Features
 Page 3 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



	Project Study Area		Preserve Train Tracks within Walking Path
	Bridge		Preserve Train Tracks
	Concrete		Track Relocation Placement
	Bike Path/Asphalt		Track Removal
	Walking Path		

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

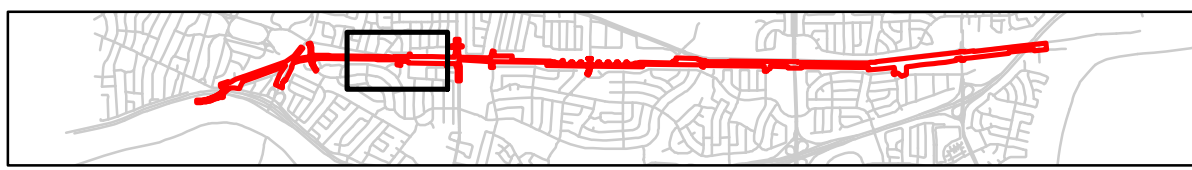
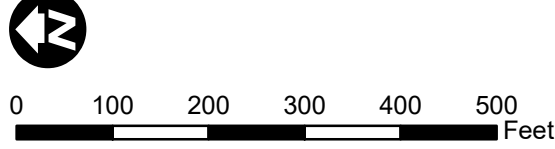
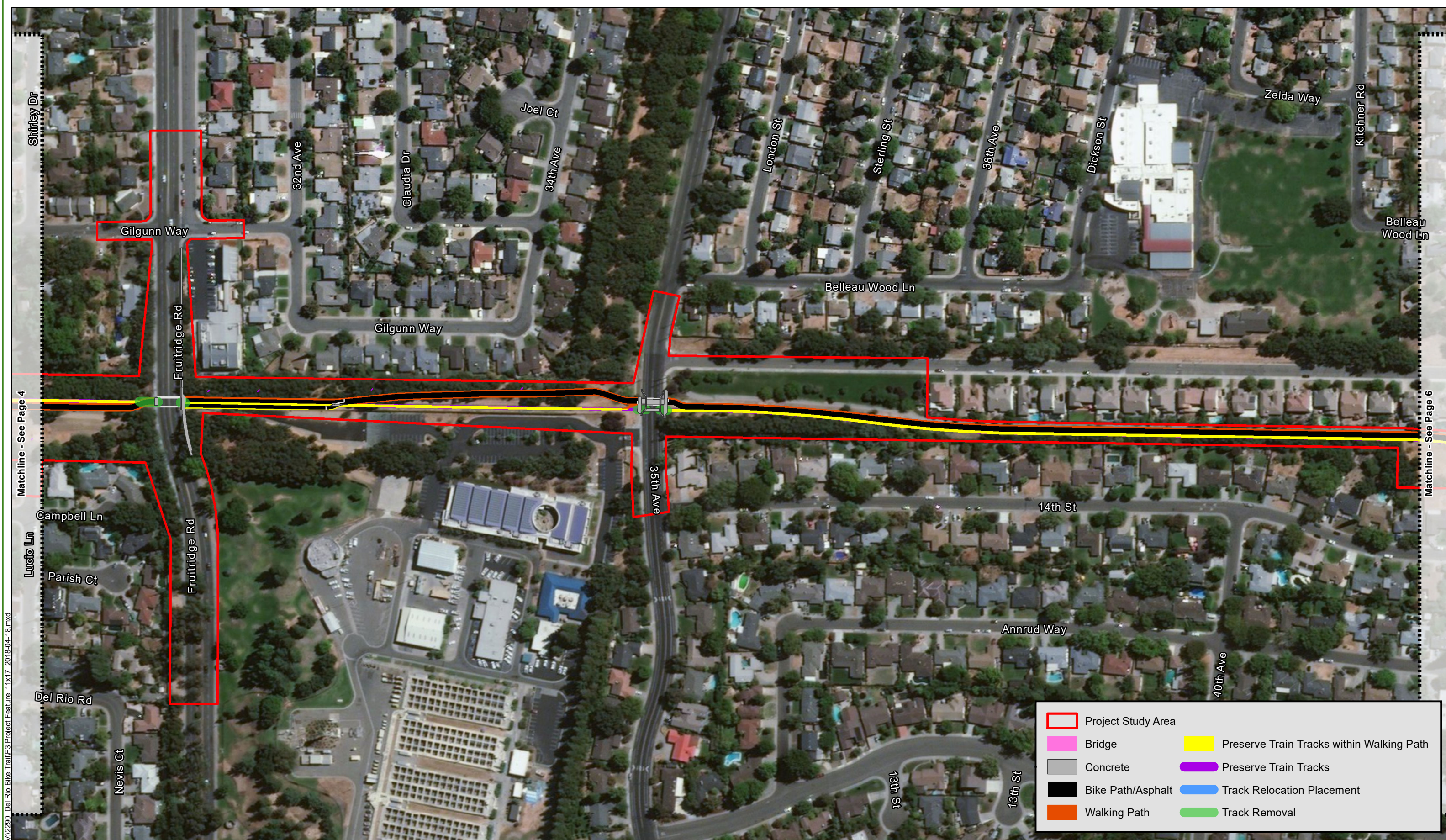


FIGURE 3
Conceptual Project Features
 Page 4 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



	Project Study Area		Preserve Train Tracks within Walking Path
	Bridge		Preserve Train Tracks
	Concrete		Track Relocation Placement
	Bike Path/Asphalt		Track Removal
	Walking Path		

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

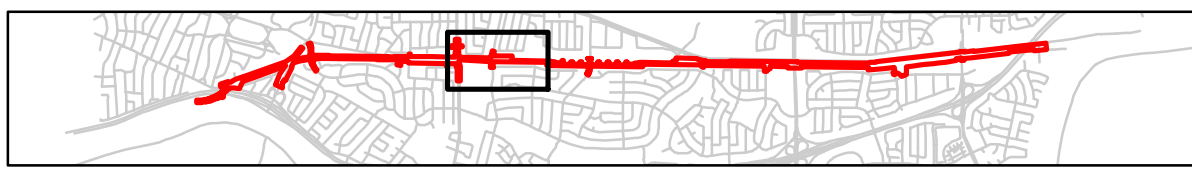
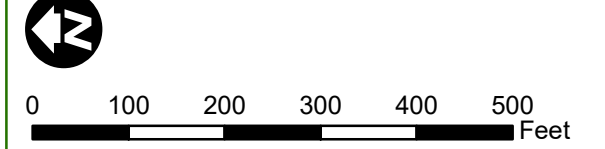


FIGURE 3
Conceptual Project Features
 Page 5 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



Matchline - See Page 5

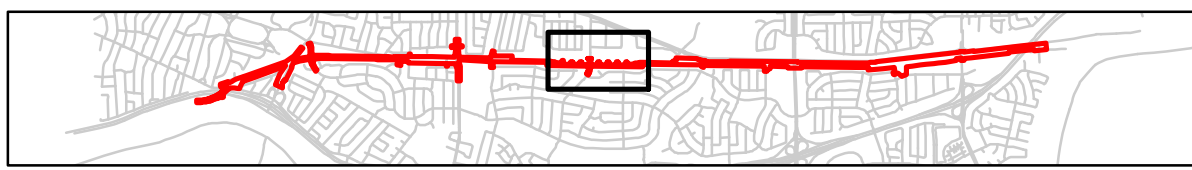
Matchline - See Page 7

VA2290_Del Rio Bike Trail\F3 Project Feature_11x17_2018-04-18.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



0 100 200 300 400 500 Feet



- Project Study Area
- Bridge
- Concrete
- Bike Path/Asphalt
- Walking Path
- Preserve Train Tracks within Walking Path
- Preserve Train Tracks
- Track Relocation Placement
- Track Removal

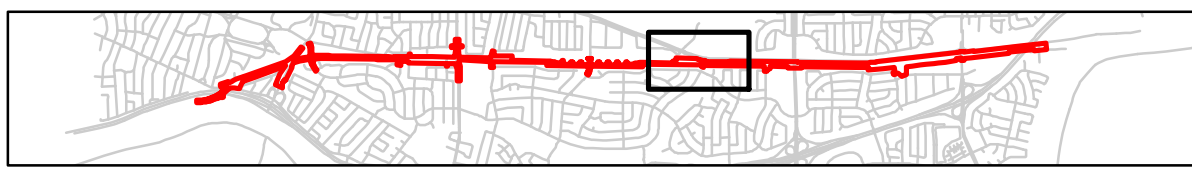
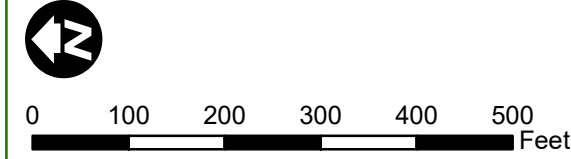


Matchline - See Page 6

Matchline - See Page 8

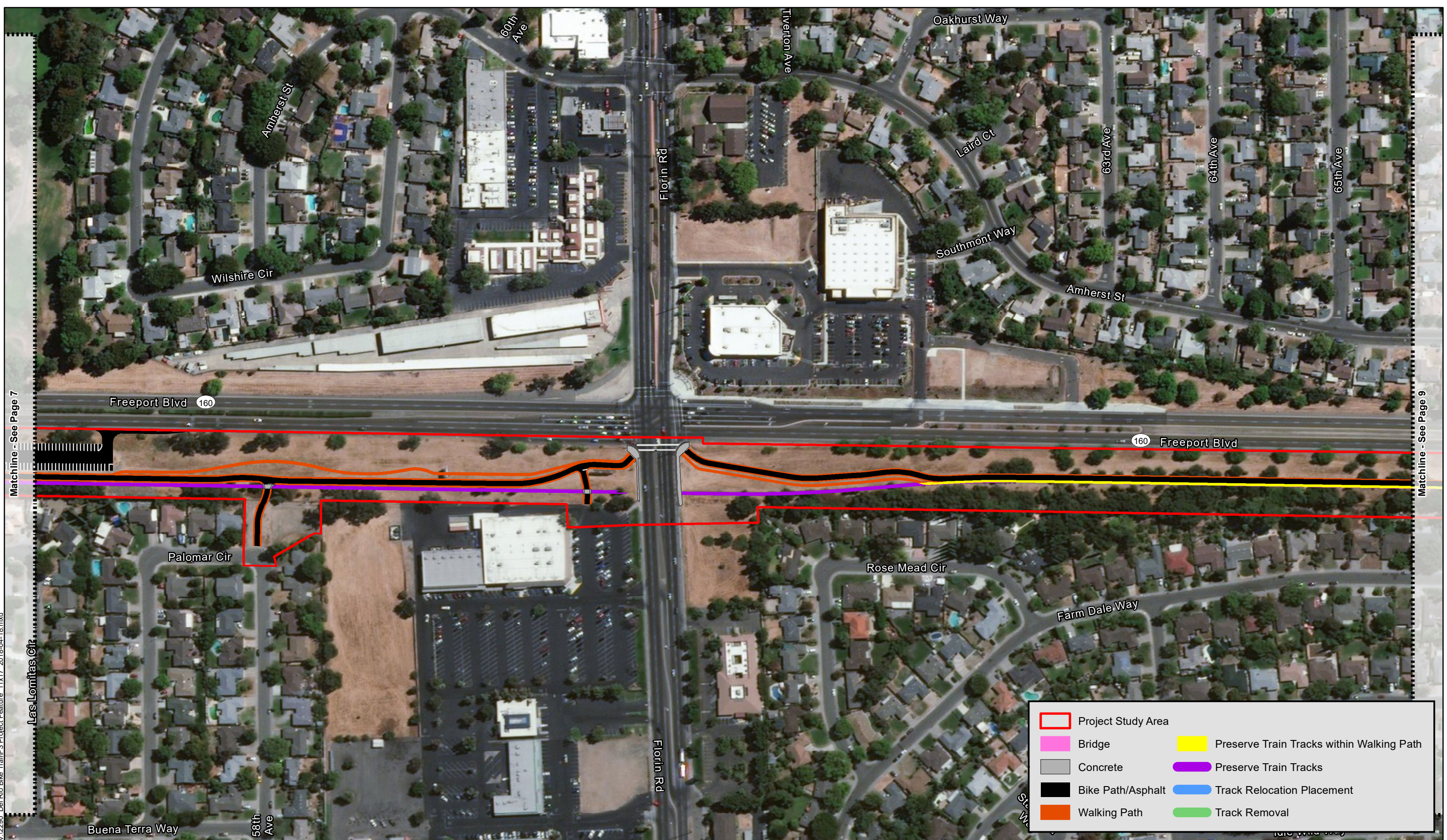
VA2280_Del Rio Bike Trail\F3 Project Feature_11x17_2018-04-18.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



	Project Study Area		Preserve Train Tracks within Walking Path
	Bridge		Preserve Train Tracks
	Concrete		Track Relocation Placement
	Bike Path/Asphalt		Track Removal
	Walking Path		

FIGURE 3
Conceptual Project Features
 Page 7 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



Matchline - See Page 7

Matchline - See Page 9

VA2280_Del Rio Bike Trail\F3 Project Feature_11x17_2018-04-18.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

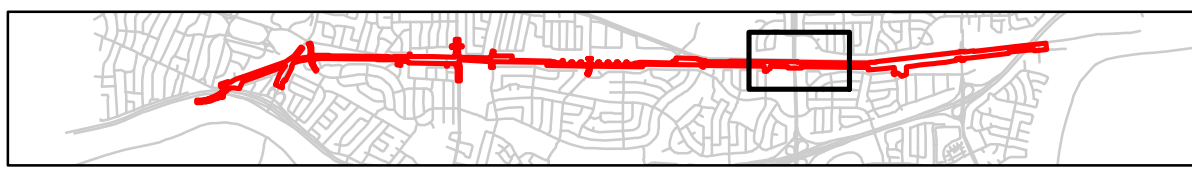
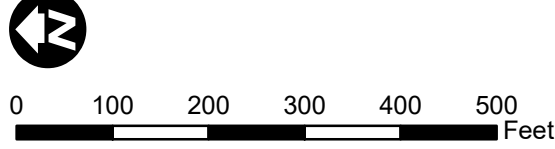


FIGURE 3
Conceptual Project Features
 Page 8 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



Matchline - See Page 8

Matchline - See Page 10

VA2290_Del Rio Bike Trail\F3 Project Feature_11x17_2018-04-18.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

	Project Study Area		Preserve Train Tracks within Walking Path
	Bridge		Preserve Train Tracks
	Concrete		Track Relocation Placement
	Bike Path/Asphalt		Track Removal
	Walking Path		

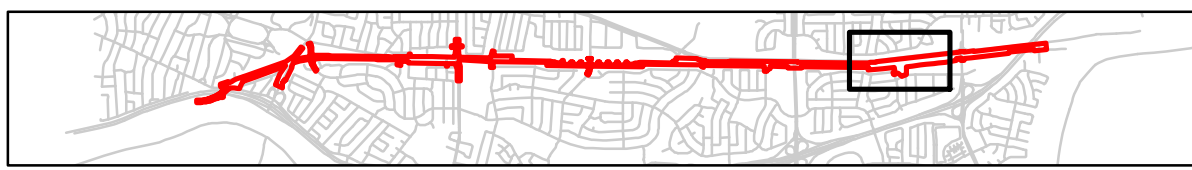
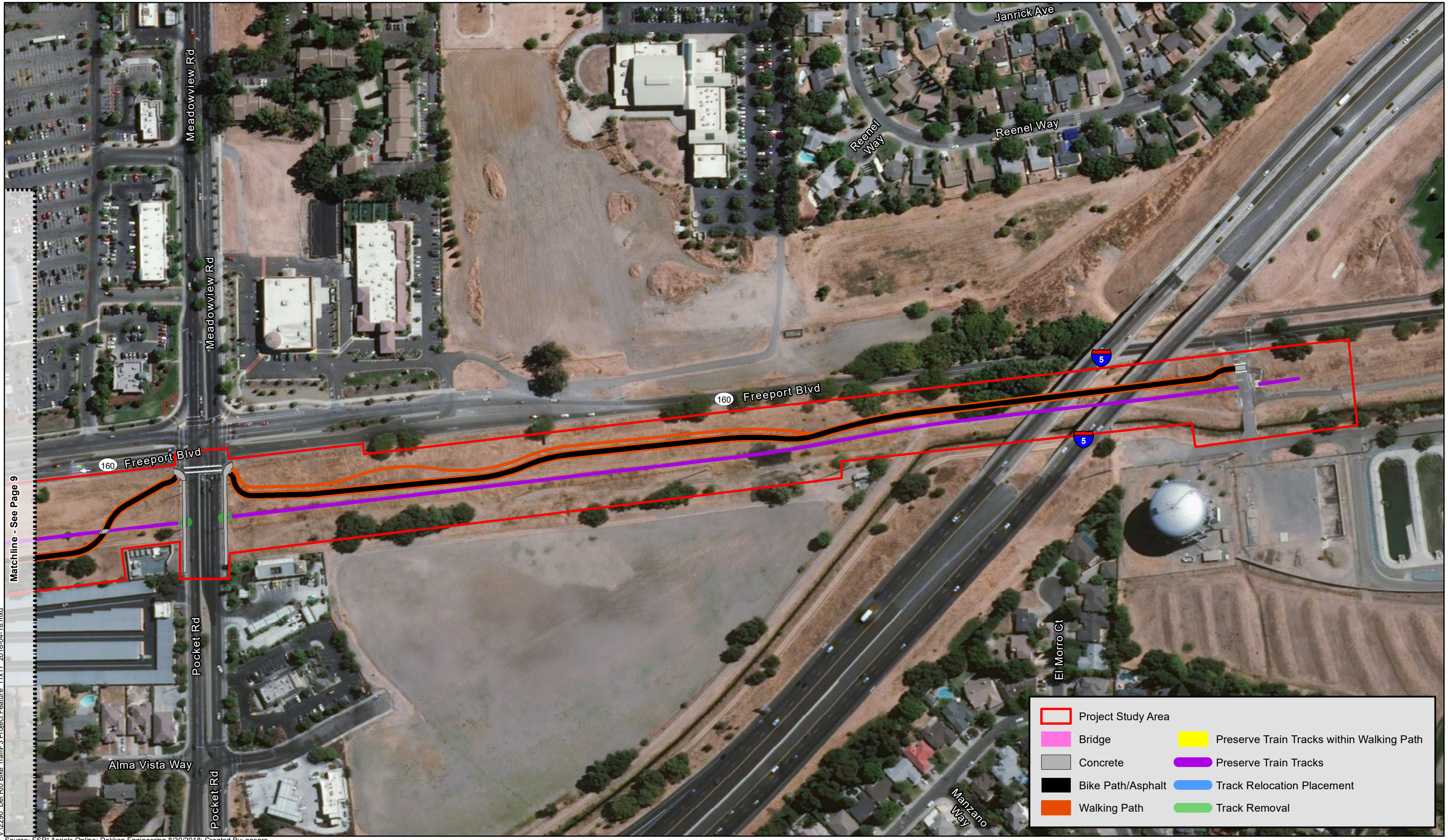


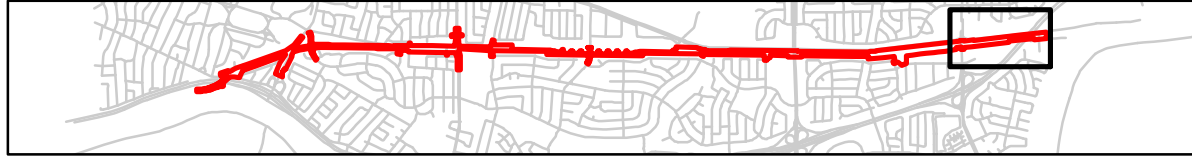
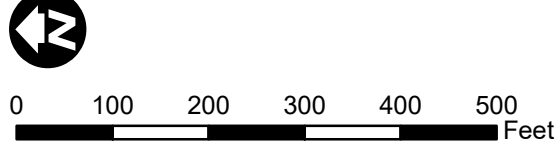
FIGURE 3
Conceptual Project Features
 Page 9 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



Matchline - See Page 9

VA2280_Del Rio Bike Trail\F3 Project Feature_11x17_2018-04-18.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



	Project Study Area		Preserve Train Tracks within Walking Path
	Bridge		Preserve Train Tracks
	Concrete		Track Relocation Placement
	Bike Path/Asphalt		Track Removal
	Walking Path		

FIGURE 3
Conceptual Project Features
 Page 10 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

The Del Rio Trail Project is needed because the South Land Park, Pocket, and adjacent communities in South Sacramento currently have limited ADA-compliant, active modes of transportation to schools, retail, jobs, and recreational amenities, thereby increasing automotive dependency and Vehicle Miles Traveled while reducing opportunities for those who do not drive or do not have access to a car, including children, the elderly, the disadvantaged, and persons with disabilities.

PROPOSED PROJECT DETAILS

The proposed Del Rio Trail Project consists of a Class I multi-use trail (12 to 16 feet of pavement with unpaved shoulders ranging from 2 to 3 feet) and when feasible, an adjacent 5 to 6-foot wide unpaved walking trail. The Del Rio Trail would include at-grade crossings and intersection modifications at each location where the trail intersects a vehicular roadway. Other components of the proposed Project include providing access points at various locations along the trail, as well as landscape and hardscape improvements. Construction staging would occur within existing City right of way along the corridor. No private right of way acquisition would occur.

Anticipated Construction Equipment

Typical construction equipment would include the following:

- Backhoe
- Excavator
- Concrete saw
- Concrete hammers
- Cement truck
- Paver
- Rollers
- Motor grader
- Dump truck
- Light hand tools

Most construction-related noise would occur during the multi-use trail construction. This operation would likely include noise from concrete hammers and excavators. All construction work for the proposed Project will comply with the City of Sacramento Standard Construction Specifications (or Best Management Practices [BMPs]). Construction is anticipated to last less than twelve months.

AGENCY ROLES AND RESPONSIBILITIES

The City is the Lead Agency, as defined by CEQA, for this Draft EIR, and has the principal responsibility to ensure that the requirements of CEQA have been met. After the EIR public review process is complete, the City Council is the party responsible for certifying that the EIR adequately evaluates the environmental impacts of the proposed Project. The City Council has the authority to approve, approve with modifications, or reject the proposed Project.

Permits

The permits, reviews, and approvals listed below would be required for proposed Project construction.

Required Permits and Approvals

Responsible Agency	Permit/Approval	Status
Regional Water Quality Control Board	National Pollutant Discharge Elimination System 402 General Permit for Storm Water Discharges Associated with Construction Activity	Prior to construction.
Central Valley Flood Protection Board	Encroachment Permit	Prior to construction.
Department of Water Resources Maintenance Area 9	Encroachment Permit	Prior to construction.
Sacramento Area Flood Control Agency	Construction timing coordination.	Prior to construction.
California Department of Fish and Wildlife	Section 1602 Streambed Alteration Agreement	Prior to Construction
U.S. Army Corps of Engineers	Section 408 Permit	Prior to construction.
City of Sacramento	Protected Tree Removal Permit.	Prior to construction.

Coordination Efforts:

The proposed Project currently falls under the Sacramento County (County) area-wide municipal separate storm sewer system (MS4) permit to discharge stormwater runoff from storm drains within County jurisdiction; however, since the proposed Project area exceeds 1 acre, a National Pollutant Discharge Elimination System (NPDES) 402 General Permit for Storm Water Discharges associated with construction activity will also be obtained prior to construction.

The proposed Project is located along the Sacramento River levee within the 100-year floodplain. Coordination with Central Valley Flood Protection Board (CVFPB), Department of Water Resource Maintenance Area 9 (MA-9), U.S. Army Corps of Engineers (USACE), California Department of Fish and Game, and Sacramento Area Flood Control Agency (SAFCA) will be required prior to construction.

AREAS OF CONTROVERSY

The City issued a Notice of Preparation (NOP) for this Draft EIR on June 8, 2018 in compliance with CEQA and the State CEQA Guidelines (see Appendix C of this Draft EIR). The City provided the NOP to local, State, and Federal agencies, organizations, and individuals that requested receipt of the City's public notices. The NOP was circulated for comment for 30 days, ending on July 9, 2018.

During the NOP comment period, the public and various government agencies have identified areas of controversy that pertain to the proposed Project. General topics raised included: biological resources, water quality, recreation, visual resources, noise, traffic, cultural, archeological, and Native American resources, as well as general permitting concerns. Specific topics raised included:

- Impacts to the Historic Walnut Grove Branch Line of the Southern Pacific Railroad;
- Right of Way;
- Tree Removal; and
- Consideration of Project Alternatives.

ISSUES TO BE RESOLVED

The discussion of environmental impacts, mitigation measures, and Project alternatives as evaluated in detail in this Draft EIR constitutes the identification of issues to be resolved as required for compliance with CEQA Guidelines Section 15123(b)(2). In addition, a summary of Environmental Impacts and Mitigation Measures is provided in below on Page xxviii.

NEXT STEPS FOR THE EIR

This Draft EIR will be circulated and made available to local, State, and Federal agencies and to organizations and individuals who may want to review and comment on the adequacy of the analysis included in this Draft EIR. The period for public review and comment is November 5, 2018 through January 3, 2019 [established in the Notice of Availability (NOA)], which is filed with the Sacramento County Clerk and posted on the Community Development Department website at:

<http://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports.aspx>.

During the public review period, written comments should be mailed/mailed to:

Tom Buford, Manager, Manager of Environmental Planning Services
City of Sacramento Community Development Department,
300 Richards Boulevard, Third Floor, Sacramento, CA 95811
Phone (916) 808-7931 or
email to: tbuford@cityofsacramento.org

The Draft EIR is available for review at the address above. The Draft EIR is also available at the following locations:

City of Sacramento Public Library
915 I Street
Sacramento, CA 95814

City of Sacramento Community Development Website:

<https://www.cityofsacramento.org/Community-Development/Planning/Environmental/Impact-Reports>

Del Rio Trail Website:

<http://www.cityofsacramento.org/Public-Works/Engineering-Services/Projects/Current-Projects/Del-Rio-Trail>

Please write "Del Rio Trail Project EIR" in the subject line. For comments by agencies and organizations, please include the name of a contact person for your agency or organization. All comments received, including names and addresses, will become part of the official administrative record and may be available to the public.

EFFECTIVELY COMMENTING ON THE DRAFT EIR

Readers are invited to review and comment on the adequacy and completeness of this Draft EIR in describing the potential impacts of the proposed Project, the level of severity of any impacts, the mitigation measures being proposed to reduce or avoid those impacts, and the project alternatives being considered.

In this regard, CEQA defines "significant effect on the environment" as a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the proposed Project, including land, air, water, minerals, flora, fauna, ambient noise and objects of historic or aesthetic significance (CEQA Guidelines, Section 15382). "Mitigation" includes actions that would avoid the impact altogether, minimize the impact, rectify by repairing, rehabilitating, or restoring the impacted environment, reducing the impact over time, or compensating for the impact by replacing or providing substitute resources or environments (CEQA Guidelines, Section 15370).

The most effective comments are those that focus on the adequacy and completeness of the environmental analysis and that are supported by factual evidence. Comments that focus on whether the proposed Project should be approved or denied are not comments on the adequacy of this Draft EIR.

FINAL EIR

Upon completion of the public review period, the City will review the comments received and prepare written responses to all environmental issues raised and, if necessary, revise the Draft EIR. Comments received, the responses to comments, and any necessary text revisions to the Draft EIR will be included as part of the Final EIR record for consideration of the proposed Project. Responses will be made available for review by the commenting agencies at least 10 days prior to any public hearing on the proposed Project, at which time the certification of the complete EIR would be considered.

The Final EIR will be considered by the City Council when acting on the proposed Project. If the proposed Project is approved, CEQA requires the City to adopt findings describing how each of the significant impacts identified in the EIR is being mitigated. The findings will also describe the reasons why Project alternatives that were analyzed in the EIR have not been adopted if the City Council chooses not to adopt a Project alternative. Finally, the City will adopt a Mitigation Monitoring and Reporting Plan (MMRP) that describes how it will ensure the mitigation measures being required of the proposed Project will be carried out. The MMRP is included as an attachment to this Draft EIR as Appendix B.

SUMMARY OF POTENTIAL IMPACTS AND PROPOSED MITIGATION

CEQA requires that the environmental analysis contained in the Draft EIR also include a summary of the proposed Project and its consequences, including an identification of each potentially significant effect of the proposed Project (Build Alternative), the level of effect the proposed Project and alternative may have, as well as any proposed mitigation measures. A full discussion of each of the proposed mitigation measures is found in Chapter 2.0. The table below provides a summary of the potential impacts of the proposed Project.

Summary of Major Potential Impacts from Alternatives

Potential Impact	Build Alternative	No-Build Alternative
Visual/Aesthetics	The Build Alternative would have potential changes in visual quality through the removal of trees but would not significantly impact the visual character of the Project area. <u>Mitigation measures would ensure impacts are less than significant.</u>	<u>No impact.</u>

Potential Impact	Build Alternative	No-Build Alternative
Air Quality and Climate Change (Construction)	<p>Construction impacts to air quality are short-term in duration and, therefore, would not result in adverse or long-term conditions. <u>Air quality impacts would be less than significant.</u></p> <p>The Build Alternative would result in minor increases in GHG emissions during construction; however, <u>these impacts are short-term and would not result in a significant increase in regional GHG.</u></p>	<u>No impact.</u>
Natural Communities	<p>The Build Alternative would result in temporary impacts to riparian habitat; therefore, a Section 1602 Streambed Alteration Agreement would also be acquired from the CDFW. <u>Mitigation measures would be implemented to reduce impacts to a less than significant level.</u></p>	<u>No impact.</u>
Wetlands and other Waters	<p>The Build Alternative would result in temporary impacts to waters of the U.S. and State. The City will coordinate with the U.S. Army Corps of Engineers and Regional Water Quality Control Board to ensure appropriate <u>mitigation measures are implemented which would reduce these impacts to a less than significant level.</u></p>	<u>No impact.</u>
Plant Communities	<p>No special status plant species have been identified within the proposed Project area. <u>Impacts to plant communities would be less than significant.</u></p>	<u>No impact.</u>
Animal Communities	<p>No special status animal species have been identified within the proposed Project area. <u>Impacts to animal communities would be less than significant.</u></p>	<u>No impact.</u>
Threatened and Endangered Species	<p>The Build Alternative would not result in impacts to State or Federal threatened or endangered species. <u>Minimization and mitigation measures would be implemented to reduce potentially significant impacts to a less than significant level.</u></p>	<u>No impact.</u>

Potential Impact	Build Alternative	No-Build Alternative
<p>Historic Resources</p>	<p>The Build Alternative would result in the removal of segments of the historic Walnut Grove Branch Line of the Southern Pacific Railroad, which is eligible for inclusion in the National Register of Historic Places. Caltrans CSO, as designated by the State Historic Preservation Office, concurred on October 23, 2018 that the track removal is not considered an adverse effect. <u>Minimization and mitigation measures would be implemented to reduce potentially significant impacts to a less than significant level.</u></p>	<p><u>No impact.</u></p>
<p>Archaeological Resources</p>	<p>The Build Alternative is not expected to encounter any archaeological resources during Project construction. If resources are discovered, construction will stop until a qualified cultural specialist can determine how to protect the sensitive resources. <u>Impacts to archaeological resources are expected to be less than significant.</u></p>	<p><u>No impact.</u></p>
<p>Population Growth</p>	<p>The Build Alternative would not result in the acquisition of private property or stimulate population growth, other than what was planned for in the 2035 General Plan. <u>No impacts due to population growth are expected.</u></p>	<p><u>No impact.</u></p>
<p>Utilities/Public Services</p>	<p>The Build Alternative would require utility coordination for water, sewer, electric, telephone/cable, and gas prior to construction. <u>These impacts are expected to be less than significant.</u></p>	<p><u>No impact.</u></p>
<p>Hazards & Hazardous Materials</p>	<p>The Build Alternative is not anticipated to impact hazardous waste materials during ground disturbance. A Spill Prevention, Control and Countermeasure Program would be prepared prior to construction. <u>Mitigation measures would be implemented to reduce impacts to a less than significant level.</u></p>	<p><u>No impact.</u></p>

Potential Impact	Build Alternative	No-Build Alternative
Hydrology and Water Quality	The Build Alternative will be designed to maintain existing drainage patterns in the Project area and ensure that it does not contribute to flooding up or downstream. <u>Construction-related temporary impacts to water quality could occur, but these impacts would be less than significant through the implementation of Best Management Practices during construction.</u>	<u>No Impact.</u>
Noise (Construction)	The Build Alternative would cause temporary construction noise that could impact adjacent residences. <u>Mitigation measures would ensure impacts are less than significant.</u>	<u>No impact.</u>
Transportation and Traffic	Short-term traffic operations at intersections would be temporarily affected during construction of the trail crossings; however, one lane in each direction would remain open for through traffic throughout construction. <u>A traffic management plan will be developed by the City to ensure these impacts are reduced to a less than significant level.</u>	<u>No impact.</u>
Cumulative Impacts	<u>The Build Alternative is not expected to result in any cumulative impacts.</u>	<u>No impact.</u>

TABLE OF CONTENTS

INTRODUCTION	i
1.0 PROPOSED PROJECT	1
1.1 Introduction.....	1
1.2 The Environmental Review Process	1
1.3 CEQA Purpose and Authority	2
1.4 Lead Agency Determination.....	2
1.5 Notice of Preparation	3
1.6 Public Outreach.....	3
1.7 Scope of the Draft EIR.....	7
1.8 Effects Determined to Be Potentially Significant	7
1.9 Relationship to Other Documents	8
2.0 ENVIRONMENTAL IMPACT ASSESSMENT	13
2.1 AESTHETICS AND VISUAL RESOURCES.....	15
2.2 AIR QUALITY	28
2.3 BIOLOGICAL RESOURCES.....	46
2.4 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES	108
2.5 GEOLOGY AND SOILS.....	154
2.6 GREENHOUSE GAS EMISSIONS	161
2.7 HAZARDS AND HAZARDOUS MATERIALS	171
2.8 HYDROLOGY AND WATER QUALITY.....	188
2.9 LAND USE AND PLANNING	207
2.10 NOISE AND VIBRATION.....	211
2.11 POPULATION AND HOUSING	219
2.12 PUBLIC SERVICES	244
2.13 RECREATION.....	247
2.14 TRANSPORTATION AND TRAFFIC	254
2.15 UTILITIES AND SERVICE SYSTEMS.....	262
3.0 ALTERNATIVES.....	271
3.1 ALTERNATIVES CONSIDERED AND SCREENING CRITERIA.....	271
3.1.1 Development of Reasonable Range of Alternatives	271
3.1.2 Methods Used to Screen Alternatives	272
3.1.3 Alternatives Considered but Rejected for Further Consideration	272
3.2 ENVIRONMENTALLY SUPERIOR ALTERNATIVE	294
4.0 OTHER CEQA CONSIDERATIONS	296
4.1 GROWTH INDUCING IMPACTS	296
4.1.1 Direct Growth Inducement.....	296
4.1.2 Indirect Growth Inducement	297
4.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS.....	297
4.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES.....	297
4.4 ENERGY RESOURCES.....	298
4.5 CUMULATIVE IMPACTS.....	298
4.5.1 Geographic Scope	299
4.5.2 List of Related Plans and Projects.....	300
4.5.3 Methods	304
4.5.4 Resource-Specific Cumulative Analysis	305

5.0 CEQA PREPARERS	319
6.0 REFERENCES	320

List of Figures

Figure 1 – Project Vicinity	ii
Figure 2 – Project Location	iii
Figure 3 – Project Features.....	v
Figure 4 – Zoning Designations	9
Figure 5 – Land Use	11
Figure 6 – Existing elevated segment of the abandoned railway corridor with disturbed or ruderal vegetation and dispersed trees.	17
Figure 7 – Existing disturbed oak woodland area within abandoned railway corridor with litter and debris piles.....	18
Figure 8 – Existing disturbed grassland and ruderal vegetation along abandoned railway corridor, with fencing and dense vegetation shielding residential views.	18
Figure 9 – Existing inactive railway corridor adjacent to commercial building in foreground, and South Land Park Drive in background.....	19
Figure 10 – Representative urban setting at the I-5 bridge facing north west on Sutterville Road.	19
Figure 11 – Representative open space area at Charlie Jensen Park, facing north east.	20
Figure 12 – Key Views	21
Figure 13 – Vegetation Communities and Waters within the BSA	53
Figure 14 – Impacts to Waters	93
Figure 15 – Elderberry shrubs exhibiting exit holes within the BSA	99
Figure 16 – Testing Locations	117
Figure 17 – Watersheds.....	193
Figure 18 – 303(d) Listed Waters	199
Figure 19 – Potential Right of Way.....	223
Figure 20 – Parks and Recreation Areas In and Adjacent to the Project Area	251
Figure 21 – Existing and Planned Bicycle Facilities in the Study Area.....	258
Figure 22 – Alternative 1 – Reduce Tree Removal.....	273

List of Tables

Table 1. SMAQMD Thresholds of Significance	29
Table 2. Federal and State Ambient Air Quality Standards	33
Table 3. 2012 Sacramento Valley Air Basin Emissions Inventory	40
Table 4. Sacramento County Area Designations for State and Federal Ambient Air Quality	40
Table 5. Construction Emissions (lbs/day)	42
Table 6. Attainment at Project Location.....	43
Table 7. Listed and Proposed Species with the Potential to Occur or Known to Occur in the Project Area.	73
Table 8. Elderberry Shrubs located within the BSA	97
Table 9. Project Impacts to Jurisdictional Waters	104
Table 10. Summary of Action Plan	148
Table 11. Global Warming Potential for Greenhouse Gases	168
Table 12. Recognized Environmental Conditions Within One Mile of the Site	178
Table 13. Recognized Environmental Conditions Less Than 1/8 Mile of the Site	179
Table 14. Central Valley RWQCB Water Quality Objectives for Inland Surface Waters.....	194

Table 15. Beneficial Uses	197
Table 16. TMDLs Within the Project Vicinity.....	200
Table 17. Exterior Noise Compatibility Standards for Various Land Uses.....	211
Table 18. Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses (dBA)	212
Table 19. Population Density and Associated Ambient Noise Levels	213
Table 20. Construction Equipment Noise Emissions and Acoustical Usage Factors Database	215
Table 21. Vibration Source Amplitudes for Construction Equipment.....	216
Table 22. Guideline Vibration Annoyance Potential Criteria	217
Table 23. Potential Project Right of Way.....	221
Table 24. Comparison of Environmental Impacts of the Alternatives Compared to the Proposed Project	295
Table 25. Geographic Scope of Cumulative Impact and Method of Evaluation.....	299
Table 26. List of Collective Past, Present, and Reasonably Anticipated Future Projects Within the City	300

List of Appendices

Appendix A California Environmental Quality Act Checklist
Appendix B Mitigation Monitoring And Reporting Plan
Appendix C Notice of Preparation Public Comments
Appendix D Road Construction Emissions Model
Appendix E CNDDDB, USFWS, and CNPS Special Status Species Lists
Appendix F Native American Outreach Log
Appendix G CSO Concurrence Letter
Appendix H FEMA Firmette Maps
Appendix I List of Acronyms
Appendix J List of Technical Studies

1.0 PROPOSED PROJECT

1.1 Introduction

The City of Sacramento (City) proposes to construct approximately 4.8 miles of Class I multi-use trail along the abandoned railway corridor west of Freeport Boulevard from south of Meadowview Road/Pocket Road to the Sacramento River Parkway north of Sutterville Road as part of the Del Rio Trail Project (proposed Project). The proposed Del Rio Trail Project consists of a Class I multi-use trail (12 to 16 feet of pavement with unpaved shoulders ranging from 2 to 3 feet) and when feasible, an adjacent 5 to 6-foot wide unpaved walking trail. The Del Rio Trail would include at-grade crossings and intersection modifications at each location where the trail intersects a vehicular roadway (see Figures 1 through 3).

The proposed Project begins approximately 0.4 mile south of Pocket Road near the Freeport Water Tower adjacent to the Interstate-5 (I-5) bridge over Freeport Boulevard and extends approximately 4.8 miles north along the abandoned railway corridor within the City of Sacramento. At the southern entry, the bike trail would connect directly to the newly constructed Freeport Shores Trail and the South Sacramento Parkway West. The route would then cross at Meadowview-Pocket Road and continue north through the South Land Park neighborhood towards William Land Park and the Sacramento River Parkway. North of Sutterville Road, the trail connects to the Sacramento River Parkway via two alignments: west along Sutterville Road with Class II bike lanes and northwest along the existing railway corridor.

This environmental document is prepared in conformance with the requirements the California Environmental Quality Act (CEQA) Public Resources Code (PRC) 21000-21178. The California Department of Transportation (Caltrans) is preparing a separate environmental document consistent with the requirements of the National Environmental Policy Act (NEPA) 40 CFR 1500-1508. Compliance with NEPA is required since the proposed Project intends to use Federal funding for implementation. For the proposed Project, the City is the CEQA Lead Agency and Caltrans is the NEPA Lead Agency.

In order to provide decision makers, the public, and reviewing agencies a complete description of the proposed Project and a description of how it has the potential to impact the natural and human environment, this Draft Environmental Impact Report (EIR) has been prepared. The Draft EIR provides an overview of the proposed Project in Chapter 1, evaluates each environmental resource for potential impacts and measures to reduce those impacts in Chapter 2, and analyzes Project alternatives in Chapter 3.

1.2 The Environmental Review Process

The CEQA requires public agencies to identify, disclose, and consider the potential environmental impacts of proposed discretionary actions that an agency is considering for approval. A Project that may have a significant impact on the environment cannot be approved unless the Lead Agency makes the approval contingent upon the implementation of mitigation measures that would reduce or avoid that impact to the extent feasible. When a Project may have significant environmental impacts, the Lead Agency must prepare an EIR before it considers whether to approve the Project.

The City, as the CEQA Lead Agency for the proposed Project, has prepared this Draft EIR for public review and comment. As discussed below, the Draft EIR will be available for review and comment by public agencies and the public for a period of 45 days. Prior to considering the proposed Project, the City would prepare a Final EIR that includes the comments received on the Draft EIR, written responses to those comments, a list of the commenters, and any revisions being made to the Draft EIR that are initiated by the City or in response to the comments. The Final EIR would be considered in combination with the Draft EIR by the City Council when acting on the proposed Project.

1.3 CEQA Purpose and Authority

This Draft EIR has been prepared pursuant to the CEQA Guidelines (14 California Code of Regulations [CCR] 15000 et seq.). CEQA requires that State and local government agencies consider the environmental consequences of Projects over which they have discretionary authority before taking action on those Projects (PRC 21000 et seq.).

The purpose of this Draft EIR is to analyze the environmental impacts of the proposed Project and establish ways to reduce or avoid these potential impacts. Additionally, this Draft EIR identifies alternatives to the proposed Project that would meet most Project objectives and reduce one or more potential environmental impacts.

The CEQA requires that each public agency mitigate or avoid the significant environmental effects of Projects it approves or implements, whenever feasible. An EIR is an informational document used in State, regional, and local planning and decision-making processes to disclose potential environmental effects. The purpose of this Draft EIR is not to recommend approval or denial of a Project. However, the public agency's decision whether to approve or to deny the proposed Project must take into consideration the information provided by the EIR.

When considering the proposed Project, the public agency may grant approval even if it would result in significant and unavoidable environmental impacts so long as the EIR discloses the Project's environmental effects, including:

- Effects that cannot be avoided;
- Growth inducing effects;
- Effects found not to be significant; and
- Cumulative impacts.

The CEQA provides that a Lead Agency that intends to approve a Project with significant and unavoidable effects must identify the “[s]pecific economic, legal, social, technological, or other considerations...” that make specific infeasible mitigation measures or alternatives identified in the EIR. In addition, the Lead Agency in such a case must identify the benefits of the Project that outweigh the significant effects on the environment (Statement of Overriding Considerations).

Accordingly, this Draft EIR describes and evaluates the potential impacts associated with the proposed Project. Additional resource-specific studies, such as visual resources, biological resources, cultural resources, hazardous waste, noise, community impacts, and water quality have been prepared for this Draft EIR to provide detailed information about the proposed Project's potential impacts on the environment. These technical studies are available for review at the City of Sacramento Community Development Center and on the Project website at:

<http://www.cityofsacramento.org/Public-Works/Engineering-Services/Projects/Current-Projects/Del-Rio-Trail>

The mitigation measures identified in this Draft EIR are designed to include enough detail and specificity to ensure that they would be effectively carried out to reduce the proposed Project's impacts.

1.4 Lead Agency Determination

As the public agency undertaking the proposed Project, the City is designated as the Lead Agency. CEQA Guidelines Section 15367 defines the Lead Agency as “. . . the public agency, which has the principal responsibility for carrying out or approving a Project.” Other public agencies may use this document in their decision-making or permit processes.

This Draft EIR was prepared by Dokken Engineering in close coordination with the City. This Draft EIR reflects the independent judgment and analysis of the City as required by the CEQA. A list of those involved in report preparation is provided in Chapter 6.0 of this Draft EIR.

1.5 Notice of Preparation

The CEQA does not require formal hearings at any stage of the environmental review process (CEQA Guidelines Section 15202[a]). However, it does encourage “wide public involvement, formal and informal, to receive and evaluate public reactions to environmental issues” (CEQA Guidelines Section 15201).

In accordance with the CEQA Guidelines, the City distributed a Notice of Preparation (NOP) of a Draft EIR for the proposed Project on June 8, 2018 and gave the public an opportunity to provide comment on the scope of the analysis that should be included in this Draft EIR. The NOP comment period closed on July 9, 2018. The comments received by the City on the NOP were considered in the preparation of this Draft EIR. The scope of this Draft EIR includes the potential environmental impacts identified in the NOP, as well as any issues raised by agencies and the public in response to the NOP. The NOP and comments received during the NOP comment period are contained in Appendix C of this Draft EIR.

1.6 Public Outreach

The City is dedicated to public and stakeholder outreach and ongoing public communications beyond what is required by the CEQA for the Del Rio Trail Project. In order to gather feedback from the community regarding a potential trail in support of the Active Transportation Program (ATP) grant application for the proposed Project, City staff coordinated with the South Land Park Neighborhood Association (SLPNA) to host a public meeting on April 22, 2015. Approximately 2,700 invitations were sent out to residents, businesses, schools, and government officials. Groups in attendance included members of SLPNA, Land Park Community Association (LPC), California State Parks, Sacramento Rapid Transit, and the Railroad Foundation. The proposed Project concept was introduced to members of the public, and initial comments were collected by City staff and representatives from SLPNA. Board members of SLPNA and LPC expressed their support for the proposed Project and stated that they do not want a running rail line near their communities. Attendees on behalf of the railroad stated that they were not in favor of the trail and would instead prefer a “Rail-with-Trail” Project.

After the ATP Cycle 2 Grant was awarded in 2015, the City created a public outreach program to share information and obtain feedback to better define the proposed Project. This included creating a publicly accessible page on its website with a list of resources and materials for information regarding the proposed Project:

<http://www.cityofsacramento.org/Public-Works/Engineering-Services/Projects/Current-Projects/Del-Rio-Trail>

The City distributed two newsletters announcing public workshops and providing basic information about the proposed Project. At these meetings, the public submitted questions and comments on comment cards, which were reviewed and considered for integration into Project planning. Frequently asked questions were made available on the Project website. Sixteen meetings have been held regarding the proposed Project:

1. August 1, 2017 – South Land Park Neighborhood Association National Night Out

*Alice Birney Elementary School
6251 13th Street., Sacramento, CA
7:00 p.m.-8:00 p.m.*

Representatives from the City and the project team presented the current project design, answered questions, and collected contact information for inclusion in the project outreach database.

2. March 22, 2017 – The Del Rio Trail Project Public Workshop No. 1

Pony Express Elementary School (Cafeteria)
1250 56th Ave, Sacramento, 95831
5 p.m.-7 p.m.

During the first hour of the open-house style meeting, attendees visited five information stations to learn about the proposed Project, discuss their ideas, and share their comments, concerns, and suggestions.

At 6 p.m., Councilmember Jay Schenirer addressed meeting attendees, introduced a representative from Councilmember Steve Hansen's office, Consuelo Hernandez, and expressed support for the proposed Project. Meeting facilitator Lucy Eidam Crocker introduced Pamela Dalcin-Walling of Dokken Engineering and Jesse Gothan with the City of Sacramento Public Works. Ms. Dalcin-Walling and Mr. Gothan gave a Project overview presentation.

The Project overview presentation was followed by a seven-member comment/question panel. The panel addressed general questions about the proposed Project, as well as questions regarding safety, access points and crossings, enhancements, construction and maintenance, and funding.

3. March 29, 2017 - South Land Park Neighborhood Association Annual Meeting

Pony Express Elementary School
6:30 p.m.

The City attended a SLPNA meeting as a guest and presented information regarding the trail.

4. June 1, 2017 – 27th Ave/Normandy Lane/Del Rio Road Intersection Focus Meeting

Lutheran Church of the Master
1900 Potrero Way, Sacramento, CA 95822
5 p.m.-7:30 p.m.

Residents who live near the 27th Avenue/Normandy Lane/Del Rio Road Intersection met with members of the Project team to discuss concerns and share comments about the proposed Project. Pamela Dalcin-Walling, Project Manager from Dokken Engineering, presented a Project overview.

The meeting was focused on the unique horizontal and vertical constraints of this particular intersection that would make a new pedestrian and bicycle crossing challenging. The Project team also discussed sidewalks, safety, and privacy, and reviewed upcoming scheduled meetings and the Project timeline before the meeting came to a close.

5. June 8, 2017 - The Del Rio Trail Project Public Workshop No. 2

June 8, 2017
Pony Express Elementary School (Cafeteria)
1250 56th Ave, Sacramento, 95831
5 p.m.-7 p.m.

Between 5 p.m. and 6:15 p.m., attendees visited five stations to learn about the proposed Project, discuss their ideas, and share their comments, concerns, and suggestions. Pamela Dalcin-Walling of Dokken Engineering provided a Project overview and update and reviewed the activities that had occurred since the last Project meeting. Following the presentation, there was an open Q&A session between the audience and Project team members present. The session addressed general questions about the proposed Project, as well as questions regarding safety, access points and crossings, enhancements, construction and maintenance, and funding.

6. June 21, 2017 - Land Park Community Association Meeting

*Eskaton Monroe Lodge
3225 Freeport Blvd, Sacramento, CA 95818
6:30 p.m.*

The City attended a monthly LPC meeting as a guest and presented information regarding the trail.

7. August 17, 2017 – Office Hours Meeting

*New Technology High School
1400 Dickson Street, Sacramento, 95822
5 p.m.-7 p.m.*

This was an informal, office hours meeting that allowed members of the community to visit Project stations and ask members of the Project team questions one-on-one. A formal presentation was not given. Questions addressed during the workshop included Project aspects such as plantings, property access, the preservation of the historic rail line, safety along the trail, and maintenance.

8. December 11, 2017 - Regional Transit Board Meeting

*RT Auditorium
1400 29th Street, Sacramento, CA
5:30 p.m.*

Jesse Gothan from the City of Sacramento Public Works presented an overview of the proposed Project. Two members of the SLPNA addressed the board to speak in favor of the proposed Project. Eleven board members of SPLNA attended this meeting and several spoke in favor of the trail.

9. December 18, 2017 - Meeting with the California State Railroad Museum Foundation

*Sacramento City Hall
915 I St, Sacramento, CA
1 p.m.-2 p.m.*

City representatives met with members of the Board of the California State Railroad Museum Foundation (Foundation) to discuss the proposed Project and any updates since they last met. The Foundation Board emphasized that the Foundation was not against the bike trail, but their main goal is the preservation of the railroad line. The City presented examples and renderings of aesthetic features of the trail that would serve to memorialize the historic nature of the corridor. The Foundation Board informed the City that they would discuss this information with other Foundation Board members in January.

10. February 22, 2018 – Sutterville Elementary Parent Teacher Association Meeting

*Sutterville Elementary School
4967 Monterey Way, Sacramento, CA*

The City attended a Parent Teacher Association (PTA) meeting as a guest and presented information regarding the trail.

11. March 23, 2018 – South Land Park Neighborhood Association Annual Meeting

*Pony Express Elementary School (cafeteria)
1250 56th Ave, Sacramento, CA
6:30 p.m.*

The City attended a SLPNA meeting as a guest and presented information regarding the trail.

12. April 4, 2018 – 2nd Meeting with the California State Railroad Museum Foundation

*Sacramento City Hall
915 I St, Sacramento, 95814
11 a.m.-12 p.m.*

The City met with members of the Board of the California State Railroad Museum Foundation to present an updated Project design, modified to address concerns expressed by the foundation in their initial meeting.

13. May 16, 2018 – Land Park Community Association Meeting

*Eskaton Monroe Lodge
3225 Freeport Blvd., Sacramento, CA
6:30 p.m.-7:30 p.m.*

The City attended a monthly LPC meeting as a guest, presented information regarding the trail, and answered questions.

14. May 23, 2018 – Preservation Sacramento

*Urban Hive
1601 Alhambra Blvd., Sacramento, CA
6:00 p.m.-7:00 p.m.*

The City of Sacramento met with members of Preservation Sacramento to present the project design and obtain reaction/feedback.

15. June 27, 2018 – South Land Park Community Meeting

*Alice Birney Elementary School
6251 13th Street., Sacramento, CA
7:00 p.m.-8:00 p.m.*

SLPNA held a community meeting to provide up-to-date facts regarding the railroad opposition to the trail and to report on the planning efforts associated with the trail. Brief presentations were made by Brian Ebbert, Chuck Hughes, Jay Schenirer, and Scott Burns. The project team as well as representatives from City of Sacramento Police Department, City Park Rangers, and Jim Cooper's office were on hand to answer questions from the attendees.

16. August 1, 2018 – South Land Park Neighborhood Association National Night Out

*Alice Birney Elementary School
6251 13th Street., Sacramento, CA
7:00 p.m.-8:00 p.m.*

Representatives from the City and the project team presented the current project design, answered questions, and collected contact information for inclusion in the project outreach database.

17. A public meeting will be held during circulation of the CEQA environmental document to collect comments regarding the proposed Project and the Draft EIR on December 6, 2018 at the Pony Express Elementary School located at 1250 56th Avenue, Sacramento, CA 95831 from 6:00p.m. – 8:00 p.m.

1.7 Scope of the Draft EIR

The analysis included in Chapter 2.0 focuses on the specific environmental resource topics that require further evaluation to determine if they have a potential impact. Comments received during the scoping process were taken into consideration in development of this Draft EIR based on a comparison with the CEQA Checklist Guidelines (Appendix A). Environmental issues identified in the NOP that received no additional public comment and are determined to have no significant or a less than significant impact are disclosed in the following paragraph. Environmental issues with a potentially significant impact identified during the NOP and scoping process are further evaluated for determination of level of significance and are summarized under the following heading “Effects Determined to Be Significant” below and in more detail in Chapter 2.0.

Environmental Issues Determined Not to Be Significant

Pursuant to the CEQA Guidelines, the discussion of the potential impacts on the physical environment can be focused on those impacts that may be significant or potentially significant. The CEQA allows a Lead Agency to limit the details of discussion of the environmental effects (impacts) that are not considered potentially significant (PRC Section 21100, CCR Sections 15126.2[a] and 15128). The CEQA requires that the discussion of any significant effects on the environment be limited to substantial or potentially substantial adverse changes in physical conditions that exist within the affected area, as defined in PRC Section 21060.5 (Statutory definition of “environment”).

Impacts dismissed in an analysis as clearly insignificant and unlikely to occur need not be discussed further in the Draft EIR unless the Lead Agency subsequently receives information inconsistent with the finding (CCR Section 15143). As part of the NOP scoping process, it was determined that implementation of the proposed Project would result in no impact (i.e., not significant) related to the following resources; and are, therefore, not discussed at further length in this Draft EIR:

Agricultural and Forestry Resources: The proposed Project site has been designated as Parks and Recreation, Public/Quasi Public, Suburban Center, Suburban Corridor, Suburban Neighborhood High Density, Suburban Neighborhood Low Density, Suburban Neighborhood Medium Density, and Traditional Neighborhood Low Density in the 2035 General Plan. The Project site is zoned “A” for Agricultural, “C-1” for Limited Commercial, “C-2” for General Commercial, “F” for Flood, “M-1” for Industrial, “OB” for Office Building, “R-1” for Standard Single Family, “R-2” for Two-Family, “R-3” for Multi-Family, “SC” for Shopping Center, and “TC” for Transportation Corridor (see Figures 4 and 5). The proposed Project is not adjacent to, nor located on, lands that are zoned for forest land, timberlands, or agricultural uses. Therefore, no impacts to agricultural and forestry resources would occur and this issue is not discussed further in this Draft EIR.

Mineral Resources: According to the City of Sacramento 2035 General Plan Master EIR, no significant mineral deposits have been identified within the proposed Project corridor (City of Sacramento 2014). Additionally, the proposed Project is not located within an Aggregate Resource Area as identified by the City of Sacramento 2035 General Plan Land Use Diagram (City of Sacramento 2015). Therefore, no impacts to mineral resources would occur and this issue is not discussed further in this Draft EIR.

1.8 Effects Determined to Be Potentially Significant

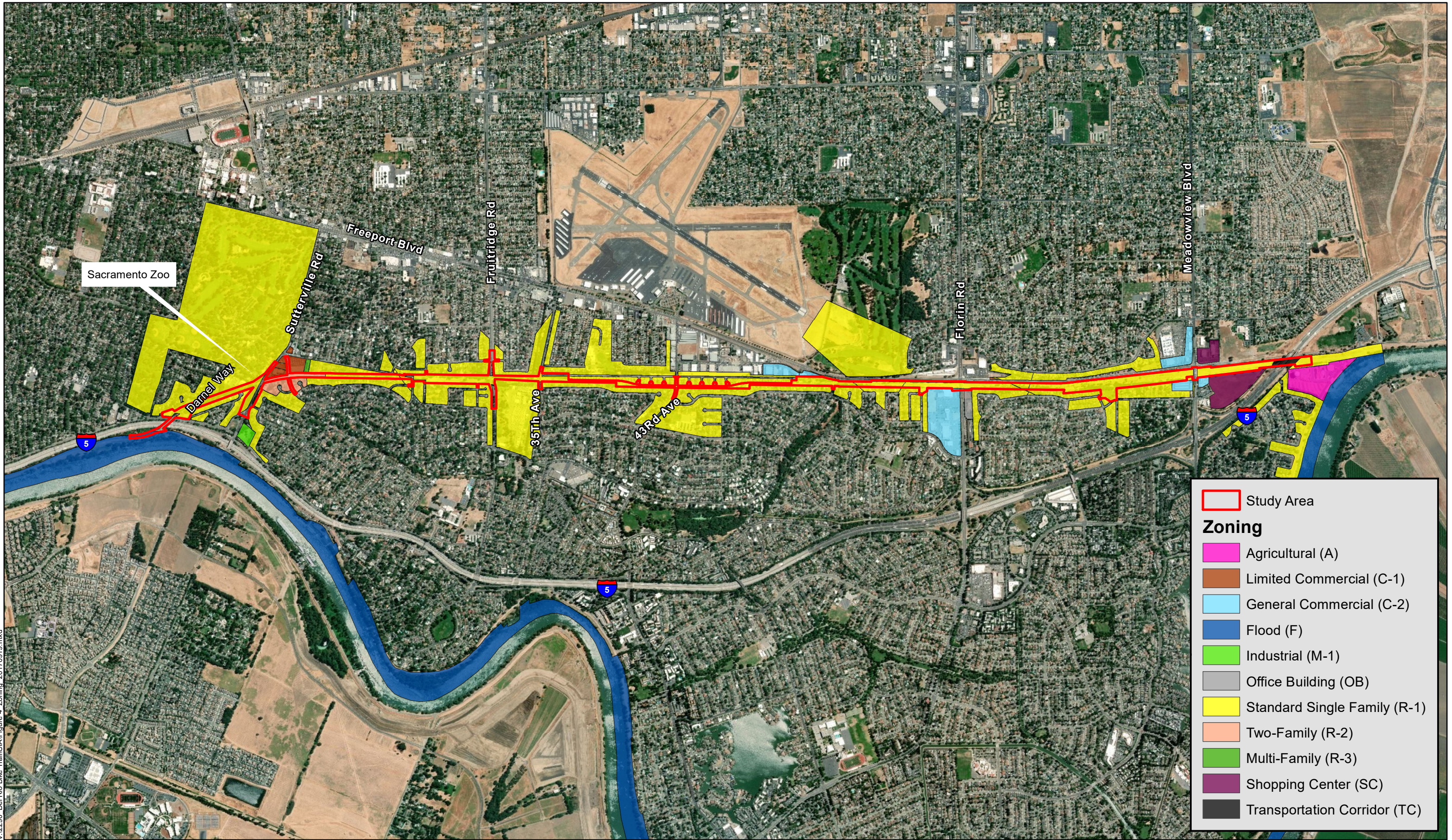
The NOP and Project scoping process identified the following environmental issues may have potential environmental impacts that require further analysis in the Draft EIR. Accordingly, the following environmental issues are evaluated in this Draft EIR:

Aesthetics (AES)	Hazards and Hazardous Materials (HAZ)	Recreation (REC)
Air Quality (AIR)	Hydrology and Water Quality (WQ)	Transportation and Traffic (TRA)
Biological Resources (BIO)	Land Use and Planning (LU)	Tribal Cultural Resources (TCR)
Cultural Resources (CUL)	Noise (NOISE)	Utilities and Services Systems (UTL)
Geology and Soils (GEO)	Population and Housing (POP)	Greenhouse Gas Emissions (GHG)
Public Services (PUB)		

1.9 Relationship to Other Documents

This Draft EIR incorporates, by reference, the environmental analysis and other information contained in the City of Sacramento 2035 General Plan (2015) and the Final City of Sacramento Bicycle Master Plan (2016). The full text of the City of Sacramento 2035 General Plan is available online at: <https://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan>

The full text of the Final City of Sacramento Bicycle Master Plan is available online at: <https://www.cityofsacramento.org/Public-Works/Transportation/Programs-and-Services/Bicycling-Program>



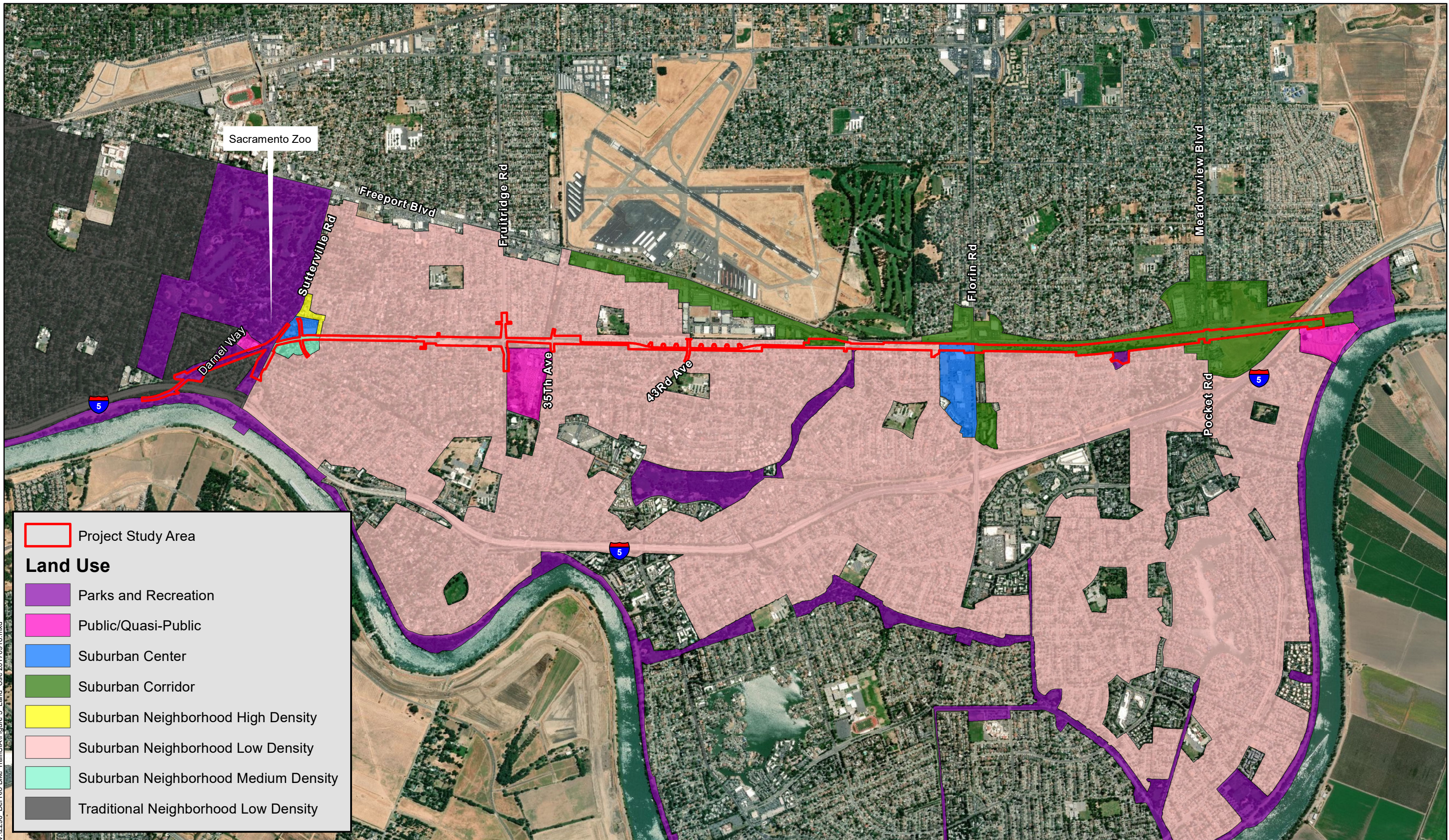
VA2290_Del Rio Bike Trail(CIA)Figure 4_Zoning_20170919.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



FIGURE 4
Zoning Designations

ATPL-5002(189)
Del Rio Trail Project
City of Sacramento, Sacramento County, California



Project Study Area

Land Use

- Parks and Recreation
- Public/Quasi-Public
- Suburban Center
- Suburban Corridor
- Suburban Neighborhood High Density
- Suburban Neighborhood Low Density
- Suburban Neighborhood Medium Density
- Traditional Neighborhood Low Density

V:\2290_Del Rio Bike Trail\CI\Figure 5 Land Use 20170918.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



FIGURE 5
Land Use

ATPL-5002(189)
Del Rio Trail Project

City of Sacramento, Sacramento County, California

2.0 ENVIRONMENTAL IMPACT ASSESSMENT

In accordance with CEQA Guidelines Section 15126.2, this Draft EIR identifies and focuses on the significant direct and indirect environmental effects (impacts) of the proposed Project, considering both its short-term and long-term effects. Short-term effects are generally those associated with construction of the proposed Project, while long-term effects are generally those associated with operation of the proposed Project.

Organization of Environmental Issue Assessment

Each environmental issue analyzed in Chapter 2.0 contains the following components:

Regulatory Framework presents the laws, regulations, plans, and policies that are relevant to each issue area. Regulations originating from the Federal, State, and/or local levels are each discussed, as appropriate.

Environmental Setting presents the existing environmental conditions within the proposed Project boundaries and within the surrounding Project area, as appropriate, to establish baseline conditions, in accordance with CEQA Guidelines Section 15125. The extent of the environmental setting area evaluated (the Project study area) differs among resources, depending on the locations where impacts would be expected. For example, air quality impacts are assessed for the air basin (macro-scale), as well as the site vicinity (micro-scale), whereas aesthetic impacts are assessed for the Project vicinity only.

Methodology of Analysis includes the methodology to determine what constitutes a significant impact, the Thresholds of Significance used to determine the level of significance of the environmental impacts for each resource topic, in accordance with CEQA Guidelines Sections 15126, 15126.2, and 15143, and the Project Impact Analysis and documentation of any required mitigation measures. The Thresholds of Significance used in this Draft EIR were developed using criteria from the CEQA Guidelines (see Appendix A); Federal, State, and local regulatory schemes; local/regional plans and ordinances; accepted practice; consultation with recognized experts; and other professional opinions.

Project Impacts identify the level of each environmental impact by comparing the effects of the proposed Project to the environmental setting. Project impacts are organized numerically in each subsection (e.g., Impact AES-1, Impact AES-2, Impact AES-3). A bold-font environmental impact statement precedes the discussion of each impact while its level of significance follows the discussion of each impact. The discussion that follows the impact summary includes the substantial evidence supporting the impact significance conclusion.

Required Mitigation includes specific details of the mitigation identified in the Environmental Impacts with performance standards, timing, and responsible parties identified.

Format Used for Impact Analysis and Mitigation Measures

The format adopted in this Draft EIR to present the evaluation of environmental impacts is described and illustrated below. Abbreviations used in the impact analysis and mitigation measure numbering are shown in Section 1.0.

Summary Heading of Impact (Example)

Impact AIR-1: An impact summary heading appears immediately preceding the impact description (Summary Heading of Impact in this example). The impact abbreviation identifies the section of the report (AIR for Air Quality in this example) and the sequential order of the impact (1 in this example) within that section. To the right of the impact number is the impact statement, which identifies the potential impact.

Narrative Analysis: A narrative analysis follows the impact statement assessing the baseline condition of the proposed Project compared to the established Threshold of Significance. This analysis identifies any potential mitigation required and explains how the mitigation would mitigate the potential impact. The analysis concludes with what the Level of Significance is with all factors considered.

Level of Significance: Less than Significant with Mitigation (the evaluated Level of Significance concluded in the analysis is included here, such as Less than Significant with Mitigation in this example).

This section describes the determination of the severity of Project impacts. This is fundamental to achieving the objectives of CEQA. The CEQA Guidelines Section 15091 requires that decision-makers mitigate, as completely as is feasible, the significant impacts identified in the Draft and Final EIRs. Levels of significance can fall into four categories: No Impact; Less Than Significant; Less Than Significant With Mitigation; or Significant Unmitigated Impact. If the EIR identifies any significant unmitigated impacts, the CEQA Guidelines Section 15093 requires decision-makers to adopt a statement of overriding considerations that explains why the benefits of the Project outweigh the adverse environmental consequences identified in the EIR.

The Level of Significance for each impact examined in this Draft EIR is determined by considering the predicted magnitude of the impact against the applicable threshold. This section also identifies the resulting level of significance of the impact, including the implementation of mitigation measures (if required).

Mitigation Required: Mitigation Required lists any feasible measures that could avoid, minimize, rectify, reduce, or compensate for significant adverse impacts, with measures having to be fully enforceable through incorporation into the Project (PRC Section 21081.6[b]) as discussed under the impact analysis.

Mitigation measures are not required for environmental impacts that are found to be less than significant. Mitigation for a significant environmental impact is described following the impact, where feasible and available. If sufficient feasible mitigation was not available to reduce environmental impacts to a less than significant level, or where the Lead Agency lacked the authority to ensure that the mitigation be implemented when needed, the impacts would be identified as significant and unavoidable. None of the impacts identified for the proposed Project have been identified as significant and unavoidable.

In some cases, following the impact discussion, reference is made to State and Federal regulations and agency policies that would fully or partially mitigate the impact. In addition, policies and programs from applicable local land use plans that partially or fully mitigate the impact may be cited.

Project-specific mitigation measures, beyond those contained in other documents, are identified with a summary heading and described using the format presented below:

Mitigation Measure (AIR-1): The description indicates Project-specific mitigation identified that would reduce the impact to the lowest degree feasible.

2.1 AESTHETICS AND VISUAL RESOURCES

This section describes the regulatory and environmental setting for aesthetics and visual resources. It also describes impacts to aesthetics and visual resources that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

Federal and State

There are no roadways near the Project site that are designated in Federal or State plans as a scenic highway or route worthy of protection for maintaining and enhancing scenic viewsheds.

Local

City of Sacramento 2035 General Plan (2015)

The following goals and policies from the Land Use and Urban Design (LU) Element and the Environmental Resources (ER) Element related to aesthetics, light, and glare are relevant to the proposed Project (City of Sacramento 2015). Those goals and policies that directly pertain to the proposed Project are discussed in the impact analysis below.

Goal LU 2.3 City of Trees and Open Spaces. Maintain a multi-functional “green infrastructure” consisting of natural areas, open space, urban forest, and parkland, which serves as a defining physical feature of the City of Sacramento, provides visitors and residents with access to open space and recreation, and is designed for environmental sustainability.

Policy LU 2.3.1 Open Space System. The City shall strive to create a comprehensive and integrated system of parks, open space, and urban forests that frames and complements the City’s urbanized areas.

Goal LU 2.4 City of Distinctive and Memorable Places. Promote community design that produces a distinctive, high-quality built environment whose forms and character reflect the City of Sacramento’s unique historic, environmental, and architectural context, and create memorable places that enrich community life.

Policy LU 2.4.1 Unique Sense of Place. The City shall promote quality site, architectural and landscape designs that incorporate those qualities and characteristics that make the City of Sacramento desirable and memorable, including walkable blocks, distinctive parks and open spaces, tree-lined streets, and varied architectural styles.

Policy LU 2.4.2 Responsiveness to Context. The City shall promote building designs that respect and respond to the local context, including use of local materials, responsiveness to the City of Sacramento’s climate, and in consideration of the cultural and historic context of the City’s neighborhoods and centers.

Goal LU 2.7 City Form and Structure. Require excellence in the design of the City’s form and structure through development standards and clear design direction.

Goal ER 7.1. Visual Resource Preservation. Maintain and protect significant visual resources and aesthetics that define the City of Sacramento.

Policy ER 7.1.1 Protect Scenic Views. The City shall seek to protect views from public places to the Sacramento and American rivers and adjacent greenways, landmarks, and urban views of the downtown skyline and the State Capitol along Capitol Mall.

City of Sacramento Tree Planting, Maintenance, and Conservation Ordinance No. 2016-0026

The City has adopted provisions relating to tree planting, maintenance and conservation. City Code states the following regarding the purpose of the regulations:

“The City Council finds that trees are a signature of the City and are an important element in promoting the well-being of the citizens of Sacramento. The City Council finds that, when proper arboricultural practices are applied, trees enhance the natural scenic beauty of the City; increase oxygen levels; promote ecological balance; provide natural ventilation and air filtration; provide temperature and erosion controls; increase property values; and improve the quality of life. The City Council also finds and determines that it is in the public interest to protect and manage tree resources within the City in order to preserve and maintain the benefits that they provide to the community. The purpose of this chapter is to provide for the conservation of existing tree resources; to optimize tree canopy coverage throughout the City while recognizing individual rights to develop and make reasonable use of private property consistent with the general plan; and to provide clear standards for protection, removal, and replacement of City trees and private protected trees (City Code Section 12.56.010).”

City of Sacramento Tree Ordinance: Sacramento City Code 12.56

The City has adopted regulatory policies for the preservation, protection, and maintenance of the existing trees within the City. Sacramento City Code (CC) 12.56 was amended and adopted by the City Council on August 4, 2016.

Work on and/or the removal of City trees or private protected trees requires prior approval in the form of a City of Sacramento Tree Permit (City Tree Permit). City trees are characterized as trees partially or completely located in a City park, on City owned property, or on a public right-of-way, including any street, road, sidewalk, park strip, mow strip or alley. For City trees located within City Park, the Director of the City Youth, Parks & Community Enrichment Department handles approvals for tree removal. For all other City trees located on City property or within the ROW, the City Director of Public Works handles approvals. CC section 12.56.040 includes specific requirements for notice and hearing for removal of City trees.

Private protected trees are defined as trees designated to have special historical value, special environmental value, or significant community benefit, and are located on private property. In addition, private protected trees include: 1) native trees at 12 inches DSH (i.e., coast live, interior, valley and blue oaks [*Quercus* spp.], California sycamore [*Platanus racemose*], and buckeye [*Aesculus californica*]); 2) all trees at 32 inches DSH with an existing single family or duplex dwelling; and 3) all trees at 24 inches DSH on undeveloped land or any other type of property such as commercial, industrial, and apartments (City of Sacramento 2017b).

City of Sacramento Tree Ordinance: Sacramento City Code 12.56.040 Removal of City Trees—Public Projects

Whenever feasible, the City shall modify the design of public projects to avoid the removal or damage to city trees.

If the City proposes to remove City trees that have a DSH of four inches or more as part of a public project that otherwise requires City council approval, the City project manager shall provide written justification to the director of the need to remove City trees for the public project. The director shall review the written justification and if the director agrees with the written justification the director shall make a recommendation to the City council to approve the request to remove the City trees. The request for approval from City council may take place at any stage of the public project but the City shall obtain council approval prior to removing the City trees. City trees proposed to be removed as part of a public project that either does not require City council approval or has a DSH less than four inches shall be removed as provided in Section 12.56.030(C).

The director shall provide written notice of the proposal to remove City trees as part of a public project by posting a notice of the time, date, and location of the City council meeting during which the City council is to decide whether or not to remove City trees in a conspicuous place on or in proximity to the trees at least fifteen (15) days prior to the City council meeting (Ord. 2016-0026 § 4).

Environmental Setting

Aesthetic resources are those natural resources, landforms, vegetation, and human-made structures in the region and local environment that generate sensory reactions and evaluations by viewers. The proposed Project location and setting provides the context for determining the type of changes to the existing visual environment. The proposed Project is located on the abandoned railway corridor west of Freeport Boulevard from south of Meadowview Road/Pocket Road to the Sacramento River Parkway north of Sutterville Road in the City of Sacramento, Sacramento County, California. The proposed Project is located in the U.S. Department of Agriculture (USDA) Great Valley Ecological Subsection (262A) of the California Dry Steep Province (USDA 2007). The landscape is characterized by low elevation fluvial plains with general land covers of disturbed grasslands, oak woodlands, and urban infrastructure. The land use within the proposed Project corridor is primarily a suburban and urban landscape of residential and commercial land uses, with patches of disturbed natural areas throughout the abandoned railway corridor (see Figure 6 through 11 for existing conditions and Figure 12 for locations of key views). The proposed Project corridor is defined as the area of land that is visible from, adjacent to, and outside the proposed trail right-of-way, and is determined by topography, vegetation, and viewing distance.

No scenic resources have been identified within the corridor through background investigations and scenic resources literature searches. Additionally, the proposed Project corridor is not within or adjacent to a designated State Scenic Highway according to the California Scenic Highway Mapping System (2011).



Figure 6. Existing elevated segment of the abandoned railway corridor with disturbed or ruderal vegetation and dispersed trees.



Figure 7. Existing disturbed oak woodland area within abandoned railway corridor with litter and debris piles.



Figure 8. Existing disturbed grassland and ruderal vegetation along abandoned railway corridor, with fencing and dense vegetation shielding residential views.



Figure 9. Existing inactive railway corridor adjacent to commercial building in foreground, and South Land Park Drive in background.



Figure 10. Representative urban setting at the I-5 bridge facing north west on Sutterville Road.



Figure 11. Representative open space area at Charlie Jensen Park, facing north east.

Project Study Area



VA2290_Del Rio Bike Trail\VA\F12_keyviews.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



0 0.25 0.5 0.75 1 Miles

FIGURE 12
Representative Key Views
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to aesthetics and visual resources within or adjacent to the proposed Project area. When an impact is determined to be significant, mitigation measures were identified that would reduce or avoid that impact.

Methodology of Analysis

Using the CEQA Checklist Guidelines (see Appendix A) for guidance, the following Thresholds of Significance were established, analyzed, and evaluated using the methodology established in Section 3.1.3.2 to determine whether impacts to aesthetics and visual resources would be significant. Would the proposed Project:

- Have a substantial adverse effect on a scenic vista;
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway;
- Substantially degrade the existing visual character or quality of the site and its surroundings; or,
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Project Impact Analysis

Impact AES-1: Potential to have a substantial adverse effect on a scenic vista.

The City of Sacramento 2035 General Plan (2015) designates public places that have views to the Sacramento and American Rivers as well as adjacent greenways, landmarks, and urban views of the downtown skyline and the State Capitol along Capitol Mall as scenic vistas. No scenic resources have been identified within the corridor through background investigations and scenic resources literature searches. Additionally, the proposed Project corridor is not within or adjacent to a designated State Scenic Highway according to the California Scenic Highway Mapping System (2011). Therefore, no impact would occur to scenic vistas.

Level of Significance: No Impact.

Required Mitigation: None Required.

Impact AES-2: Potential to damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State Scenic Highway.

No scenic resources have been identified within the corridor through background investigations and scenic resources literature searches. Additionally, the Project corridor is not within or adjacent to a designated State Scenic Highway according to the California Scenic Highway Mapping System (2011).

Level of Significance: No Impact.

Required Mitigation: None Required.

Impact AES-3: Potential to substantially degrade the existing visual character or quality of the site and its surroundings.

Visual Resources and Resource Change

Visual resources of the Project setting are defined and identified below by assessing visual character and visual quality in the proposed Project corridor. Resource change is assessed by evaluating the visual character and the visual quality of the visual resources that comprise the proposed Project corridor before and after the construction of the proposed Project.

The visual character of the proposed Project would be compatible with the existing visual character of the corridor. The Project proposes to construct 4.8 miles of Class I multi-use trail along the abandoned railway corridor; however, the overall character of the area would not change. The proposed Project would maintain the linear form of the abandoned railway corridor. The colors throughout the abandoned corridor are a composition of light and dark vegetation (reds, yellows, oranges, and greens) interspersed with residential homes, apartments, and commercial businesses of all colors, maintained park open spaces, and roadway segments of gray and black. The vegetative character of the corridor is mostly comprised of sparse, un-manicured scrub vegetation along with planted turf lawn within neighboring parks. A mix of smooth to rough textures run throughout the 4.8-mile corridor composed of vegetation, trees, buildings, and roadways. The proposed Project would be consistent with the form, line, color, and texture of the corridor, and would be compatible with the composite of mixed urban visual character of the corridor.

The visual quality of the existing corridor would not be significantly altered by the proposed Project. Vividness, or memorability, within the abandoned railway corridor is low as the proposed Project corridor is disturbed vegetation, urban, and barren landscape. The landscape is not memorable, distinctive or diverse from other urban land cover types.

Intactness, or the lack of encroachment or eyesores, is low due to high levels of litter, debris, and miscellaneous objects scattered throughout the disturbed vegetation areas and intermixed with the urban land cover. Unity, or harmonious visual pattern, is also low due to the disturbed and urban landscapes. The proposed Project would replace the abandoned railway corridor with a new multi-use trail. Overall, visual quality within the corridor would remain moderately-low. Vividness, intactness, and unity would also remain moderately-low due to the level of disturbance and urban development.

Resource Change (changes to visual resources as measured by changes in visual character and visual quality) would be moderate. Trees throughout the Project study area greatly contribute to the visual character and quality of the existing corridor. The proposed Project is anticipated to require select removal of trees throughout the Project corridor, which would result in a moderate resource change; however, the proposed Project would involve aesthetic treatments such as landscaping enhancements, educational signage, and planting trees and vegetation in select locations along the trail corridor. The proposed Project would require the removal of approximately 161 trees within City right of way which meet the City's requirements as a protected City Tree. The proposed Project would also require the removal of approximately 59 trees within State Parks right of way. No trees on private property are anticipated to be removed. While the elimination of large existing trees would temporarily impact the existing visual quality of the corridor, new trees and vegetation would be planted and allowed to grow; therefore, this impact would be temporary and ultimately result in a similar visual quality. The proposed Project would also be designed to avoid oak trees to the greatest extent feasible. The City would comply with City Code 12.56.040 and establish a replacement plan prior to removal of the protected trees pursuant to Sacramento City Ordinance 2016-0026, Chapter 12.56 City and Private Protected Trees. With the implementation of measure **AES-1**, the proposed Project would have a less than significant impact on protected trees.

Further, the intactness and unity of the Project area would remain the same due to the disturbed vegetation and may potentially benefit from the proposed Project, as litter and debris would be disposed of during Project implementation. This Project is not considered an adverse resource change as the Project type is consistent with the planned development in this area per the City of Sacramento General Plan (2015).

Viewers and Viewer Response

Neighbors are defined as people with views directly to the Project site, and roadway users are defined as people traveling along the adjacent road with brief views of the Project site. Viewer response can be defined as how neighbors and roadway users are anticipated to respond to changes in the visual quality of their existing environment. Viewer response is ranked using *Low*, *Moderately-Low*, *Moderate*, *Moderately-High*, and *High*. Viewers with a low response are anticipated to perceive little to no change in

the quality of their visual environment, while viewers with a high response are anticipated to perceive a significant change in the quality of their visual environment.

Viewer Sensitivity

Viewer sensitivity is a measure of the viewer's recognition of a particular object, and is comprised of three attributes: activity, awareness, and local values. Activity relates to the preoccupation of the viewer. The more observant of their surroundings, the more sensitive the viewer would be to changes in visual resources. Awareness relates to the focus of view. The more specific the awareness, the more sensitive a viewer is to change. Local values and attitudes also affect viewer sensitivity. If the viewer group values aesthetics in general or if a specific visual resource has been protected by local, State, or Federal designation, it is likely that viewers would be more sensitive to visible changes. The proposed Project is anticipated to have a moderately-high viewer sensitivity due to the local interest and values in protecting the natural and historical resources of the area, including visual and aesthetic qualities. Public outreach meetings regarding the proposed Project show there is a strong awareness of Project details and interest in how the proposed Project would impact the local community.

Neighbors

Viewer exposure for neighbors directly adjacent to the Project area are anticipated to have a moderately-high level of viewer exposure and a moderately-high level of viewer sensitivity because they live near the Project site; however, the abandoned railway corridor is situated between visual barriers (fencing, vegetation, or combination of the two) such that the majority of neighbors' views would be blocked, minimizing visual exposure and sensitivity from finished trail use or temporary construction activities. Where the existing trail corridor is elevated behind residential neighbors, these viewers' exposure and sensitivity would be moderately-high due to a more direct line of sight to the trail. Additionally, the existing berm located near Del Rio/27th Avenue and Normandy Lane would be removed for construction of the proposed trail, resulting in an increase of visibility into adjacent properties. However, in some cases, viewer sensitivity may be improved, as the proposed Project would provide new levels of activity, awareness of recreational activity options, and access for use of alternative modes of transportation. Neighbors adjacent to the Project area would have short durations of exposure to trail users as well as short durations of temporary construction activities. Overall, the viewer response for neighbors of the proposed Project would be moderately-high due to levels of viewer exposure and viewer sensitivity.

Roadway Users

Viewer exposure for roadway users adjacent to the trail would be low. Roadway users would only have exposure to the Project site where the trail would be visible from the roadway. Freeport Boulevard from I-5 north to Belleau Wood Lane would have a direct line of sight to the proposed trail alignment. Additionally, roadway users would have visual exposure to the trail and its users where the trail crosses roads along the 4.8-mile alignment (35th Avenue, Fruitridge Road, Del Rio Road, South Land Park Drive, and Sutterville Road). Other non-roadway users, including pedestrians, bicyclists, and other recreationalists, would also have visual exposure to the trail from use. A positive response from this user group is anticipated as the trail would provide recreational opportunities, as well as the use of other modes of transportation into the City of Sacramento. It is anticipated that the overall average response of all viewer groups to the proposed Project would be moderate.

Visual Impact

Visual impacts are determined by assessing changes to the visual resources and predicting viewer response to those changes. Based on "Resource Change" and "Viewers and Viewers Response" discussed previously, changes to visual resources as a result of the proposed Project are anticipated to be moderately-low. While the Build Alternative is anticipated to result in a similar visual quality to the existing corridor, impacts to visual resources would include oak tree removal throughout the corridor. To minimize impacts from oak tree removal during Project implementation, measure **AES-1** would be implemented. In addition, any aesthetic treatments and/or landscaping incorporated during final design would be designed and implemented in coordination with the City. Implementation of measure **AES-3** would also further reduce potential adverse visual impacts caused by the proposed Project.

Temporary Impacts

Temporary impacts within the corridor would consist of temporary construction resulting in a low overall visual impact for the proposed Project. Predominantly, temporary construction activities would take place within the abandoned railway corridor out of the line of sight for most viewers. Other viewers such as pedestrians, bicyclists, and vehicle drivers and passengers would only have short durations of visual impacts from temporary construction activities. Construction-related vehicle access and staging of construction materials would occur within already disturbed areas along the length of the Project site.

Project construction would expose nearby viewers to surfaces, produce construction debris, and introduce equipment and truck traffic. Construction vehicle access and staging of construction materials would be visible to motorists travelling in the Project vicinity. Temporary impacts due to Project construction would be short-term and would cease upon Project completion. Implementation of mitigation measure **AES-4** would further minimize visual impacts.

Level of Significance: Less than Significant with Mitigation Incorporated.

Required Mitigation: **AES-1, AES-3, and AES-4.**

Impact AES-4: Potential to create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The multi-use trail surface would be constructed from materials typically seen within the adjacent landscape. No substantially reflective surfaces are proposed. The Project would be designed to avoid oak trees to the greatest extent feasible; however, the proposed Project is anticipated to require select removal of oak trees throughout the Project corridor. The number of oak trees to be removed would be determined during final design. While the elimination of large existing trees would temporarily increase glare due to removal of shade sources, new trees and vegetation would be planted and allowed to grow; therefore, this impact would be temporary and ultimately result in a similar visual quality that currently exists. To minimize impacts from oak tree removal during Project implementation, measure **AES-1** would be implemented.

The Project area is not currently lighted. Light and glare only exist from the residential streetlights adjacent to the proposed Project area. No additional lighting is anticipated to be added along the trail; however, lighting would be installed at roadway crossings for safety. Additionally, all construction work would be conducted during the hours specified in the City ordinances; therefore, no short-term, temporary sources of nighttime lighting would be used during construction activities. With implementation of **AES-2**, impacts due to light and glare would be less than significant with mitigation incorporated.

Level of Significance: Less than Significant with Mitigation Incorporated.

Required Mitigation: **AES-1 and AES-2.**

Mitigation Measures

AES-1: The City shall protect in place, where feasible, all City or Private Protected Trees, defined under Sacramento City Ordinance 2016-0026, Chapter 12.56 City and Private Protected Trees. City Trees are characterized as trees partially or completely located in a City park, on City owned property, or on a public right-of-way, including any street, road, sidewalk, park strip, mow strip or alley. Private Protected Trees are defined as the following:

1. A tree that is designated by City council resolution to have special historical value, special environmental value, or significant community benefit, and is located on private property;
2. Any native valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), coast live oak (*Quercus agrifolia*), California buckeye (*Aesculus californica*), or California sycamore (*Platanus racemosa*), that has a DSH of 12 inches or more, and is located on private property;
3. A tree that has a DSH of 24 inches or more located on private property that:

- is an undeveloped lot; or
 - does not include any single unit or duplex dwellings; or
4. A tree that has a DSH of 32 inches or more located on private property that includes any single unit or duplex dwellings.

The City will comply with City Code 12.56.040 and establish a replacement plan prior to removal of the protected trees pursuant to Sacramento City Ordinance 2016-0026, Chapter 12.56 City and Private Protected Trees.

AES-2: Lighting design will comply with local standards in order to minimize light and glare impacts on surrounding sensitive users. Lighting fixtures will be selected to minimize light pollution into the adjacent residences and skies, while taking into account safety needs.

AES-3: To minimize impacts to views of visual resources, aesthetic treatments and/or landscaping will be incorporated during final design in coordination with the City.

AES-4: A Landscape Architect will design planting plans to re-vegetate exposed slopes and other disturbed soil areas.

2.2 AIR QUALITY

This section describes the regulatory and environmental setting for air quality. It also describes impacts to air quality that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

Federal and State

Clean Air Act

The United States Environmental Protection Agency (USEPA) is responsible for addressing national and interstate air pollution issues and setting policies. The EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans, provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards (NAAQS), also known as Federal standards. There are Federal standards for the following criteria air pollutants, which were identified from provisions of the Clean Air Act of 1970:

- Ozone;
- Particulate matter (PM10 and PM2.5);
- Nitrogen dioxide;
- Carbon monoxide (CO); and
- Lead Sulfur dioxide.

Federal standards were set to protect public health, including that of sensitive individuals; thus, the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. Primary Federal standards are the levels of air quality necessary, with an adequate margin of safety, to protect the public health (California Air Resources Board [CARB] 2017).

State Implementation Plan

A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that would be followed to attain and maintain Federal standards. The State Implementation Plan for the State of California is administered by the CARB, which has overall responsibility for Statewide air quality maintenance and air pollution prevention. California's State Implementation Plan incorporates individual Federal attainment plans for regional air districts—air districts prepare their Federal attainment plans, which are sent to the CARB to be approved and incorporated into the California State Implementation Plan. Federal attainment plans include the technical foundation for understanding air quality (e.g., emission inventories and air quality monitoring), control measures and strategies, and enforcement mechanisms.

Local

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is the primary agency responsible for planning to meet Federal and State ambient air quality standards in Sacramento County and the larger Sacramento Ozone Nonattainment Area.

The SMAQMD operates monitoring stations in Sacramento County, develops rules, regulations, and CEQA thresholds for stationary sources and equipment, prepares emissions inventory and air quality management planning documents, and conducts source testing and inspections. Table 1 depicts the SMAQMD Thresholds of Significance for Projects subject to CEQA (SMAQMD 2009a).

Table 1. SMAQMD Thresholds of Significance

	Construction Phase	Operational Phase
Mass Emission Thresholds		
Nitrogen Oxide (NOx) (Ozone precursor)	85 pounds/day	65 pounds/day
Reactive Organic Gases (ROG) (VOC) (Ozone precursor)	None.	65 pounds/day
Particulate Matter (PM10)	Zero (0). If all feasible best available control technology (BACT) and BMPs are applied, then 80 pounds/day and 14.6 tons/year.	Zero (0). If all feasible BACT and BMPs are applied, then 80 pounds/day and 14.6 tons/year.
Particulate Matter (PM2.5)	Zero (0). If all feasible BACT and BMPs are applied, then 82 pounds/day and 15 tons/year.	Zero (0). If all feasible BACT and BMPs are applied, then 82 pounds/day and 15 tons/year.
Concentration Thresholds (Based on the California Ambient Air Quality Standard, identical threshold for both phases of development.		
Carbon Monoxide (CO)	20 ppm 1-hour standard (23 mg/m ³); 9 ppm 8-hour (10 mg/m ³)	
Nitrogen Dioxide (NO ₂)	0.18 ppm 1-hour standard (339 (339 µg/m ³); 0.03 ppm Annual Arithmetic Mean (57 µg/m ³)	
Sulphur Dioxide (SO ₂)	0.25 ppm 1-hour standard (665 µg/m ³); 0.04 ppm 24-hour standard (105 µg/m ³)	
Lead	1.5 µg/m ³ 30-day average	
Visibility Reducing Particles	Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 percent	
Sulfates	25 µg/m ³ 24-hour standard	
Hydrogen Sulfide (H ₂ S)	0.03 ppm (42 µg/m ³) 1-hour standard	
Vinyl Chloride	0.01 ppm (26 µg/m ³) 24-hour standard	

The SMAQMD's air quality management plans include control measures and strategies to be implemented to attain State and Federal ambient air quality standards in Sacramento County. The SMAQMD then implements these control measures as regulations to control or reduce criteria pollutant emissions from stationary sources or equipment. Applicable SMAQMD attainment plans include:

An 8-Hour Ozone Attainment and Reasonable Further Progress Plan and Revised 8-Hour Ozone Attainment and Reasonable Further Progress Plan.

The 2009, 8-Hour Ozone Attainment and Reasonable Further Program Plan describes measures to be implemented by the air districts in the Sacramento Federal Nonattainment Area (SFNA) to achieve the 1997 ozone NAAQS. This plan includes the information and analyses to fulfill the Federal Clean Air Act (CAA) requirements for demonstrating reasonable further progress and attainment of the 1997, 8-hour ozone NAAQS for the Sacramento region. In addition, this plan establishes an updated emissions inventory Projected for a 2019 attainment date, provides photochemical modeling results, proposes the implementation of reasonably available control measures, and sets new motor vehicle emission budgets for transportation conformity purposes for the reasonable further progress milestone years and the 2018 attainment year. The emission reduction strategy is based on reductions in both reactive organic gases (ROG) and nitrogen oxide (NOx) emissions. Future control measures include State and Federal control

strategies (e.g., smog check program improvements and cleaner heavy-duty trucks and off-road equipment), local mobile source incentive programs, Sacramento Area Council of Governments' transportation control measures, a measure to reduce biogenic volatile organic compounds (VOC) from Sacramento's urban forest, indirect source rules related to construction and operation of development Projects, and new and more stringent stationary source control rules (SMAQMD 2011).

In 2011, the air districts comprising the SFNA reviewed the 2009 Ozone Attainment Plan and concluded that certain stationary source control measures and transportation control measures would not be adopted or implemented within the time frames outlined in the plan. The air districts submitted a revision to CARB and USEPA. For the SMAQMD, the revision resulted in removal of two stationary source control measures (stationary internal combustion engines at major stationary sources and asphaltic concrete) and two indirect source review rule measures commitments, substitution of one transportation control measure (TCM) and rescheduling several stationary source measures and TCMs.

PM10 Implementation/Maintenance Plan and Redesignation Request for Sacramento County

On October 28, 2010, the SMAQMD Governing Board approved the PM10 maintenance plan and request for redesignation for the 1997 PM10 NAAQS (SMAQMD 2010a). In 2002, the USEPA officially determined that Sacramento County had attained the PM10 NAAQS by the December 31, 2000, attainment deadline. This plan fulfills the requirements for the USEPA to redesignate Sacramento County from nonattainment to attainment of the PM10 NAAQS through the following plan elements and tasks:

- Document the extent of the PM10 problem in Sacramento County;
- Determine the emission inventory sources contributing to the PM10 problem;
- Identify the appropriate control measures that achieved attainment of the PM10 NAAQS;
- Demonstrate maintenance of the PM10 NAAQS; and
- Request formal redesignation to attainment of the PM10 NAAQS (SMAQMD 2010a).

On December 7, 2010, following review of the maintenance plan and redesignation request, CARB submitted it to the USEPA for approval. The USEPA proposed redesignation of the area on July 24, 2013 and opened a public comment period for this action. Final USEPA approval of the redesignation is pending, as of this Draft EIR.

2009 Triennial Report and Plan Revision

This plan is intended to comply with the requirements of the California Clean Air Act (CCAA) as related to bringing the region into compliance with the California Ambient Air Quality Standards (CAAQS) for ozone. The SMAQMD has prepared several triennial progress reports that build upon the 1994 Sacramento Area Regional Ozone Attainment Plan. The 2009 Triennial Report and Plan Revision (SMAQMD 2010b) is the most recent report. The triennial progress report includes a current emission inventory and Projected future inventories of ROG and NOx emissions in Sacramento County. The future inventories reflect population growth rates, travel, employment, industrial/commercial activities, and energy use, as well as controls imposed through local, State, and Federal emission reduction measures. The triennial report discusses rules that the SMAQMD has adopted during the previous three years, incentive programs that have been implemented, and other measures that would supplement those in the Ozone Attainment Plan to achieve the required five percent per year reduction required by the CCAA.

The SMAQMD also has several rules that relate to the proposed Project, which are summarized below.

Rule 201 – General Permit Requirements: Requires any Project that includes the use of certain equipment capable of releasing emissions to the atmosphere as part of Project operation to obtain a permit from the SMAQMD prior to operation of the equipment. The applicant, developer, or operator of a Project that includes an emergency generator, boiler, or heater should contact the SMAQMD to determine if a permit is required. Portable construction equipment with an internal combustion engine over 50 horsepower are required to have a SMAQMD permit or a CARB portable equipment registration.

Rule 401 – Ringelmann Chart: Prohibits individuals from discharging into the atmosphere from any single source of emissions whatsoever any air contaminant whose opacity exceeds certain specified

limits.

Rule 402 – Nuisance: To protect the public health, Rule 402 prohibits any person from discharging such quantities of air contaminants that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public.

Rule 403 – Fugitive Dust: Requires a person to take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation.

Rule 453 – Cutback and Emulsified Asphalt Paving Materials: Asphalt paving operations that may be associated with implementation of a Project would be subject to Rule 453. This rule applies to the manufacture and use of cutback asphalt and emulsified asphalt for paving and maintenance operations.

Rule 902 – Asbestos: To protect the public health and the environment, Rule 902 sets specific procedures to follow regarding handling, transport, and disposal of asbestos containing materials.

The Guide to Air Quality Assessment in Sacramento County also provides methods to analyze air quality impacts from plans and Projects, including screening criteria, thresholds of significance, calculation methods, as well as mitigation measures that help assist lead agencies in complying with the CEQA. These guidelines require that basic construction emission control practices be implemented for emissions regardless of the significance determination.

The Sacramento Valley Basinwide Air Pollution Control Council

The Sacramento Valley Basinwide Air Pollution Control Council (Control Council) is authorized pursuant to California Health and Safety Code Section (HSC) section 40900 (SMAQMD 2016) to carry out the following activities relevant to the Proposed Project pursuant to State Law and the CCR (reference HSC Section 41865 and Section 41866; CCR Section 80100 et seq.):

- Assist Districts in the Sacramento Valley Air Basin in coordinating all air pollution control activities to ensure that the entire Sacramento Valley Air Basin is, or will be, in compliance with the requirements of State and Federal law.

City of Sacramento 2035 General Plan (2015)

The City of Sacramento's air quality and climate change Goals and Policies are provided in the Environmental Resources (ER) Element and the Utilities (U) Element of the General Plan and are as follows:

Goal ER 6.1 Improved Air Quality. Improve the health and sustainability of the community through improved regional air quality and reduced greenhouse gas emissions that contribute to climate change.

Policy ER 6.1.2 New Development. The City shall review proposed development Projects to ensure Projects incorporate feasible measures that reduce construction and operational emissions for reactive organic gases, nitrogen oxides, and particulate matter (PM10 and PM2.5) through Project design.

Policy ER 6.1.3 Emissions Reduction. The City shall require development Projects that exceed SMAQMD ROG and NOx operational thresholds to incorporate design or operational features that reduce emissions equal to 15 percent from the level that would be produced by an unmitigated Project.

Policy ER 6.1.4 Sensitive Uses. The City shall coordinate with SMAQMD in evaluating exposure of sensitive receptors to toxic air contaminants and will impose appropriate conditions on Projects to protect public health and safety.

Policy ER 6.1.10 Coordination with SMAQMD. The City shall coordinate with SMAQMD to ensure Projects incorporate feasible mitigation measures to reduce GHG emissions and air pollution if not already provided for through Project design.

Policy ER 6.1.14 Preference for Reduced-Emission Equipment. The City shall give preference to contractors using reduced emission equipment for City construction Projects and contracts for services (e.g., garbage collection), as well as businesses that practice sustainable operations.

Environmental Setting

Regional Setting

As mentioned in the regulatory framework above, Federal and State ambient air quality standards are set for 10 air pollutants designated in the CCAA. The Federal and State ambient air quality standards, relevant effects, properties, and sources of the pollutants are summarized in Table 2. Several pollutants are mentioned in Table 2 that do not apply to the proposed Project and are, therefore, not further addressed in this analysis. Analysis of lead is not included because the proposed Project would not involve lead-based materials and is not anticipated to result in emissions of lead pollutants such as aeriially-deposited lead (ADL). The proposed Project is not expected to generate or be exposed to vinyl chloride because the proposed Project uses do not include chemical processes that create this pollutant, and there are no such uses in the Project vicinity.

Table 2. Federal and State Ambient Air Quality Standards

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1-Hour	0.09 ppm	—	Irritate respiratory system; reduce lung function; breathing pattern changes; reduction of breathing capacity; inflame and damage cells that line the lungs; make lungs more susceptible to infection; aggravate asthma; aggravate other chronic lung diseases; cause permanent lung damage; some immunological changes; increased mortality risk; vegetation and property damage.	Ozone is a photochemical pollutant, as it is not emitted directly into the atmosphere and is formed by a complex series of chemical reactions between VOC, NOx, and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NOx) are mobile sources (on-road and off-road vehicle exhaust).
	8-Hour	0.070 ppm	0.075 ppm			
Carbon monoxide (CO)	1-Hour	20 ppm	35 ppm	Ranges depending on exposure: slight headaches; nausea; aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; decreased exercise tolerance in persons with peripheral vascular disease and lung disease; impairment of central nervous system functions; possible increased risk to fetuses; death.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.
	8-Hour	9.0 ppm	9 ppm			

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Nitrogen dioxide ^b (NO ₂)	1-Hour	0.18 ppm	0.100 ppm	Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; contributions to atmospheric discoloration' increased visits to hospital for respiratory illnesses.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides—NO _x (NO, NO ₂ , NO ₃ , N ₂ O, N ₂ O ₃ , N ₂ O ₄ , and N ₂ O ₅). NO _x is a precursor to ozone, PM ₁₀ , and PM _{2.5} formation. NO _x can react with compounds to form nitric acid and related small particles and result in PM related health effects.	NO _x is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. Nitrogen dioxide forms quickly from NO _x emissions. NO ₂ concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			
Sulfur dioxide ^c (SO ₂)	1-Hour	0.25 ppm	0.075 ppm	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically, or one pollutant alone is the predominant factor.	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SO _x) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below State and Federal standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM ₁₀ .	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethylsulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.
	3-Hour	—	0.5 ppm			
	24-Hour	0.04 ppm	0.14 (for certain areas)			
	Annual	—	0.030 ppm (for certain areas)			

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Particulate matter (PM10)	24-hour	50 µg/m ³	150 µg/m ³	<p>Short-term exposure (hours/days): irritation of the eyes, nose, throat; coughing; phlegm; chest tightness; shortness of breath; aggravate existing lung disease, causing asthma attacks and acute bronchitis; those with heart disease can suffer heart attacks and arrhythmias.</p> <p>Long-term exposure: reduced lung function; chronic bronchitis; changes in lung morphology; death.</p>	<p>Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM10 refers to particulate matter that is between 2.5 and 10 microns in diameter, (1 micron is one-millionth of a meter). PM2.5 refers to particulate matter that is 2.5 microns or less in diameter, about one- thirtieth the size of the average human hair.</p>	<p>Stationary sources include fuel or wood combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation related sources are from vehicle exhaust and road dust. Secondary particles form from reactions in the atmosphere.</p>
	Mean	20 µg/m ³	—			
Particulate matter (PM2.5)	24-Hour	—	35 µg/m ³			
	Annual	12 µg/m ³	12.0 µg/m ³			
Visibility-reducing particles	8-Hour	See note below ^d				
Sulfates	24-Hour	25 µg/m ³	—	<p>Decrease in ventilatory function; aggravation of asthmatic symptoms; aggravation of cardio-pulmonary disease; vegetation damage; degradation of visibility; property damage.</p>	<p>The sulfate ion is a polyatomic anion with the empirical formula SO₄²⁻. Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.</p>	<p>Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.</p>

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Lead ^e	30-day	1.5 µg/m ³	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction, behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs.	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. Leaded gasoline was used in motor vehicles until around 1970. Lead concentrations have not exceeded State or Federal standards at any monitoring station since 1982.	Lead ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering.
	Quarter	—	1.5 µg/m ³			
	Rolling 3-month average	—	0.15 µg/m ³			
Vinyl chloride ^e	24-Hour	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, CARB identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.
Hydrogen sulfide	1-Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H ₂ S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Volatile organic compounds (VOC)		There are no State or Federal standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM10 and lower visibility.
Benzene		There are no ambient air quality standards for benzene.		Short-term (acute) exposure of high doses from inhalation of benzene may cause dizziness, drowsiness, headaches, eye irritation, skin irritation, and at higher levels, loss of consciousness can occur. Long-term (chronic) occupational exposure of high doses has caused blood disorders, leukemia, and lymphatic cancer.	Benzene is a VOC. It is a clear or colorless light-yellow, volatile, highly flammable liquid with a gasoline-like odor. The EPA has classified benzene as a “Group A” carcinogen.	Benzene is emitted into the air from fuel evaporation, motor vehicle exhaust, tobacco smoke, and from burning oil and coal. Benzene is used as a solvent for paints, inks, oils, waxes, plastic, and rubber. Benzene occurs naturally in gasoline at 1 to 2 percent by volume. The primary route of human exposure is through inhalation.

Air Pollutant	Averaging Time	California Standard	Federal Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Diesel particulate matter (DPM)		There are no ambient air quality standards for DPM.		Some short-term (acute) effects of DPM exposure include eye, nose, throat, and lung irritation, coughs, headaches, light-headedness, and nausea. Studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems. Human studies on the carcinogenicity of DPM demonstrate an increased risk of lung cancer, although the increased risk cannot be clearly attributed to diesel exhaust exposure.	DPM is a source of PM2.5—diesel particles are typically 2.5 microns and smaller. Diesel exhaust is a complex mixture of thousands of particles and gases that is produced when an engine burns diesel fuel. Organic compounds account for 80 percent of the total particulate matter mass, which consists of compounds such as hydrocarbons and their derivatives, and polycyclic aromatic hydrocarbons and their derivatives. Fifteen polycyclic aromatic hydrocarbons are confirmed carcinogens, a number of which are found in diesel exhaust.	Diesel exhaust is a major source of ambient particulate matter pollution in urban environments. Typically, the main source of DPM is from combustion of diesel fuel in diesel-powered engines. Such engines are in on-road vehicles such as diesel trucks, off-road construction vehicles, diesel electrical generators, and various pieces of stationary construction equipment.
<p>Notes:</p> <p>ppm = parts per million (concentration) $\mu\text{g}/\text{m}^3$ = micrograms per cubic meter Annual = Annual Arithmetic Mean 30-day = 30-day average Quarter = Calendar quarter</p> <p>a Federal standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3 Hour SO₂, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.</p> <p>b To attain the 1-hour nitrogen dioxide national standard, the 3-year average of the annual 98th percentile of the 1-hour daily maximum concentrations at each site must not exceed 100 parts per billion (0.100 ppm).</p> <p>c On June 2, 2010, a new 1-hour SO₂ standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO₂ national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.</p> <p>d Visibility reducing particles: In 1989, the CARB converted both the general Statewide 10-mile visibility standard and the Lake Tahoe 30-mile visibility standard to instrumental equivalents, which are "extinction of 0.23 per kilometer" and "extinction of 0.07 per kilometer" for the Statewide and Lake Tahoe Air Basin standards, respectively.</p> <p>e The CARB has identified lead and vinyl chloride as 'toxic air contaminants' with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.</p> <p>Source of effects, properties, and sources: South Coast Air Quality Management District 2007a; California Environmental Protection Agency 2002; California Air Resources Board 2009; U.S. Environmental Protection Agency 2003, 2009a, 2009b, 2010, 2011a, and 2012; National Toxicology Program 2011a and 2011b. Source of standards: California Air Resources Board 2016</p>						

Toxic Air Contaminants

A toxic air contaminant (TAC) is defined as an air pollutant that may cause or contribute to an increase in mortality or serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. The California Almanac of Emissions and Air Quality (CARB 2013) presents the relevant concentration and cancer risk data for the ten TACs that pose the most substantial health risk in California based on available data. These TACs are as follows: acetaldehyde, benzene, 1,3-butadiene, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, perchloroethylene, and DPM.

Some studies indicate that DPM poses the greatest health risk among the TACs listed above. A 10-year research program (CARB 1998) demonstrated that DPM from diesel-fueled engines is a human carcinogen and that chronic (long-term) inhalation exposure to DPM poses a chronic health risk. In addition to increasing the risk of lung cancer, exposure to diesel exhaust can have other health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. Diesel exhaust is a major source of fine particulate pollution as well, and studies have linked elevated particle levels in the air to increased hospital admissions, emergency room visits, asthma attacks, and premature deaths among those suffering from respiratory problems.

DPM differs from other TACs in that it is not a single substance but a complex mixture of hundreds of substances. Although DPM is emitted by diesel-fueled, internal combustion engines, the composition of the emissions varies, depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present. Unlike the other TACs, however, no ambient monitoring data are available for DPM because no routine measurement method currently exists. The CARB has made preliminary concentration estimates based on a DPM exposure method. This method uses the CARB emissions inventory's PM10 database, ambient PM10 monitoring data, and the results from several studies to estimate concentrations of DPM.

Odors

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., emotional reaction) to physiological (e.g., nausea).

With respect to odors, the human nose is the sole sensing device. The ability to detect odors is subjective and varies considerably among the population. Some individuals have the ability to smell very minute quantities of specific substances; others may not have the same sensitivity but may have sensitivities to odors of other substances. In addition, people may have different reactions to the same odor; an odor that is offensive to one person may be perfectly acceptable to another.

Local Setting

The proposed Project is located in Sacramento County within the Sacramento Valley Air Basin (SVAB) and is under the jurisdiction of the SMAQMD. Due to the topographical and climatic factors in the SVAB, there is a potential for high concentrations of regional and local air pollutants.

The CARB emissions inventory for the Sacramento Valley Air Basin is listed in Tables 3 and 4, below. All emissions are represented in pounds per day and reflect the most current data provided to the CARB.

Table 3. 2012 Sacramento Valley Air Basin Emissions Inventory

STATIONARY SOURCES	TOG	ROG	CO	NOx	SOx	PM	PM10	PM2.5
<u>Fuel Combustion</u>	24.9	3.1	41.6	29.9	1.4	2.8	2.7	2.6
<u>Waste Disposal</u>	97.8	1.2	0.2	0.1	0.1	0.0	0.0	0.0
<u>Cleaning and Surface Coatings</u>	13.9	12.0	0.0	0.0	0.0	0.0	0.0	0.0
<u>Petroleum Production and Marketing</u>	83.5	11.9	0.5	2.1	0.0	0.0	0.0	0.0
<u>Industrial Processes</u>	5.9	4.6	7.7	2.0	0.3	18.5	9.9	4.8
* TOTAL STATIONARY SOURCES	226.0	32.8	50.0	34.2	1.7	21.4	12.6	7.5
AREA-WIDE SOURCES								
AREA-WIDE SOURCES	TOG	ROG	CO	NOx	SOx	PM	PM10	PM2.5
<u>Solvent Evaporation</u>	37.9	33.8	-	-	-	0.0	0.0	0.0
<u>Miscellaneous Processes</u>	123.9	27.2	148.3	10.0	1.1	218.0	117.4	31.5
* TOTAL AREA-WIDE SOURCES	161.9	61.0	148.3	10.0	1.1	218.0	117.4	31.5
MOBILE SOURCES								
MOBILE SOURCES	TOG	ROG	CO	NOx	SOx	PM	PM10	PM2.5
<u>On-Road Motor Vehicles</u>	39.0	35.7	333.6	93.6	0.4	6.4	6.3	3.5
<u>Other Mobile Sources</u>	32.2	28.7	166.3	49.7	0.4	3.2	3.1	2.8
* TOTAL MOBILE SOURCES	71.2	64.4	499.9	143.2	0.8	9.6	9.4	6.3
GRAND TOTAL FOR SVAB	459.1	158.2	698.2	187.4	3.6	249.0	139.5	45.4

Source: CARB 2013, Table 4 describes Sacramento County designations for the State and Federal Ambient Air Quality (CARB 2016 and EPA Green Book 2017).

Table 4. Sacramento County Area Designations for State and Federal Ambient Air Quality

Criteria Pollutants	State Designation	Federal Designation
Ozone	Nonattainment	Nonattainment
PM10	Nonattainment	Attainment
PM2.5	Attainment	Nonattainment
Carbon Monoxide	Moderate Attainment	Unclassified/Attainment
Nitrogen Dioxide	Attainment	Unclassified/Attainment
Sulfur Dioxide	Attainment	Unclassified
Sulfates	Attainment	-
Lead	Attainment	Unclassified/Attainment
Hydrogen Sulfide	Unclassified	-
Visibility Reducing Particles	Unclassified	-

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to air quality. When an impact is determined to be significant, mitigation measures were identified that would reduce or avoid that impact.

Methodology of Analysis

Using SMAQMD's Guide to Air Quality Assessment to screen Thresholds of Significance for criteria pollutants (as shown in Table 1, SMAQMD 2009), applicable air quality rules and regulations, and the CEQA Environmental Checklist for guidance, the following Thresholds of Significance for evaluating potential impacts were established. These thresholds are evaluated based on Project estimates from the SMAQMD Roadway Construction Emissions Model Version 8.1.0 to determine whether potential air quality impacts from the proposed Project would be significant (Appendix D). A potential impact would be significant if the proposed Project would:

- Construction emissions of NO_x above 85 pounds per day;
- Operational emissions of NO_x or ROG above 65 pounds per day;
- Violation of any air quality standard or contribute substantially to an existing or Projected air quality violation;
- Any increase in PM₁₀ concentrations unless all feasible Best Available Control Technology (BACT) and Best Management Practices (BMPs) have been applied then increases above 80 pounds per day or 14.6 tons per year.
- CO concentrations that exceed the 1-hour state ambient air quality standard (i.e., 20.0 ppm) or the 8-hour state ambient standard (i.e., 9.0 ppm); or
- Exposure of sensitive receptors to substantial pollutant concentrations.

Ambient air quality standards have not been established for toxic air contaminants (TAC). TAC exposure is deemed to be significant if:

- TAC exposures create a risk of 10 in 1 million for stationary sources, or substantially increase the risk of exposure to TACs from mobile sources.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact AIR-1: Potential to conflict with or obstruct implementation of the applicable air quality plan.

As described in the regulatory framework section above, applicable air quality plans include: California State Implementation Plan; SMAQMD plans including: the 8-Hour Ozone Attainment and Reasonable Further Progress Plan and Revised 8-Hour Ozone Attainment and Reasonable Further Progress Plan; PM₁₀ Implementation/Maintenance Plan and Redesignation Request for Sacramento County, the 2009 Triennial Report and Plan Revision, as well as the air district rules; and the Sacramento 2035 General Plan.

During construction of the proposed Project, various types of equipment and vehicles would temporarily operate on the proposed Project site. Construction exhaust emissions would be generated from construction equipment, earth-movement activities, construction workers' commutes, and construction material hauling for the entire construction period, posing the risk of emissions that could potentially violate set standards within an applicable air quality plan. The aforementioned activities would involve the use of diesel- and gasoline-powered equipment that would generate emissions of criteria pollutants, such as ROG and NO_x, which leads to the creation of ozone emissions. Air quality modeling was performed to evaluate potential Project emissions for criteria pollutants regulated by the applicable air quality plans using Project-specific details to determine whether the proposed Project would generate criteria air pollutant emissions in excess of levels allowed by the air quality plans. The results of the modeling of construction emissions were compared to the SMAQMD standards of significance (referenced in the Methodology of Analysis section) are summarized in Table 5.

Table 5. Construction Emissions (lbs/day)

Phase	ROGs	CO	NO _x	PM ₁₀	Exhaust PM ₁₀	Fugitive Dust PM ₁₀
Grubbing/Land Clearing	1.43	10.05	13.31	3.09	0.59	2.50
Grading/Excavation	5.91	47.52	61.43	5.36	2.86	2.50
Drainage/Utilities/Sub-Grad	5.09	41.61	49.30	4.93	2.43	2.50
Paving	2.16	20.55	19.01	1.13	1.13	-
Maximum (pound/day)	5.91	47.52	61.43	5.36	2.86	2.50
Total (tons/construction Project)	0.30	2.49	3.04	0.29	0.15	0.14

Source: Road Construction Emissions Model, Version 8.1.0

Based on the modeling results, estimated unmitigated emissions from the proposed Project would not exceed the thresholds established for key criteria pollutants in the SMAQMD air quality planning documents. Although the proposed Project would temporarily cause localized increases in emission levels, the Project would be less than the SMAQMD thresholds of significance for all criteria pollutants. Because construction and operational emissions are expected to be well below the thresholds, the proposed Project is not expected to violate any air quality standards. The proposed Project consists of constructing a multi-use trail and would not increase the capacity of a roadway; therefore, no additional trips or delays are expected to result from the proposed Project. The proposed Project would not exceed the threshold for NO_x (85 lbs/day).

SMAQMD has established screen-level criteria for the assessment of significant impacts from construction-related emissions of fugitive dust. These criteria are based on a Project's maximum actively disturbed area. Construction activities that would disturb less than 15.0 acres per day would be required to implement the appropriate level of mitigation, identified by the SMAQMD as "Basic Construction Emission Control Practices," for all Projects to further minimize construction-related impacts regardless of the CEQA significance determination. Best management practices (BMPs) have been included from the "Basic Construction Emission Control Practices" to reduce construction-related emissions of fugitive dust. See Question A for the City Code: 15.40.050 and 15.44.170; SMAQMD Rule 403 (Fugitive Dust) and their Basic Construction Emissions Control Practices. Based on the factors presented above, the proposed Project would be consistent with the goals of the SMAQMD through the implementation of **AIR-1**. Therefore, impacts are less than significant with mitigation incorporated.

Level of Significance: Less than Significant with Mitigation Incorporated.

Mitigation Required: AIR-1.

Impact AIR-2: Potential to violate an air quality standard or contribute substantially to an existing or Projected air quality violation.

In order to assess the proposed Project's potential to contribute to an existing or Projected air quality violation, localized criteria pollutant emissions were analyzed since these are the pollutants with established ambient air quality standards. Particulate matter emissions, primarily PM₁₀, are of concern during construction because of potential fugitive dust emissions during earth-disturbing activities and result in localized pollutant concentrations. The SMAQMD has not established significance thresholds specifically for fugitive dust emissions but has adopted a threshold for total PM₁₀ of 80 lbs/day (see Table 5, above) when applicable BMPs included in **AIR-1** are implemented. This threshold includes emissions from both fugitive dust and PM emissions from vehicles. All PM₁₀ emission estimates for the proposed Project were below the SMAQMD significance thresholds (see Table 5, above). However, to ensure that localized PM emissions do not contribute significantly to the existing State exceedance of PM₁₀, **AIR-1** would include the preparation of a Construction Emissions and Dust Control Plan to mitigate for emissions generated during construction activities by limiting the amount of fugitive dust generated. Operation activities would be similar to existing conditions; therefore, no long-term impacts to air quality or violations of air quality standards would occur. Potential impacts to air quality standards or contributions to an existing or Projected air quality violation are considered less than significant with **AIR-1** incorporated.

Level of Significance: Less than Significant with Mitigation Incorporated.

Mitigation Required: AIR-1.

Impact AIR-3: Potential to result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).

The proposed Project would have short-term impacts resulting from the following construction-related sources: 1) construction and demolition equipment emissions; and 2) dust from construction operations.

As shown in Table 6, the proposed Project is located in a nonattainment area for 1-hour Ozone for State standards, nonattainment area for 8-hour Ozone for both Federal and State standards, and nonattainment area for Particulate Matter under 2.5 micrometers for Federal standards and State standards.

Table 6. Attainment at Project Location

Criteria Pollutant	Attainment Status	
	Federal	State
O ₃ – 1-hour	N/A	Nonattainment - Serious
O ₃ – 8-hour	Nonattainment	Nonattainment
PM ₁₀	Nonattainment	Nonattainment
PM _{2.5}	Nonattainment	Nonattainment
CO	Unclassified/Attainment	Attainment
NO ₂	Unclassified/Attainment	Attainment
SO ₂	Unclassified	Attainment
Sulfates	N/A	Attainment
Lead	Attainment	Attainment
Hydrogen Sulfide	N/A	Unclassified
Visibility Reducing Particles	N/A	Unclassified

Source: California Air Resources Board (2017)

Temporary/Construction Impacts

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and other activities related to construction. Emissions from construction equipment also are anticipated and would include CO, NO_x, volatile organic compounds (VOCs), directly-emitted particulate matter (PM₁₀ and PM_{2.5}), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO_x and VOCs in the presence of sunlight and heat.

Heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, SO₂, NO_x, VOCs and some soot particulate (PM₁₀ and PM_{2.5}) in exhaust emissions. If construction activities were to increase traffic congestion in the Project area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site and detour area. The estimated construction related emissions of NO_x is 61.43 lbs/day, which is well under the 85 lbs/day threshold (see Appendix D for the Air Quality Model Results).

Dust generated will result in a temporary, local impact, limited to areas of construction. Dust control practices will be incorporated into the proposed Project to mitigate this potential impact. The dust control practices will comply with the current City Codes: 15.40.050 and 15.44.170; SMAQMD Rule 403 (Fugitive Dust) and their Basic Construction Emissions Control Practices. The general requirements of Rule 403 are:

301 Limitations: A person shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:

301.1 Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land.

301.2 Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts; and

301.3 Other means approved by the Air Pollution Control Officer.

To further reduce temporary Project-specific impacts, implementation of AIR-1 and AIR-2 would occur.

Permanent Impacts

The proposed Project will not change traffic volumes within or adjacent to the Project area; therefore, no permanent impacts related to air quality will occur.

Level of Significance: Less than Significant with Mitigation Incorporated.

Mitigation Required: AIR-1.

Impact AIR-4: Potential to expose sensitive receptors to substantial pollutant concentrations.

Although the nearest sensitive receptor is located approximately 30 feet from the Project area, construction activities, which involve the use of diesel-powered equipment, are short-term and emissions are expected to be well below the thresholds. Operational emissions are not expected to increase, as discussed for Impact **AIR-c**. Despite a low-impact expectation for this Project, measures for construction activities are still recommended to further reduce impacts on sensitive receptors.

SMAQMD defines sensitive receptors as facilities that house or attract children, the elderly, people with illnesses, or others who are especially sensitive to the effects of air pollutants or may experience adverse effects from unhealthful concentrations of air pollutants. Hospitals, clinics, schools, convalescent facilities, and residential areas are examples of sensitive receptors. The nearest sensitive receptors in the vicinity of the Project site are residences approximately 30 feet from the trail throughout the 4.8-mile corridor.

Construction activities are anticipated to involve the operation of diesel-powered equipment. In 1998, the CARB identified diesel exhaust as a TAC. Cancer health risks associated with exposures to diesel exhaust typically are associated with chronic exposure, in which a 70-year exposure period often is assumed. Although elevated cancer rates can result from exposure periods of less than 70 years, acute exposure (i.e., exposure periods of 2 to 3 years) to diesel exhaust typically are not anticipated to result in an increased health risk because acute exposure typically does not result in exposure concentrations that would represent a health risk. Health impacts associated with exposure to diesel exhaust from Project construction are anticipated to be less than significant because construction activities are expected to occur well below the 70-year exposure period used in health risk assessments. Additionally, emissions would be short-term and intermittent in nature, and therefore would not generate TAC emissions at high enough exposure concentrations to represent a health hazard. Therefore, construction of the proposed Project is not anticipated to result in an elevated cancer risk to exposed persons. Odors from construction may occur during activities such as laying pavement; however, these activities would be intermittent and short-term in nature; therefore, potential effects related to air quality and odors would be less than significant. To further reduce temporary Project-specific impacts, implementation of AIR-1 and AIR-2 would occur.

Asbestos

A review of information available through United States Geological Survey (USGS) indicated that the nearest ultramafic rock formation potentially associated with naturally occurring asbestos (NOA) is approximately 23 miles northeast of the Project area, along the eastern banks of Folsom Lake (USGS 2015).

Observations made during the site reconnaissance indicate that the proposed Project area is composed of unpainted concrete and/or asphalt, bare earth, gravel, and vegetation; therefore, analysis for lead-containing structures prior to construction is not warranted.

Level of Significance: Less than Significant with Mitigation Incorporated.

Mitigation Required: AIR-1 and AIR-2.

Impact AIR-5: Potential to create objectionable odors affecting a substantial number of people.

While offensive odors rarely cause any physical harm, they can still be very unpleasant, leading to considerable distress among the public and often generating citizen complaints to local governments and the SMAQMD. The occurrence and severity of odor impacts depends on numerous factors, including the nature, frequency, and intensity of the source, the design and ability for noxious odors to be generated in the first place, the wind speed and direction, and the sensitivity of the receptor. The nearest sensitive receptors in the vicinity of the Project site who could be affected by odors are residences, schools, and daycares approximately 30 feet from the proposed Project area.

Diesel fumes from construction equipment are often found to be objectionable; however, operation of diesel equipment on site is short term and intermittent and construction is temporary. Operation of diesel equipment would comply with Federal, State, and local regulations, including with all applicable SMAQMD rules and regulations as part of the construction specifications, which would limit construction-related odorous emissions. Therefore, construction of the proposed Project would not be expected to create objectionable odors affecting a substantial number of people and would have a less than significant impact.

Level of Significance: Less than Significant.

Mitigation Required: None Required.

Mitigation Measures

AIR-1: Sacramento Metropolitan Air Quality Management District's Rule 403 - Fugitive Dust would be followed. The general requirements of Rule 403 are: 301 Limitations: -301 Limitations: A person shall take every reasonable precaution not to cause or allow the emissions of fugitive dust from being airborne beyond the property line from which the emission originates, from any construction, handling or storage activity, or any wrecking, excavation, grading, clearing of land or solid waste disposal operation. Reasonable precautions shall include, but are not limited to:

- **301.1** Use, where possible, of water or chemicals for control of dust in the demolition of existing buildings or structures, construction operations, the construction of roadways or the clearing of land.
- **301.2** Application of asphalt, oil, water, or suitable chemicals on dirt roads, materials stockpiles, and other surfaces which can give rise to airborne dusts; and
- **301.3** Other means approved by the Air Pollution Control Officer.

AIR-2: Basic Construction Emission Control Practices – California regulations limit idling from both on-road and off-road diesel-powered equipment. The California Air Resources Board enforces the idling limitations. The following practices describe exhaust emission control from diesel powered fleets working at a construction site:

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to five minutes [required by CCR, Title 13, Sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site. Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

2.3 BIOLOGICAL RESOURCES

This section describes the environmental and regulatory setting for biological resources. It also describes impacts on biological resources that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

There are Federal, State, County of Sacramento (County), and City requirements for the protection of plant and wildlife species, their habitats, and other biological resources. The regulatory setting outlines the laws and regulations relevant to proposed Project.

Federal

Clean Water Act: Section 401

The United States Environmental Protection Agency (USEPA) regulates surface water quality in Waters of the United States (WOTUS) under Section 401 of the State Clean Water Act (CWA). CWA Section 401 Water Quality Certification (WQC) provides states and authorized tribes with an effective tool to help protect the physical, chemical, and biological integrity of water quality, by providing them an opportunity to address the aquatic resource impacts of federally issued permits and licenses. CWA 401 compliance is required for any Project that produces a federal action with construction that could have an impact to surface water quality (USEPA 2017).

Clean Water Act: Section 404

CWA Section 404 regulates the discharge of dredged and fill materials into waters of the United States. Waters of the United States refers to oceans, bays, rivers, streams, lakes, ponds, and wetlands, including any or all of the following: areas within ordinary high water mark of a stream, including non-perennial streams with a defined bed and bank and any stream channel that conveys natural runoff, even if it has been realigned; and seasonal and perennial wetlands, including coastal wetlands. If a Project discharges any fill materials into WOTUS, including wetlands, before and after the Project actions, then a CWA 404 compliance must be met with the USACE.

Endangered Species Act of 1973

The Federal Endangered Species Act (FESA) was passed by Congress in 1973 to protect and recover imperiled species and the habitat upon which they depend. The FESA is administered by the United States Fish and Wildlife Service (USFWS). Under the FESA, protected species are either listed as “endangered”, in danger of extinction throughout all or a significant region of the species range; or as “threatened”, likely to become endangered within the near future (USFWS 2015). “Take” is to hunt, pursue, catch, capture, or kill; or attempt to hunt, pursue, catch, capture, or kill an endangered or threatened species. The FESA also designates “candidate” species as those plants and animals that the USFWS has sufficient data on their biological status to propose them to be listed under the FESA (USFWS 2015).

The FESA mandates the protection of Federally listed species and the habitats which they depend (50 CFR 17.12 for listed plants, 50 CFR 17.11 for listed animals, and various notices in the Federal Register for proposed species) (LII 2017b). Consultation with the USFWS would be necessary if a proposed Project has the potential to affect federally listed species, as well as suitable habitat for those species. This consultation would proceed under Section 7 of the FESA if a Federal action is part of the proposed Project or through Section 10 of the FESA if no such nexus were available (USFWS 2015).

Migratory Bird Treaty Act of 1918 and Bald and Golden Eagle Protection Act

The Migratory Bird Treaty Act (MBTA) (16 U.S. Code [USC] Section 703-711) and the Bald and Golden Eagle Protection Act (BAGEPA) (16 USC Section 668) protect specific species of birds and prohibits “take” (i.e., harm or harassment) (LII 2017a). The MBTA protects migrant bird species from “take” through setting hunting limits and seasons and protecting occupied nests and eggs (USFWS 2017b). BAGEPA prohibits the take or commerce of any part of the bald or golden eagle (USFWS 2017b). The USFWS administers both acts and reviews actions that may affect species protected under each act.

State

California Endangered Species Act

The California Endangered Species Act (CESA) prohibits “take” of State listed threatened or endangered species under sections of the California Department of Fish and Game (CDFG) Code 2050-2116. The California Department of Fish and Wildlife (CDFW) has jurisdiction over these protected plant and wildlife species listed as threatened or endangered under section 2080 of the CDFG Code. The CESA differs from the FESA in that it does not include habitat destruction in its definition of “take”. CDFW defines “take” as “...hunt, pursue, catch, capture, or kill, or attempt to hunt, pursue, catch, capture, or kill.” CDFW may authorize “take” under the CESA through Section 2081 of the CDFG Code. If the results of a biological survey indicate that a state-listed species could be affected by a proposed Project, then under Section 2081, CDFW could authorize take of species listed as endangered, threatened, candidate, or a rare plant, if that take is incidental to otherwise lawful activities and if certain conditions are met (CDFW 2017a). In addition to listed Threatened or Endangered species CDFW maintains lists for Candidate Endangered Species and Candidate Threatened species that are afforded the same level of protection as listed species.

California Environmental Quality Act Guidelines: Section 15380

Pursuant to CEQA Guidelines Section 15380, CEQA provides protection for Federal and/or State listed species, as well as species not listed Federally or by the State that may be considered rare, threatened, or endangered. Accordingly, “A species not included in any listing identified in subdivision (c) [FESA and CESA listed species] shall nevertheless be considered to be endangered, rare or threatened, if the species can be shown to meet the criteria in subdivision (b)” (CEQA Guidelines section 15380(d)). Subdivision (b) states, “A species of animal or plant is:

- 1) ‘Endangered’ when its survival and reproduction in the wild are in immediate jeopardy from one or more causes, including loss of habitat, change in habitat, overexploitation, predation, competition, disease, or other factors; or
- 2) ‘Rare’ when either:
 - a. Although not presently threatened with extinction, the species is existing in such small numbers throughout all or a significant portion of its range that it may become endangered if its environment worsens; or
 - b. The species is likely to become endangered within the foreseeable future throughout all or a significant portion of its range and may be considered ‘threatened’ as that term is used in the Federal Endangered Species Act” (CEQA Guidelines 15380(b)).
 - c. elines 15380(b)).
 - d. Indicates that species of special concern should be included in an analysis of Project impacts if they can be shown to meet the criteria of sensitivity outlined therein.

The CDFW designates Species of Special Concern (SSC) as wildlife and plant species of limited distribution, declining populations, diminishing habitat, or unusual scientific, recreational, and/or educational values qualifying SSC as “special status species” meeting the criteria under subdivision (b) of section 15380 of the CEQA Guidelines. Plants appearing on California Native Plant Society (CNPS) California Rare Plant Rank (CRPR) as well as species considered rare or protected under other applicable list are also considered to meet CEQA’s Section 15380 criteria.

For the purposes of this Draft EIR, the following parameters define “special-status species”:

- Plant and Wildlife species listed, or proposed for listing, as threatened, or endangered under the FESA (50 CFR 17.12 for listed plants, 50 CFR 17.11 for listed animals, and various notices in the Federal Register for proposed species);
- Plant and wildlife species that are listed or proposed for listing by the State as threatened or endangered under the CESA (14 CCR 670.5);
- Plant and wildlife species that meet the definitions of “rare” or “endangered” under CEQA Guidelines, Section 15380;
- Plant and wildlife species that are designated as “special animals” or “those of greatest conservation need”, by CDFW through the California Natural Diversity Database (CNDDDB);
- Wildlife Species of Special Concern to CDFW;

- Wildlife listed as “Fully Protected” in California under the CDFG Code;
- Plants listed as rare under the State Native Plant Protection Act (NPPA) of 1977 (CDFG Code 1900 et seq.);
- Plants considered by the CNPS to be Rank 1A- “plants presumed extirpated in California and either rare or extinct elsewhere”, or Rank 1B- “rare, threatened, or endangered in California and elsewhere”;
- Plants considered by CNPS to be a Rank 2A- Plants presumed extirpated in California, but common elsewhere”, or Rank 2B- “rare, threatened, or endangered in California and common elsewhere”;
- Plants considered by CNPS to be a Rank 3- “plants about which more information is needed” and cannot be yet be excluded from review”; and
- Plants considered by CNPS to be a Rank 4- “plants with limited distribution”.

The CEQA provision enables an agency to protect a species from potential significant Project impacts until the respective government agencies have had an opportunity to list the species as protected, if warranted (CDFW 2017b). To assess "impact significance" to populations of non-listed species as well as listed species CDFW recommends population-level effects, proportion of the taxon's range affected by a Project, regional effects, and impacts to habitat features are all considered (CDFW 2017b).

Native Plant Protection Act: California Department of Fish and Game Code Section 1900 et seq.

The NPPA was enacted in 1977 and is administered by CDFW (CDFG Code, Section 1900 et seq.). The NPPA prohibits “take” of endangered, threatened, or rare plant species native to the State, with the exception of special criteria identified in the NPPA CDFG Code. A “native plant” means a plant growing in a wild uncultivated state which is normally found native to the plant life of the state. “Rare” species can be defined as species that are: broadly distributed but never abundant where found, narrowly distributed, or clumped yet abundant where found, and/or narrowly distributed or clumped and not abundant where found. If potential impacts are identified for a proposed Project activity, then consultation with CDFW, permitting, and/or other mitigation may be required (CNPS 2017a).

Nesting Migratory Birds and Raptors: California Department of Fish and Game Code Sections 3503, 3503.5, and 3800

Nesting migratory birds and raptors are protected under CDFG Code, Sections 3503, 3503.5, and 3800; which prohibit the “take”, possession, or destruction of birds, their nests, or eggs. Implementation of “take” provisions require that any potential Project-related disturbance, within active nesting territories, be reduced or eliminated during critical phases of the nesting cycle (i.e., approximately February 15 through August 31). Disturbance that causes nest abandonment and/or loss of reproductive effort (e.g., killing or abandonment of eggs or young), or the loss of habitat upon which birds are dependent, is considered "taking", and is potentially punishable by fines and/or imprisonment (CLI 2017). Such taking would also violate federal law protecting migratory birds under the MBTA.

Other California Tree Protection Regulations

Additional State laws that regulate and/or protect oaks, oak woodlands, and other tree species include: the Professional Forester’s Law (PFL); the CEQA; and the State BFFP. PFL addresses oak habitat evaluations. CEQA addresses that “[a city] ... shall determine whether a Project within its authority may result in a conversion of oak woodland that will have a significant effect on the environment.” CEQA also provides protection to federal and/or State tree species that may be considered special-status. Thus, both PFL and CEQA apply to all local jurisdictions. The BFFP has regulatory authority over all of California’s forested landscapes, including the authority to regulate oak woodlands at the State or local level.

Porter-Cologne Water Quality Control Act: California Department of Fish and Game Code Section 1601-1602

The Porter-Cologne Water Quality Act, CDFG Code sections 1601-1607, is administered by the California State Water Resources Control Board (SWRCB). This act and associated codes pertain to Projects with potential impacts to water quality or waterways (SWRCB 2017).

Local

City of Sacramento Tree Ordinance: Sacramento City Code 12.56

The City has adopted regulatory policies for the preservation, protection, and maintenance of the existing trees within the City. Sacramento City Code (CC) 12.56 was amended and adopted by the City Council on August 4, 2016.

Work on and/or the removal of City trees or private protected trees requires prior approval in the form of a City of Sacramento Tree Permit (City Tree Permit). City trees are characterized as trees partially or completely located in a City park, on City owned property, or on a public right-of-way, including any street, road, sidewalk, park strip, mow strip or alley. For City trees located within City Park, the Director of the City Youth, Parks & Community Enrichment Department handles approvals for tree removal. For all other City trees located on City property or within the ROW, the City Director of Public Works handles approvals. CC section 12.56.040 includes specific requirements for notice and hearing for removal of City trees.

Private protected trees are defined as trees designated to have special historical value, special environmental value, or significant community benefit, and are located on private property. In addition, private protected trees include: 1) native trees at 12 inches DSH (i.e., coast live, interior, valley and blue oaks [*Quercus* spp.], California sycamore [*Platanus racemose*], and buckeye [*Aesculus californica*]); 2) all trees at 32 inches DSH with an existing single family or duplex dwelling; and 3) all trees at 24 inches DSH on undeveloped land or any other type of property such as commercial, industrial, and apartments (City of Sacramento 2017b).

City of Sacramento Tree Ordinance: Sacramento City Code 12.56.040 Removal of City Trees—Public Projects

Whenever feasible, the City shall modify the design of public projects to avoid the removal or damage to City trees.

If the City proposes to remove City trees that have a DSH of four inches or more as part of a public project that otherwise requires City council approval, the City project manager shall provide written justification to the director of the need to remove City trees for the public project. The director shall review the written justification and if the director agrees with the written justification the director shall make a recommendation to the City council to approve the request to remove the City trees. The request for approval from City council may take place at any stage of the public project but the City shall obtain council approval prior to removing the City trees. City trees proposed to be removed as part of a public project that either does not require City council approval or has a DSH less than four inches shall be removed as provided in Section 12.56.030(C).

The director shall provide written notice of the proposal to remove City trees as part of a public project by posting a notice of the time, date, and location of the City council meeting during which the City council is to decide whether or not to remove City trees in a conspicuous place on or in proximity to the trees at least fifteen (15) days prior to the City council meeting (Ord. 2016-0026 § 4).

City of Sacramento 2035 General Plan (2015)

The City of Sacramento's biological resources goals and policies are set forth in the Environmental Resources (ER) Element the General Plan and are as follows:

Goal ER 2.1. Natural and Open Space Protection. Protect and enhance open space, natural areas, and significant wildlife and vegetation in the City as integral parts of a sustainable environment within a larger regional ecosystem.

Policy ER 2.1.1. Resource Preservation. The City shall encourage new development to preserve on-site natural elements that contribute to the community's native plant and wildlife species value and to its aesthetic character.

Policy ER 2.1.4 Retain Habitat Areas. The City shall retain plant and wildlife habitat areas where there are known sensitive resources (e.g., sensitive habitats, special-status, threatened, endangered, candidate species, and species of concern). Particular attention shall be focused on retaining habitat areas that are contiguous with other existing natural areas and/or wildlife movement corridors.

ER 2.1.5 - Riparian Habitat Integrity. The City shall preserve the ecological integrity of creek corridors, canals, and drainage ditches that support riparian resources by preserving native plants and, to the extent feasible, removing invasive, non-native plants. If not feasible, adverse impacts on riparian habitat shall be mitigated by the preservation and/or restoration of this habitat at a 1:1 ratio, in perpetuity.

ER 2.1.6 – Wetland Protection. The City shall preserve and protect wetland resources including creeks, rivers, ponds, marshes, vernal pools, and other seasonal wetland, to the extent feasible. If not feasible, the mitigation of all adverse impacts on wetland resources shall be required in compliance with State and Federal regulations protecting wetland resources, and if applicable, threatened or endangered species. Additionally, the City may require either on- or off-site permanent preservation of an equivalent amount of wetland habitat to ensure no-net-loss of value and/or function.

Policy ER 2.1.8 Oak Woodlands. The City shall preserve and protect oak woodlands, heritage oaks, and/or significant stands of oak trees in the city that provide habitat for common native, and special status wildlife species, and shall address all adverse impacts on oak woodlands in accordance with the City's Heritage Tree Ordinance.

Policy ER 2.1.10 Habitat Assessments. The City shall consider the potential impact on sensitive plants and wildlife for each Project requiring discretionary approval. If site conditions are such that potential habitat for sensitive plant and/or wildlife species may be present, the City shall require habitat assessments, prepared by a qualified biologist, for sensitive plant and wildlife species. If the habitat assessment determines that suitable habitat for sensitive plant and/or wildlife species is present, then either (1) protocol-level surveys shall be conducted (where survey protocol has been established by a resource agency), or, in the absence of established survey protocol, a focused survey shall be conducted consistent with industry-recognized best practices; or (2) suitable habitat and presence of the species shall be assumed to occur within all potential habitat locations identified on the Project site. Survey Reports shall be prepared and submitted to the City and the CDFW or the USFWS (depending on the species) for further consultation and development of avoidance and/ or mitigation measures consistent with State and Federal law.

Goal ER. 3.1. Urban Forest. Manage the City's urban forest as an environmental, economic, and aesthetic resource to improve Sacramento residents' quality of life.

Policy ER 3.1.2 Manage and Enhance the City's Tree Canopy. The City shall continue to plant new trees, ensure new developments have sufficient right-of-way width for tree plantings, manage and care for all publicly owned trees, and work to retain healthy trees. The City shall monitor, evaluate and report, by community plan area and City-wide, on the entire tree canopy in order to maintain and enhance trees throughout the City and to identify opportunities for new plantings.

Policy ER 3.1.3 Trees of Significance. The City shall require the retention of City trees and Heritage Trees by promoting stewardship of such trees and ensuring that the design of development Projects provides for the retention of these trees wherever possible. Where tree removal cannot be avoided, the City shall require tree replacement or appropriate remediation.

Environmental Setting

The Project's Biological Study Area (BSA) is approximately 249 acres in size, and elevations within the BSA range between 5 and 40 feet above mean sea level. The topography within the BSA is very flat. Soils within the BSA include (NRCS 2017):

- Dierssen clay loam, deep drained, 0 to 2 percent slopes;
- Egbert clay, partially drained, 0 to 2 percent slopes;
- Egbert-Urban land complex, partially drained, 0 to 2 percent slopes;
- Galt clay, 0 to 1 percent slopes, MLRA 17;
- Galt-Urban land complex, 0 to 1 percent slopes, MLRA 17;
- Kimball-Urban land complex, 0 to 2 percent slopes,;
- Lang-Urban land complex, 0 to 2 percent slopes;
- San Joaquin silt loam, 0 to 3 percent slopes;

- San Joaquin-Urban land complex, 0 to 2 percent slopes;
- Trinnin-Urban land complex, 2 to 8 percent slopes;
- Valpac loam, partially drained, 0 to 2 percent slopes;
- Valpac-Urban land complex, partially drained, 0 to 2 percent slopes; and
- Xerarents-San Joaquin complex, 0 to 1 percent slopes.

The Project area is highly disturbed and the dominant vegetative communities within the BSA include: drainage, depressional wetland, ruderal/disturbed grassland, urban (grass lawns, ornamentals, hedges), and barren. Many of the urban tree plantings include thick patches of ornamentals interspersed with native and non-native oak trees. Minor habitat types include mixed willow scrub, and small portions of valley foothill riparian where the Project area borders the Sacramento River (Figure 13: Vegetation Communities and Waters within the BSA). Biological surveys were conducted on May 12, and May 17, 2017 by Dokken Engineering biologists Angela Scudiere and Courtney Owens to document existing biological resources, detect potential jurisdictional waters of the U.S. and State, and search for suitable habitat and presence of Federal and State sensitive species within the BSA. Potential impacts to resources were analyzed based on the proposed Project design and ecological resources identified in the field surveys. In compliance with the provisions of Federal, State, and local plans, policies, and laws relevant to the proposed Project, the potential impacts to natural resources within the BSA were investigated and documented.

Prior to field work, literature research was conducted through the USFWS Species List, the CDFW-maintained CNDDDB, and the CNPS Electronic Inventory of Rare and Endangered Plants to identify habitats and special status species having the potential to occur within the BSA (CNDDDB 2017; CNPS 2017; USFWS 2017b; and NMFS 2017) (see Appendix E).

Special Status Species

Special status species are plants and animals in the following categories:

- Species that are listed under the federal Endangered Species Act (ESA) and/or CESA as rare, threatened, or endangered;
- Species considered as candidates and proposed for state or Federal listing as threatened or endangered;
- Wildlife designated by CDFW as species of special concern; and
- Plants ranked by CDFW as “rare, threatened, or endangered” in California.

The CNDDDB, maintained by the CDFW, is considered the most current and reliable tool for tracking occurrences of special status species in California.








Special Status Species Evaluation

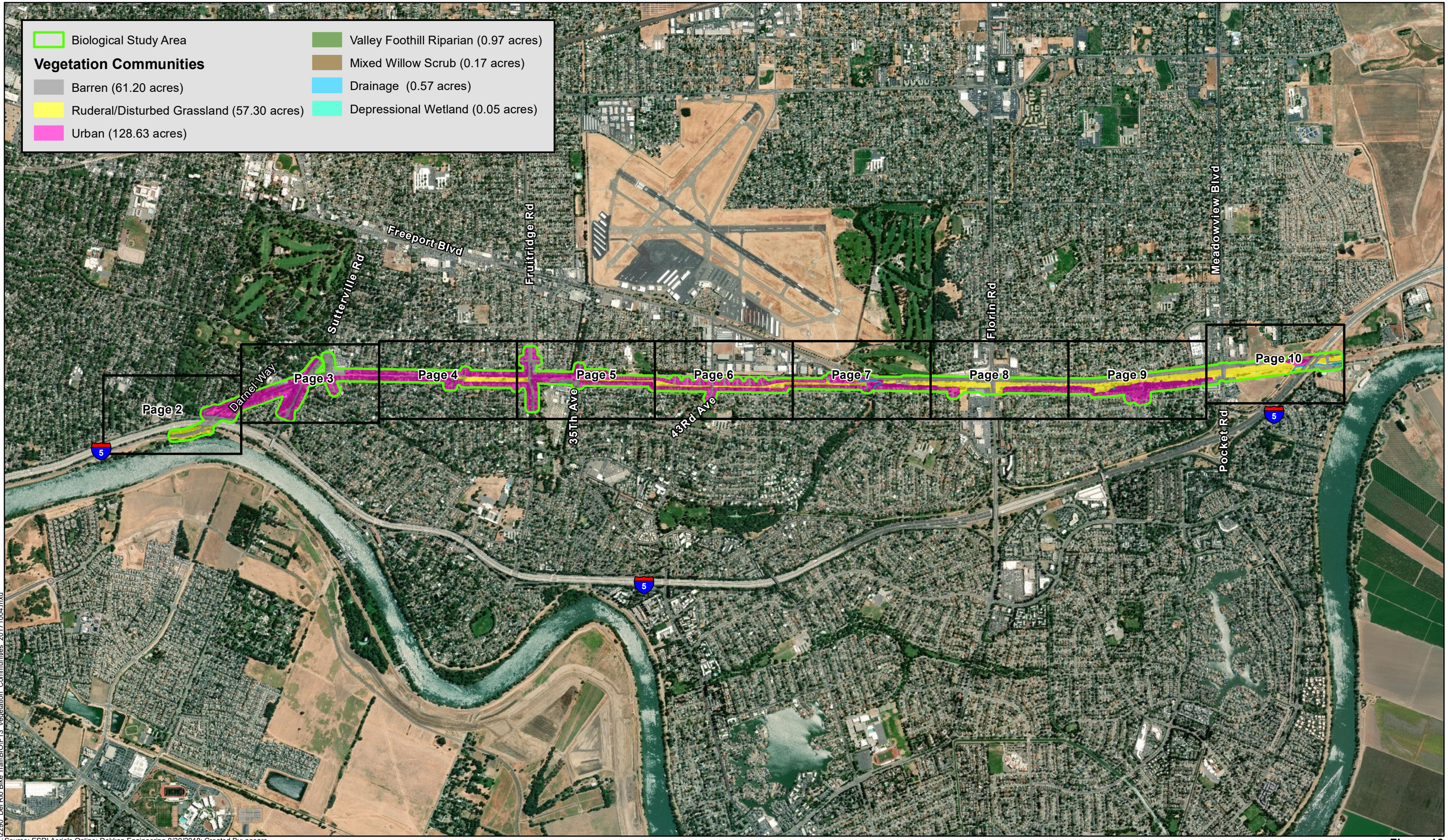
The special status species evaluation considers those species identified as having relative scarcity and/or declining populations by the USFWS or CDFW. Special status species include those formally listed as threatened or endangered, those proposed for formal listing, candidates for Federal listing, and those classified as Species of Concern by USFWS or SSC by CDFW. Species considered to be “special animals” or “fully protected” by the CDFW or rare, threatened, or endangered in California by the CNPS were also included in the evaluation.

Setting and Methods

Queries of the USFWS Planning Species list, CNDDDB Electronic Inventory of Rare and Endangered Plants, and CNPS database queries identified several special status species with the potential to be impacted by the proposed Project. Field surveys were conducted in May 2017 to document existing biological resources, detect potential jurisdictional waters of the U.S. and State, and search for suitable habitat and presence of Federal and State protected species. Potential impacts to resources were analyzed based on the proposed Project design and ecological resources identified in the field surveys. Table 7 provides a summary of all species identified in the search results, a description of the habitat requirements for each species, and conclusions regarding the potential for each species to occur within the Project area.

THIS PAGE IS LEFT INTENTIONALLY BLANK

	Biological Study Area		Valley Foothill Riparian (0.97 acres)
Vegetation Communities			
	Barren (61.20 acres)		Mixed Willow Scrub (0.17 acres)
	Ruderal/Disturbed Grassland (57.30 acres)		Drainage (0.57 acres)
	Urban (128.63 acres)		Depressional Wetland (0.05 acres)



V:\2290_Del Rio Bike Trail\BIO\F13_Vegetation Communities_20171004.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

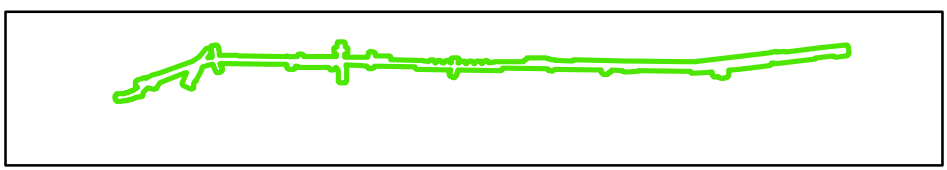
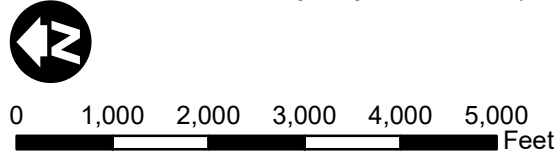










Figure 13
Page 1 of 10
Vegetation Communities and Waters within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

	Biological Study Area		Valley Foothill Riparian (0.97 acres)
Vegetation Communities			
	Barren (61.20 acres)		Mixed Willow Scrub (0.17 acres)
	Ruderal/Disturbed Grassland (57.30 acres)		Drainage (0.57 acres)
	Urban (128.63 acres)		Depressional Wetland (0.05 acres)



V:\2290_Del Rio Bike Trail\BIO\F13_Vegetation_Communities_20171004.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

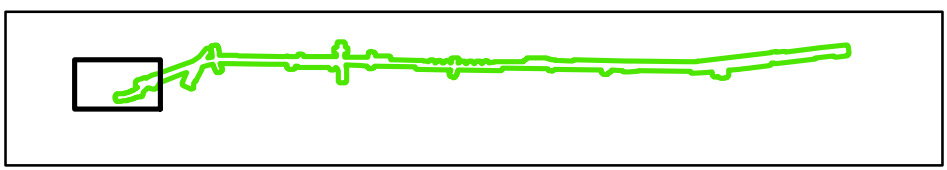
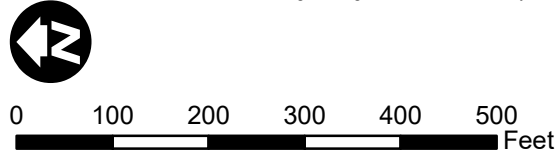










Figure 13
Page 2 of 10
Vegetation Communities and Waters within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

	Biological Study Area		Valley Foothill Riparian (0.97 acres)
Vegetation Communities			
	Barren (61.20 acres)		Mixed Willow Scrub (0.17 acres)
	Ruderal/Disturbed Grassland (57.30 acres)		Drainage (0.57 acres)
	Urban (128.63 acres)		Depressional Wetland (0.05 acres)



Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

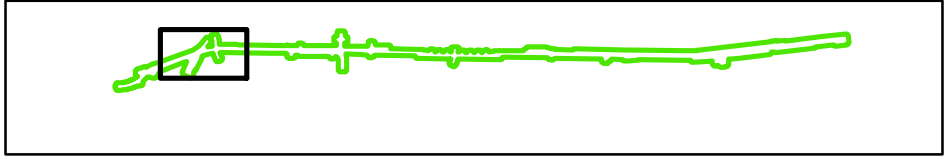
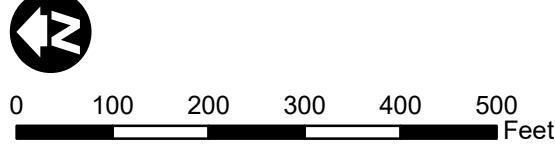


Figure 13
Page 3 of 10
Vegetation Communities and Waters within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

Biological Study Area

Vegetation Communities

Barren (61.20 acres)	Valley Foothill Riparian (0.97 acres)
Ruderal/Disturbed Grassland (57.30 acres)	Mixed Willow Scrub (0.17 acres)
Urban (128.63 acres)	Drainage (0.57 acres)
	Depressional Wetland (0.05 acres)



V:\2290_Del Rio Bike Trail\BIO\F13_Vegetation_Communities_20171004.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

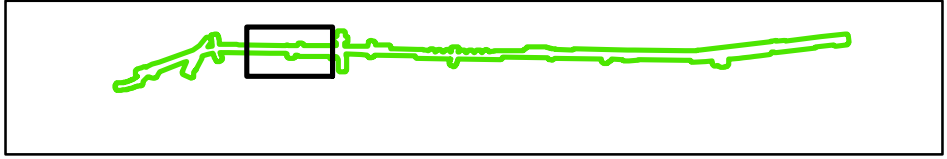
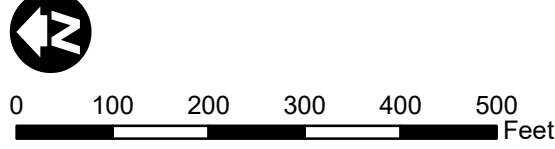


Figure 13
Page 4 of 10
Vegetation Communities and Waters within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

 Biological Study Area	 Valley Foothill Riparian (0.97 acres)
Vegetation Communities	 Mixed Willow Scrub (0.17 acres)
 Barren (61.20 acres)	 Drainage (0.57 acres)
 Ruderal/Disturbed Grassland (57.30 acres)	 Depressional Wetland (0.05 acres)
 Urban (128.63 acres)	



Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

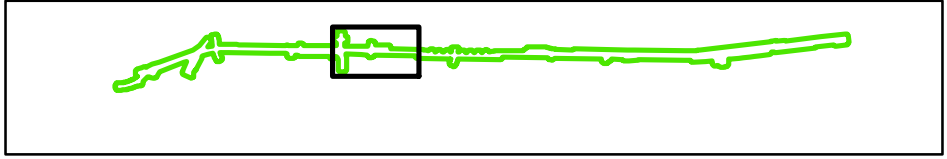
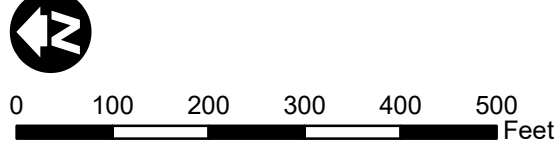
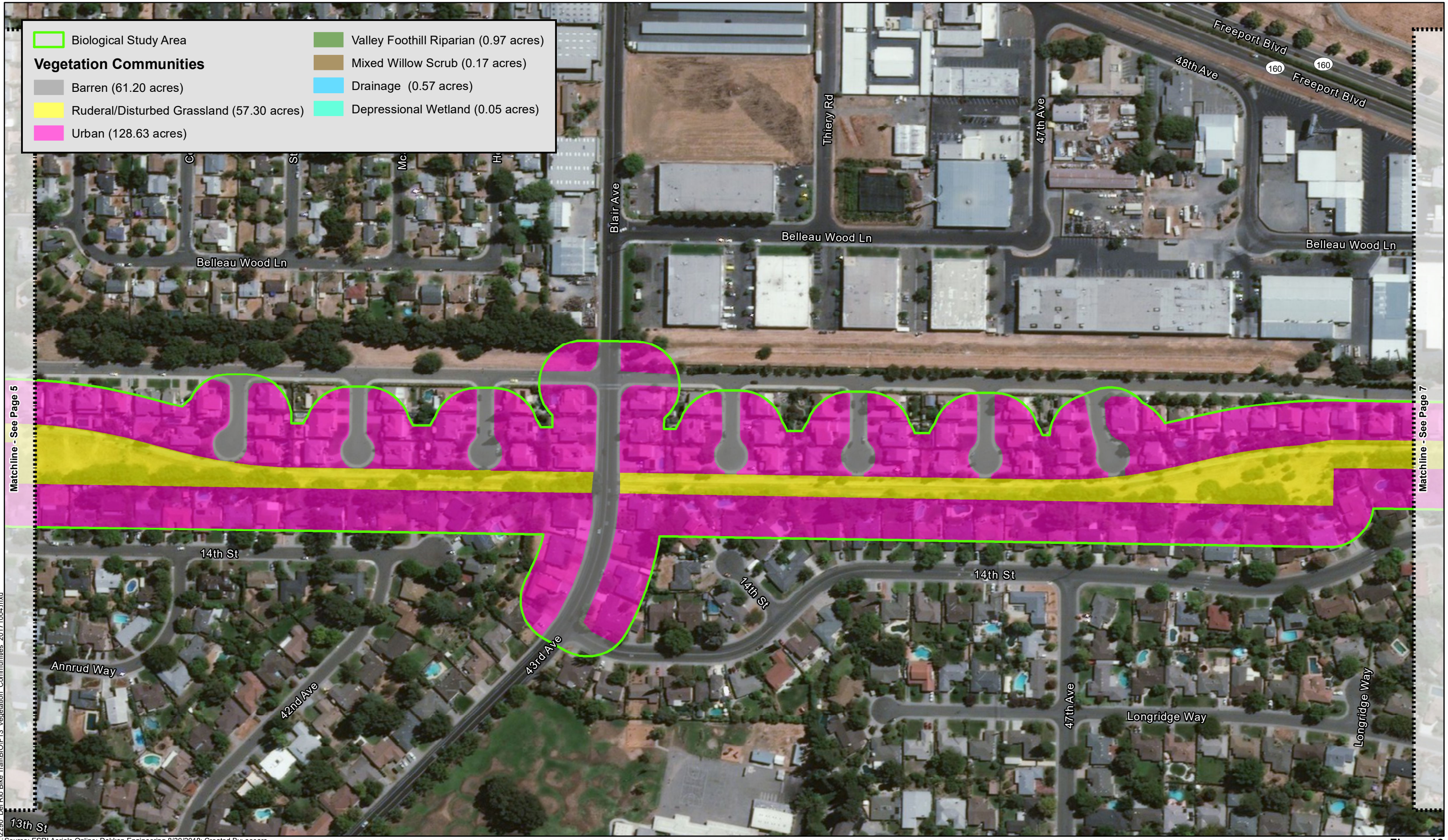


Figure 13
Page 5 of 10
Vegetation Communities and Waters within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

 Biological Study Area	 Valley Foothill Riparian (0.97 acres)
Vegetation Communities	 Mixed Willow Scrub (0.17 acres)
 Barren (61.20 acres)	 Drainage (0.57 acres)
 Ruderal/Disturbed Grassland (57.30 acres)	 Depressional Wetland (0.05 acres)
 Urban (128.63 acres)	



V:\2290_Del Rio Bike Trail\BIO\F13_Vegetation_Communities_20171004.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

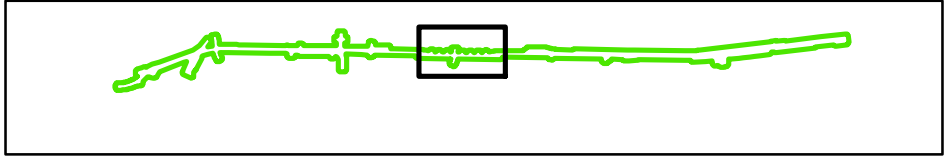
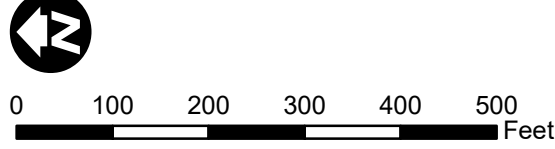


Figure 13
Page 6 of 10
Vegetation Communities and Waters within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

	Biological Study Area		Valley Foothill Riparian (0.97 acres)
Vegetation Communities			
	Barren (61.20 acres)		Mixed Willow Scrub (0.17 acres)
	Ruderal/Disturbed Grassland (57.30 acres)		Drainage (0.57 acres)
	Urban (128.63 acres)		Depressional Wetland (0.05 acres)



Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

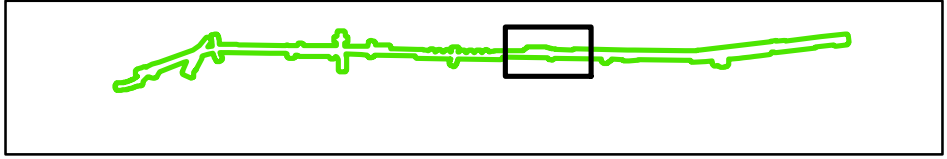
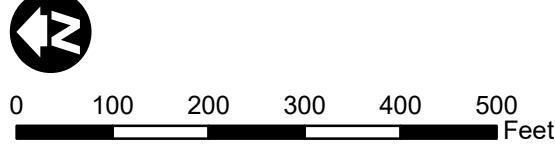



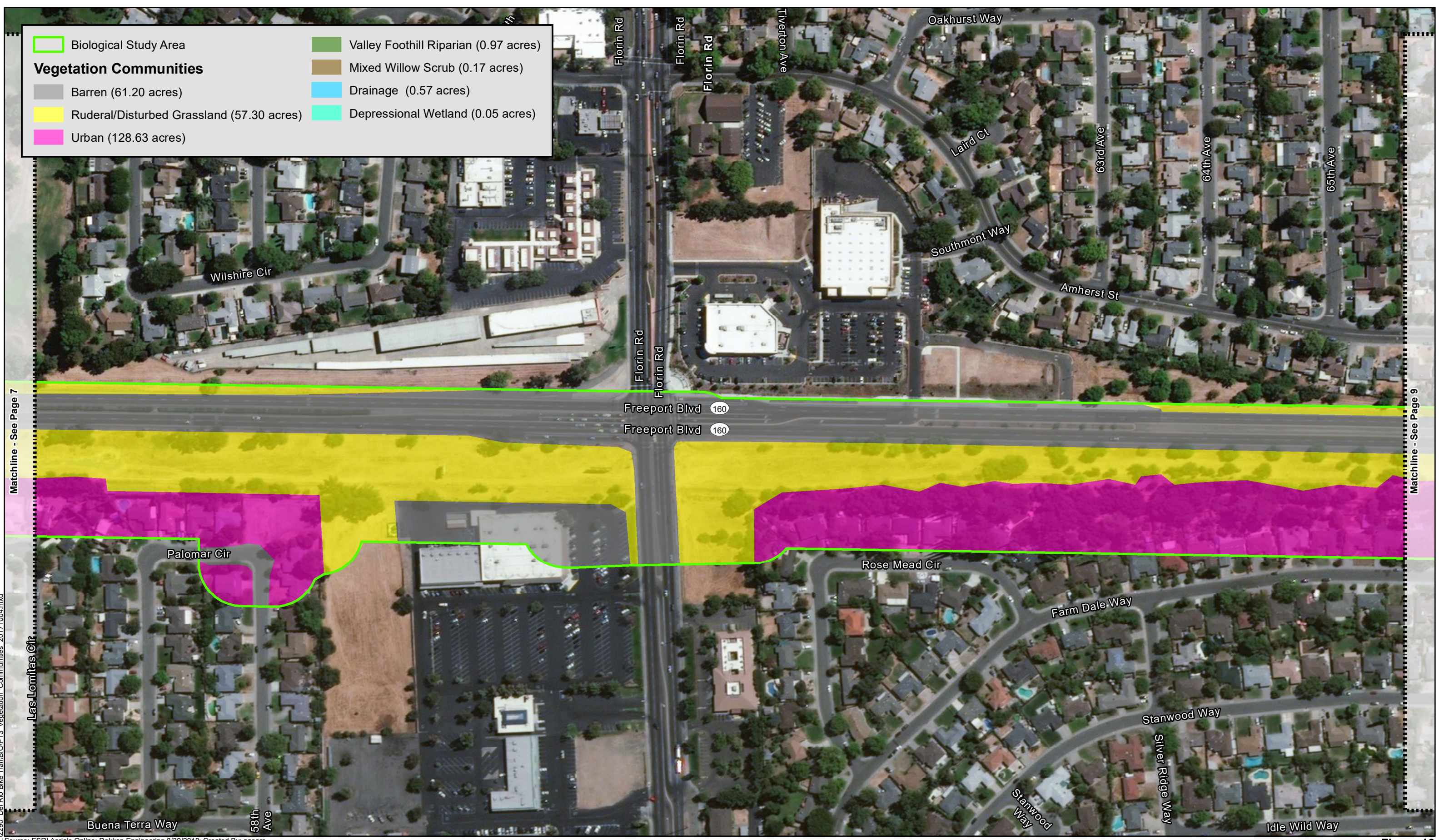


Figure 13
Page 7 of 10
Vegetation Communities and Waters within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

	Biological Study Area		Valley Foothill Riparian (0.97 acres)
Vegetation Communities			
	Barren (61.20 acres)		Mixed Willow Scrub (0.17 acres)
	Ruderal/Disturbed Grassland (57.30 acres)		Drainage (0.57 acres)
	Urban (128.63 acres)		Depressional Wetland (0.05 acres)



Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

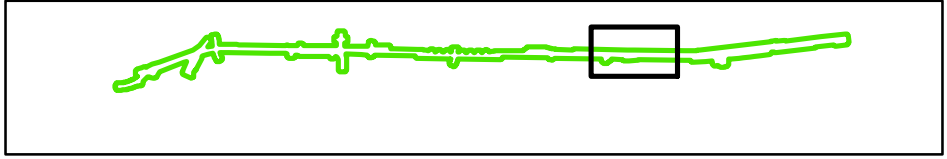
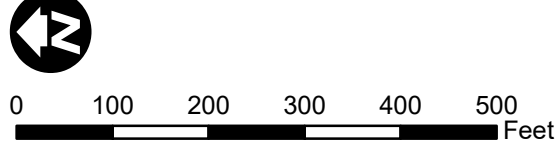


Figure 13
Page 8 of 10
Vegetation Communities and Waters within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

	Biological Study Area		Valley Foothill Riparian (0.97 acres)
Vegetation Communities			
	Barren (61.20 acres)		Mixed Willow Scrub (0.17 acres)
	Ruderal/Disturbed Grassland (57.30 acres)		Drainage (0.57 acres)
	Urban (128.63 acres)		Depressional Wetland (0.05 acres)



Matchline - See Page 8

Matchline - See Page 10

V:\2290_Del Rio Bike Trail\BIO\F13_Vegetation_Communities_20171004.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro

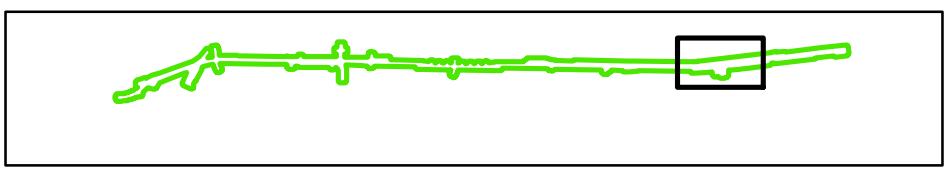
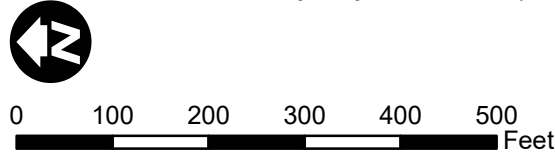



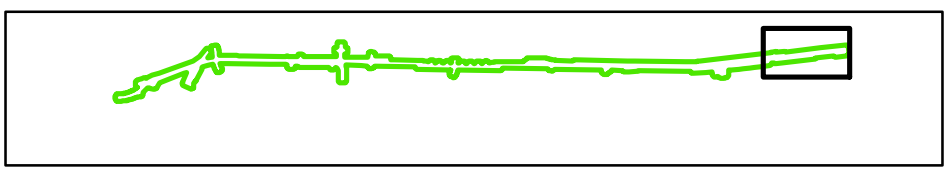
Figure 13
Page 9 of 10
Vegetation Communities and Waters within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

- | | | | |
|---|---|---|---------------------------------------|
|  | Biological Study Area |  | Valley Foothill Riparian (0.97 acres) |
| Vegetation Communities | | | |
|  | Barren (61.20 acres) |  | Mixed Willow Scrub (0.17 acres) |
|  | Ruderal/Disturbed Grassland (57.30 acres) |  | Drainage (0.57 acres) |
|  | Urban (128.63 acres) |  | Depressional Wetland (0.05 acres) |



V:\2290_Del Rio Bike Trail\BIO\F13_Vegetation_Communities_20171004.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



**Sacramento
Drainage Canal
(0.30 acres)**

Wetland 2 (0.02 acres)

Figure 13
Page 10 of 10
Vegetation Communities and Waters within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

Table 7. Listed and Proposed Species with the Potential to Occur or Known to Occur in the Project Area.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale	
Amphibian Species						
California red-legged frog	<i>Rana draytonii</i>	Fed: CA: CDF W:	T -- SSC	Inhabits lowlands and foothills in or near permanent sources of deep water with dense, shrubby or emergent riparian vegetation. Requires 11-20 weeks of permanent water for larval development and must have access to estivation habitat. Occurs from elevations near sea level to 5,200 feet.	A	Presumed Absent: The BSA does not contain a deep permanent water source, appropriate vegetative cover or suitable dispersal habitat for California red-legged frog. There are no CNDDB occurrences of the species within 36 miles of the Project vicinity. The species is presumed absent from the BSA.
California tiger salamander	<i>Ambystoma californiense</i>	Fed: CA: CDF W:	T T SSC	Inhabits annual grasslands and the grassy understory of Valley-Foothill Hardwood communities. Requires underground refuges, especially ground squirrel burrows and vernal pools or other seasonal water sources for breeding.	A	Presumed Absent: The BSA does not contain Valley Foothill hardwood vegetation or vernal pools. There are no CNDDB occurrences of the species within 20 miles of the Project vicinity. The species is presumed absent from the BSA.
Bird Species						
Grasshopper sparrow	<i>Ammodramus savannarum</i>	Fed: CA: CDF W:	-- -- SSC	Inhabits dry or well drained, dense grasslands on rolling hills, lowland plains, and valleys and hillsides on lower mountain slopes. Requires thick cover of native grasslands, preferably comprised of grasses, tall forbs and scattered shrubs. In southern California largely utilizes hillsides, and lower mountain slopes. Species may form small groups when nesting. Breeds April-July (0-5,000 feet).	A	Presumed Absent: The BSA does not contain suitable grassland habitat for the species. The BSA is within residential areas with urban vegetation and highly disturbed/ruderal grassland. There are no occurrences of the species within 10 miles of the Project vicinity. The species is presumed absent

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale	
					from the BSA.	
Bank swallow	<i>Riparia riparia</i>	Fed: CA: CDF W:	-- T --	A migratory colonial nester inhabiting lowland and riparian habitats west of the deserts during spring - fall. Majority of current breeding populations occur along the Sacramento and Feather rivers in the north Central Valley. Requires vertical banks or cliffs with fine textured/sandy soils for nesting (tunnel and burrow excavations). Nests exclusively near streams, rivers, lakes or the ocean. Breeds May-July.	A	Presumed Absent: The BSA does not contain vertical banks or cliffs. There are no occurrences of the species within 10 miles of the Project vicinity. The species is presumed absent from the BSA.
Burrowing owl	<i>Athene cunicularia</i>	Fed: CA: CDF W:	-- -- SSC	Species inhabits arid, open areas with sparse vegetation cover such as deserts, abandoned agricultural areas, grasslands, and disturbed open habitats. Requires friable soils for burrow construction (Below 5,300 feet).	A	Presumed Absent: The BSA does not contain suitable grassland habitat for the species. Grasslands that are within the BSA are highly disturbed and mowed consistently. The BSA is dominated by residential urban areas, which does not provide suitable foraging habitat for burrowing owl. The nearest CNDDDB occurrence is within 1 mile of the BSA within open agricultural area south of the BSA. The species is presumed absent from the BSA.
Least Bell's vireo	<i>Vireo bellii pusillus</i>	Fed: CA: CDF W:	E E --	Summer resident of southern California inhabiting low riparian habitats in the vicinity of water and dry river bottoms. Colonies have been identified within the Sacramento Valley. Prefers willows, baccharis, mesquite and other low, dense	A	Presumed Absent: The BSA does not contain suitable dense scrub habitat for the species. The BSA is highly disturbed and urbanized residential areas with ornamental plant species. The

Common Name	Scientific Name	Status		General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale
				vegetation as nesting sites (below 2000 feet).		BSA is dominated by residential urban areas, which does not provide suitable foraging habitat for burrowing owl. The nearest CNDDDB occurrence (2011) is within 5 miles of the BSA within the Yolo Bypass Wildlife Area. The species is presumed absent from the BSA.
Song sparrow (Modesto population)	<i>Melospiza melodia</i>	Fed: CA: CDF W:	-- -- SSC	An endemic bird found exclusively in the north-central portion of the Central Valley, with highest densities in the Butte Sink and Sacramento-San Joaquin River Delta. The species is usually found in open brushy habitats, along the borders of ponds or streams, abandoned pastures, desert washes, thickets, or woodland edges. In addition, there is a strong affinity for emergent freshwater marshes dominated by tules and cattails, riparian willow thickets, and valley oak forests with a blackberry understory. Breeds from March through August. Nest found in base of shrubs or clumps of grass.	A	Presumed Absent: The BSA does contain suitable open brushy areas, willow scrub and mixed Valley Oak woodland; however, there is a lack of emergent freshwater marshes or vegetated irrigation canals. The BSA is a highly disturbed and urbanized area dominated by residential communities. The nearest CNDDDB occurrence (2009) is within 3 miles of the southern terminus of the BSA within the Stone Lakes Wildlife Refuge. The species is presumed absent from the BSA.
Swainson's hawk	<i>Buteo swainsoni</i>	Fed: CA: CDF W:	-- T --	Inhabits grasslands with scattered trees, juniper-sage flats, riparian areas, savannahs, and agricultural or ranch lands with groves or lines of trees. Requires adjacent suitable foraging areas such as grasslands, alfalfa or grain fields that support a stable rodent prey base. Breeds March to late August.	H	Low to Moderate: The BSA does not contain suitable large nesting trees or suitable grassland foraging areas. However, the northern and southern terminus of the Project area are within proximity to the Sacramento River and some riparian areas

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Potential for Occurrence and Rationale	
					are present. No raptor nesting trees or Swainson's hawks were observed within the BSA during biological surveys. The nearest CNDDDB occurrence is less than 1 mile from the southern terminus of the Project area along the Sacramento River. Due to the close proximity to the Sacramento River riparian habitats, and the local occurrences, the species is considered to have a low to moderate potential to occur.	
Tricolored blackbird	<i>Agelaius tricolor</i>	Fed: CA: CDF W:	-- CE SSC	Inhabits freshwater marsh, swamp and wetland communities, but may utilize agricultural or upland habitats that can support large colonies, often in the Central Valley area. Requires dense nesting habitat that is protected from predators, is within 3-5 miles from a suitable foraging area containing insect prey and is within 0.3 miles of open water. Suitable foraging includes wetland, pastureland, rangeland, at dairy farms, and some irrigated croplands (silage, alfalfa, etc.). Nests mid-March - early August, but may extend until October/November in the Sacramento Valley region.	A	Presumed Absent: The BSA does not contain suitable freshwater marsh, swamp or wetland communities or upland areas suitable for large colonies. The BSA is highly disturbed and urbanized and is not suitable for the species. The nearest CNDDDB occurrence approximately 7miles west of the Project area within the Yolo Bypass. The species is presumed absent from the BSA.
Western snowy plover	<i>Charadrius alexandrinus nivosus</i>	Fed: CA: CDF W:	T -- SSC	Inhabits sandy or gravelly beaches along the coast, on estuarine salt ponds, and the shores of large alkali lakes. Species requires sandy,	A	Presumed Absent: The BSA does not contain suitable sandy or gravelly beaches or any estuarine areas. There are

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale
			gravelly or friable soil substrate for nesting. Nests are often in proximity to driftwood, rocks, or defoliated bushes. Breeds April- August.		no CNDDB occurrences within 10 miles of the BSA. The species is considered absent from the BSA.
Western Yellow-billed Cuckoo	<i>Coccyzus americans</i>	Fed: CA: CDF W:	T E --	A	Presumed Absent: The BSA does not contain suitable large-scale riparian forests. The BSA has very small tracks of riparian woodland at the northern and southern termini of the Project that are highly disturbed. Further, any occurrences within 10 miles of the BSA have been listed as extirpated. The species is considered absent from the BSA.
White-tailed kite	<i>Elanus leucurus</i>	Fed: CA: CDF W:	-- -- FP	A	Presumed Absent: The BSA does not have suitable nesting habitat within the BSA, and does not contain suitable open grasslands or agricultural areas for foraging. The nearest CNDDB occurrence is 3 miles southeast of the BSA within Stone Lakes National Wildlife Refuge. The species is considered to be absent from the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale
Yellow-headed blackbird	<i>Xanthocephalus xanthocephalus</i>	Fed: -- CA: -- CDF: -- W: SSC	Occurs primarily as a migrant and summer resident from April to early October. The species almost exclusively nests in marshes with tall emergent vegetation such as tules (<i>Scirpus</i> sp.) or cattails (<i>Typha</i> sp.), in open areas and edges over water at depths typically ranging from 1-4 feet deep. Frequently breeds within marshes edges of lakes, reservoirs, or larger ponds. Breeds from April-July.	A	Presumed Absent: The BSA does not contain emergent freshwater marshes within open areas. The BSA is a highly disturbed and urbanized area dominated by residential communities. The nearest CNDDDB occurrence (2009) is within 1 miles of the southern terminus of the BSA within the Stone Lakes Wildlife Refuge; however, this occurrence is from 1899 and no other occurrences have been listed in the area since. The species is presumed absent from the BSA.
Fish Species					
Chinook salmon – Central Valley spring run ESU	<i>Oncorhynchus tshawytscha</i>	Fed: T CA: T CDF: -- W: --	Spring-run Chinook enter the Sacramento-San Joaquin River system to spawn, requiring larger gravel particle size and more water flow through their redds than other salmonids. Remaining runs occur in Butte, Mill, Deer, Antelope, and Beegum Creeks, tributaries to the Sacramento River. Known to occur in Siskiyou and Trinity counties.	A	Presumed Absent: The BSA does not contain any water sources that could support the species, nor will the Project have any activities within waters that could support the species. The species is considered absent from the BSA.
Chinook salmon – Sacramento River winter-run ESU	<i>Oncorhynchus tshawytscha</i>	Fed: E CA: E CDF: -- W: --	Sacramento River winter-run Chinook enter the Sacramento-San Joaquin River system to spawn. In the San Joaquin basin adult migration and spawning occurs from October-December.	A	Presumed Absent: The BSA does not contain any water sources that could support the species, nor will the Project have any activities within waters that could support the species. The species is considered absent from the BSA.

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale
					BSA.
Delta Smelt	<i>Hypomesus transpacificus</i>	Fed: CA: CDF W:	T E --	Occurs within the Sacramento-San Joaquin Delta and seasonally within the Suisun Bay, Carquinez Strait and San Pablo Bay. Most often occurs in partially saline waters.	A Presumed Absent: The BSA does not contain any water sources that could support the species, nor will the Project have any activities within waters that could support the species. The species is considered absent from the BSA.
Longfin smelt	<i>Spirinchus thaleichthys</i>	Fed: CA: CDF W:	C T SSC	Within California, occurs slightly upstream from Rio Vista (on the Sacramento River in the Delta) including the Cache Slough region and Medford Island (on the San Joaquin River in the Delta) through Suisun Bay and Suisun Marsh, the San Pablo Bay, the main San Francisco Bay, South San Francisco Bay, the Gulf of the Farallones, Humboldt Bay, and the Eel river estuary & local coastal areas. Resides in California and are primarily an anadromous estuarine species that can tolerate salinities ranging from freshwater to nearly pure seawater. Prefers temperatures in the range of 16-18°C and salinities ranging from 15-30 ppt. Their spatial distribution within a bay or estuary is seasonally variable. Longfin smelt may also make daily migrations; remaining deep during the day and rising to the surface at night.	A Presumed Absent: The BSA does not contain any water sources that could support the species, nor will the Project have any activities within waters that could support the species. The species is considered absent from the BSA.
Sacramento perch	<i>Archoplites interruptus</i>	Fed: CA:	-- --	Inhabits sloughs, lakes, and slow moving rivers of the Central Valley.	A Presumed Absent: The BSA does not contain any water

Common Name	Scientific Name	Status		General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale
		CDF W:	SSC	Prefers turbid lakes, reservoirs and ponds warmed by summer heat and absent of plants; may occasionally occur in clear water among beds of aquatic vegetation. Species tolerates high temperatures, high salinities, high turbidity, and low water clarity. Young require aquatic and overhanging vegetation for cover. Spawns March-August in water temperatures between 64-84°F		sources that could support the species, nor will the Project have any activities within waters that could support the species. The species is considered absent from the BSA.
Steelhead – Central Valley DPS	<i>Oncorhynchus mykiss</i>	Fed: CA: CDF W:	T -- --	Spawning occurs in small tributaries on coarse gravel beds in riffle areas. Central Valley steelhead are found in the Sacramento River system. The principal remaining wild populations spawn annually in Deer and Mill Creeks in Tehama County, in the lower Yuba River, and a small population in the lower Stanislaus River.	A	Presumed Absent: The BSA does not contain any water sources that could support the species, nor will the Project have any activities within waters that could support the species. The species is considered absent from the BSA.
Invertebrate Species						
Conservancy fairy shrimp	<i>Branchinecta conservatio</i>	Fed: CA: CDF W:	E -- --	Inhabits relatively large and turbid clay bottomed playa vernal pools. Species requires pools to continuously hold water for a minimum of 19 days and must remain inundated into the summer months. Occupied playa pools typically are 1 to 88 acres in size, but species may utilize smaller, less turbid pools.	A	Presumed Absent: The BSA does not contain vernal pool habitat for the species and the nearest CNDDDB occurrence of the species is greater than 70 miles from the site. The species is presumed absent based on lack of required habitat within the BSA.
Valley elderberry longhorn beetle	<i>Desmocerus californicus dimorphus</i>	Fed: CA: CDF W:	T -- --	Species requires elderberry shrubs as host plants. Typically occurs in moist valley oak woodlands associated with riparian corridors in the lower Sacramento River and upper San	P	Presumed Present: The BSA does contain host elderberry shrubs for the species and during biological surveys exit holes were observed within the

Common Name	Scientific Name	Status		General Habitat Description	Habitat Present/Absent	Potential for Occurrence and Rationale
				Joaquin River drainages. (Sea level-3,000 feet).		shrubs identified. However, all of the elderberry shrubs are within upland urban habitat. the nearest CNDDDB occurrence is approximately 2 miles from the BSA. The species is presumed present within the BSA due to the observations of exit holes, however, this Project is not anticipated to impact the shrubs.
Vernal pool fairy shrimp	<i>Branchinecta lynchi</i>	Fed: CA: CDF W:	T -- --	In California inhabits portions of Tehama county, south through the Central Valley, and scattered locations in Riverside County and the Coast Ranges. Species associated with smaller and shallower cool-water vernal pools approximately 6 inches deep and short periods of inundation. Inhabited pools have low to moderate levels of alkalinity and total dissolved solids. The shrimp are temperature sensitive, requiring pools below 50 F to hatch and dying within pools reaching 75 F. Young emerge during cold-weather winter storms.	A	Presumed Absent: The BSA does not contain vernal pool habitat for the species. The nearest CNDDDB occurrence of the species is less than 2 miles from the site. The species is presumed absent based on lack of required habitat within the BSA.
Vernal pool tadpole shrimp	<i>Lepidurus packardii</i>	Fed: CA: CDF W:	E -- --	Inhabits vernal pools and swales containing clear to highly turbid waters such as pools located in grass bottomed swales of unplowed grasslands, old alluvial soils underlain by hardpan, and mud-bottomed pools with highly turbid water.	A	Presumed Absent: The BSA does not contain suitable vernal pool or grassland swale habitat for vernal pool tadpole shrimp. The nearest CNDDDB occurrence is less than 2 miles from the Project area but is located in a habitat conservation bank with

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale		
					suitable vernal pool habitat.		
Mammal Species							
American badger	<i>Taxidea taxus</i>	Fed: CA: CDF W:	-- -- SSC		<p>Prefers treeless, dry, open stages of most shrub and herbaceous habitats with friable soils and a supply of rodent prey. Species also inhabits forest glades and meadows, marshes, brushy areas, hot deserts, and mountain meadows. Species maintains burrows within home ranges estimated between 338-1,700 acres, dependent on seasonal activity. Burrows are frequently re-used, but new burrows may be created nightly. Young are born in March and April within burrows dug in relatively dry, often sandy, soil, usually in areas with sparse overstory cover. Species is somewhat tolerant of human activity, but is sensitive to automobile mortality, trapping, and persistent poisons (up to 12,000 feet).</p>	A	<p>Presumed Absent: The BSA is highly disturbed and within a high density of residential communities. At such levels of disturbance and residential areas it is unlikely the species would be present. The last known dated occurrence of the species was 1938 and this occurrence was approximately 8 miles south from the BSA. Due to the lack of local occurrences and the high disturbance levels within the BSA, the species is presumed absent from the BSA.</p>
Pallid bat	<i>Antrozous pallidus</i>	Fed: CA: CDF W:	-- -- SSC		<p>Inhabits low elevations of deserts, grasslands, shrub lands, woodlands and forests year round. Most common in open, dry habitats with rocky areas for roosting. Forages over open ground within 1-3 miles of day roosts. Prefers caves, crevices, and mines for day roosts, but may utilize hollow trees, bridges and buildings. Roosts must protect bats from high temperatures. Very sensitive to disturbance of roosting sites. Maternity colonies form early April and young are born April-July (below</p>	A	<p>Presumed Absent: The BSA does not contain the requisite deserts, grasslands, shrub lands, woodlands or forest habitat. No suitable day or night roosting habitat was observed within the BSA during biological surveys. The nearest CNDDDB occurrence of the species is more than 10 miles from the BSA.</p>

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale
			10,000 feet).		
Reptile Species					
Giant garter snake	<i>Thamnophis gigas</i>	Fed: CA: CDF W:	T T --	A	Presumed Absent: Wetland, slough, pond or rice field habitat for giant garter snake is not present within the BSA. In addition, the stream/drainage canal is a seasonal water feature and does not provide adequate aquatic habitat during the species' active season. The nearest CNDDDB occurrence of the species is approximately 3 miles from the BSA within the Stone Lakes National Wildlife Refuge.
Western pond turtle	<i>Emys marmorata</i>	Fed: CA: CDF W:	-- -- SSC	A	Presumed Absent: The BSA is highly disturbed and while western pond turtles may inhabit ephemeral streams, the stream/drainage canal is likely too dry to support many of the western pond turtle's primary prey sources including frogs, crayfish, and fish. In addition, the banks of the drainages and canals are partially concrete, asphalt, and rip-rap lined and not suitable upland habitat for western pond turtle. The nearest CNDDDB occurrence of

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale	
					the species is approximately 3 miles from the BSA within the Stone Lakes National Wildlife Refuge. Due to lack of suitable upland habitat and lack of habitat for prey species, the western pond turtle is presumed absent from the BSA.	
Plant Species						
Alkali milk-vetch	<i>Astagalus tener</i> <i>var. tener</i>	Fed: CA: CNPS :	-- -- 1B.2	An annual herb inhabiting low ground and alkaline soils of playas, alkaline flats, vernal moist meadows, vernal pools, and valley and foothill grassland of adobe clay. Flowers March–June (0-197 feet).	A	Presumed Absent: The BSA does not contain alkaline flats or vernal pool habitat suitable for the species. The nearest occurrence of the species is approximately 8 miles west within the Yolo Bypass. The species is considered absent from the BSA.
Baker's navarretia	<i>Navarretia leucocephala</i> <i>ssp. bakeri</i>	Fed: CA: CNPS :	-- -- 1B.1	An annual herb inhabiting mesic soils of vernal pools and swales within cismontane woodland, lower montane coniferous forest, meadows and seeps, valley and foothill grasslands communities. Flowers April-July (16-5,708 feet).	A	Presumed Absent: The BSA does not contain suitable valley grassland or vernal pool habitat for the species. The nearest occurrence of the species is approximately 10 miles west of the BSA within the Yolo Bypass area. The species is considered absent from the BSA.
Brittlescale	<i>Atriplex depressa</i>	Fed: CA: CNPS :	-- -- 1B.2	An annual herb inhabiting alkaline, clay soils of chenopod scrub, meadows and seeps, playas, vernal pools and valley and foothill grassland communities. Flowers June –October (0-1,049 feet).	A	Presumed Absent: The BSA does not contain suitable valley grassland or vernal pool habitat for the species. The nearest occurrence of the species is approximately 13 miles west of the BSA. The

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale
					species is considered absent from the BSA.
Colusa grass	<i>Neostapfia colusana</i>	Fed: -- CA: -- CNPS : 1B.1	An annual herb inhabiting adobe soils of large or deep vernal pools. Flowers May –August (0-656 feet).	A	Presumed Absent: The BSA does not contain suitable vernal pool habitat for the species. The nearest occurrence of the species is approximately 10 miles west of the BSA within the Yolo Bypass area. The species is considered absent from the BSA.
Crampton's tuctorial	<i>Tuctoria mucronata</i>	Fed: -- CA: -- CNPS : 1B.1	An annual herb inhabiting valley and foothill grasslands and vernal pools. Blooms April-August (16-32 feet).	A	Presumed Absent: The BSA does not contain suitable grassland or vernal pool habitat for the species. The nearest occurrence of the species is approximately 10 miles west of the BSA within the Yolo Bypass area. The species is considered absent from the BSA.
Dwarf downingia	<i>Downingia pusilla</i>	Fed: -- CA: -- CNPS : 2B.2	An annual herb inhabiting vernal pools and mesic valley and foothill grassland communities. Flowers March-May (3-1,460 feet).	A	Presumed Absent: The BSA does not contain suitable grassland or vernal pool habitat for the species. The nearest occurrence of the species is approximately 5 miles south of the BSA within the Stone Lakes National Wildlife Refuge area. The species is considered absent from the BSA.
Ferris' milk-vetch	<i>Astagalus tener var. ferrisiae</i>	Fed: -- CA: -- CNPS : 1B.1	An annual herb inhabiting vernal mesic meadows and seeps and subalkaline flats within valley and	A	Presumed Absent: The BSA does not contain suitable vernal mesic meadows and

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale
		:	foothill grassland communities. Known only from six extant occurrences. Flowers April - May (6-246 feet).		seeps and subalkaline flats for the species. The nearest occurrence of the species is approximately 6 miles west of the BSA within the Yolo Bypass area. The species is considered absent from the BSA.
Heartscale	<i>Atriplex cordulata</i> var. <i>cordulata</i>	Fed: CA: CNPS :	-- -- 1B.2	An annual herb inhabiting saline or alkaline soils of chenopod scrub, meadows and seeps, and sandy valley and foothill grassland communities. Flowers June –July (0-1837 feet).	A Presumed Absent: The BSA does not contain suitable meadows or grassland habitat for the species. The nearest occurrence of the species is approximately 12 miles west of the BSA. The species is considered absent from the BSA.
Heckard's pepper-grass	<i>Lepidium latipes</i> var. <i>heckardii</i>	Fed: CA: CNPS :	-- -- 1B.2	An annual herb found in alaline flats within valley or foothill grasslands. Flowers March-May (0 - 660 feet)	A Presumed Absent: The BSA does not contain suitable grassland habitat for the species. The nearest occurrence of the species is approximately 10 miles west of the BSA within the Yolo Bypass area. The species is considered absent from the BSA.
Jepson's coyote-thistle	<i>Eryngium jepsonii</i>	Fed: CA: CNPS :	-- -- 1B.2	A perennial herb inhabiting moist clay soils within valley and foothill grassland and vernal pool communities. Flowers April-August (0-1,640 feet)	A Presumed Absent: The BSA does not contain suitable grassland or vernal pool habitat for the species. The nearest occurrence of the species is approximately 10 miles west of the BSA within the Yolo Bypass area. The species is considered absent

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/Absent	Potential for Occurrence and Rationale
					from the BSA.
Legenere	<i>Legenere limosa</i>	Fed: CA: CNPS :	-- -- 1B.1	An annual herb inhabiting wet areas, vernal pools, and ponds. Flowers May-June (0-2,887 feet).	A Presumed Absent: The BSA does not contain suitable vernal pool habitat for the species. The nearest occurrence of the species is approximately 4 miles south of the BSA within the Stone Lakes National Wildlife Refuge. The species is considered absent from the BSA.
Northern California black walnut	<i>Juglans hindsii</i>	Fed: CA: CNPS :	-- -- 1B.1	A deciduous tree inhabiting along streams and slopes within riparian forest and riparian woodland communities. Flowers April-May (0-1,444 feet).	A Presumed Absent: The BSA does not contain suitable riparian habitat along stream or river slopes. Additionally, according to CNDDDB, the population of the species along the Sacramento river has been extirpated from the area. The species is considered absent from the BSA.
Peruvian dodder	<i>Cuscuta obtusiflora var. glandulosa</i>	Fed: CA: CNPS :	-- -- 2B.2	An annual parasitic vine inhabiting freshwater marsh communities on herbs such as Alternanthera sp., Dalea sp., Lythrum sp., Polygonum sp., and Xanthium sp. Flowers July - October (49-1,640 feet).	A Presumed Absent: The BSA does not contain suitable freshwater marsh communities for the species. The nearest occurrence of the species is approximately 4 miles south of the BSA within a freshwater lake. Due to the lack of suitable habitat and lack of local occurrences, the species is considered absent from the BSA.
Saline clover	<i>Trifolium</i>	Fed:	--	An annual herb inhabiting mesic,	A Presumed Absent: The BSA

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale	
	<i>hydrophilum</i>	CA: CNPS :	-- 1B.2	alkaline soils of salt marsh, marshes and swamps, vernal pools, and valley and foothill grasslands. Flowers April-June (0 - 1,000 feet).		does not contain suitable vernal pool or grassland habitat for the species. The nearest occurrence of the species is approximately 4 miles south of the BSA within the Stone Lakes National Wildlife Refuge. The species is considered absent from the BSA.
Sanford's arrowhead	<i>Sagittaria sanfordii</i>	Fed: CA: CNPS :	-- -- 1B.2	A perennial rhizomatous herb inhabiting freshwater marshes, swamps, ponds and ditches. Flowers May-October (0-2,132 feet).	P	Presumed Absent: The BSA does not contain suitable freshwater marsh or pond habitat for the species. However, there are some ditches and irrigation channels within the BSA that could be utilized by the species. While the nearest occurrence of the species is less than 1 mile from the southern terminus of the Project, there is no hydrologic connectivity to the drainages within the BSA. Focused rare plant surveys were conducted in May 2017 during the species blooming season and determined the species does not occupy the drainages with BSA. Therefore, the species is presumed absent from the BSA
San Joaquin spearscale	<i>Extriplex joaquinana</i>	Fed: CA: CNPS	-- -- 1B.2	An annual herb inhabiting alkaline soils of chenopod scrub, meadows and seeps, playas and valley and	A	Presumed Absent: The BSA does not contain suitable grassland, meadow, seep, or

Common Name	Scientific Name	Status	General Habitat Description	Habitat Present/ Absent	Potential for Occurrence and Rationale		
		:			foothill grassland communities. Flowers April-September (0-2,739 feet).	playa habitat for the species. The nearest occurrence of the species is approximately 10 miles west of the BSA within the Yolo Bypass area. The species is considered absent from the BSA.	
Suisun Marsh aster	<i>Symphotrichum lentum</i>	Fed: CA: CNPS :	-- -- 1B.2		A perennial rhizomatous herb inhabiting wetlands, freshwater marsh, and brackish-marsh communities. Flowers May-November (0-984 feet).	A	Presumed Absent: The BSA does not contain suitable fresh or brackish marsh community habitat for the species. The nearest occurrence of the species is approximately 5 miles west of the BSA within the Yolo Bypass area. The species is considered absent from the BSA.
Woolly rose-mallow	<i>Hibiscus lasiocarpus var. occidentalis</i>	Fed: CA: CNPS :	-- -- 1B.2		A perennial rhizomatous herb inhabiting freshwater wetlands, wet banks, and marsh communities. Often found in-between riprap on levees. Flowers June-September (0-394 feet).	A	Presumed Absent: The BSA does not contain suitable freshwater wetlands or marsh habitat for the species. The nearest occurrence of the species is approximately 3 miles south of the BSA within the Stone Lakes National Wildlife Refuge area. The species is considered absent from the BSA.

<p>Federal Designations (Fed): (FESA, USFWS) E: Federally listed, endangered T: Federally listed, threatened C: Candidate</p>	<p>State Designations (CA): (CESA, CDFW) E: State listed, endangered T: State listed, threatened CE: Candidate Endangered C: Candidate FP: Fully Protected</p>
<p>Other Designations CDFW_SSC: CDFW Species of Special Concern California Native Plant Society Designations: <i>*Note: according to CNPS (Skinner and Pavlik 1994), plants on Lists 1B and 2 meet definitions for listing as threatened or endangered under Section 1901, Chapter 10 of the CFG Code. This interpretation is inconsistent with other definitions.</i> 1A: Plants presumed extinct in California. 1B: Plants rare and endangered in California and throughout their range. 2B: Plants are endangered in California 2: Plants rare, threatened, or endangered in California but more common elsewhere in their range. 3: Plants about which more information is needed; a review list. Plants 1B, 2, and 3 extension meanings: _.1 Seriously endangered in California (over 80% of occurrences threatened / high degree and immediacy of threat) _.2 Fairly endangered in California (20-80% occurrences threatened) _.3 Not very endangered in California (<20% of occurrences threatened or no current threats known)</p>	
<p>Potential for Occurrence Criteria: Present: Species was observed on site during a site visit or focused survey. High: Habitat (including soils and elevation factors) for the species occurs on site and a known occurrence has been recorded within 5 miles of the site. Low-Moderate: Either low quality habitat (including soils and elevation factors) for the species occurs on site and a known occurrence exists within 5 miles of the site; or suitable habitat strongly associated with the species occurs on site, but no records were found within the database search. Presumed Absent: Focused surveys were conducted and the species was not found, or species was found within the database search but habitat (including soils and elevation factors) do not exist on site, or the known geographic range of the species does not include the survey area.</p>	
<p>Source: (Baldwin 2012), (Bennet 2005), (CaliforniaHerps 2015), (CDFW 2015) (CNDDDB 2017), (CNPS 2015), (Miller and Hornaday 1999), (USFWS 2002a, 2002b, 2007, 2010, USFWS 2012) (Wang 2010) (Yoshiyama et. al 1998), (Zeiner 1988)</p>	

Sensitive Habitats

Sensitive habitats include sensitive natural plant communities and other habitats designated and/or regulated by CDFW, USFWS, and USACE. Under Section 404 of the CWA, wetlands and other waters of the U.S. are subject to the jurisdiction of USACE. Aquatic habitats may also receive protection under California statutes including Section 1602 of the California Fish and Wildlife Code and the California Porter-Cologne Water Quality Control Act.

Wetlands and Waters

Based on survey results, the USGS *Sacramento West and Clarksburg, California* 7.5-minute quadrangle topographic maps, Federal Emergency Management Agency (FEMA) flood maps, and the USFWS National Wetlands Inventory (NWI 2017), a total of four aquatic features were found within the BSA.

An above-ground storm drainage feature is located approximately 300 feet south of the intersection of Belleau Wood Lane and Freeport Boulevard and west of Freeport Boulevard, within the BSA. At the southern terminus of the Project area, the Sacramento Drainage Canal is also within the BSA. Further, two freshwater wetland features were identified during the May 2017 jurisdictional water delineations. Wetland Feature 1 is located approximately 700 feet south of Pocket Road and approximately 150 feet west of Freeport Boulevard at a southwest orientation to the Pocket Road and Freeport Boulevard intersection (see Figure 14). Wetland Feature 2 is located approximately 350 feet northeast of the intersection of Farm Dale Way and Branwood Way (see Figure 14). Of the four features identified within the limits of the BSA, only two are considered waters of the U.S. and State (the Sacramento Drainage Canal and an above-ground storm drainage feature). The remaining two aquatic features identified within the BSA are small, non-jurisdictional, depressional wetland features (Wetland 1 and Wetland 2) (see Figure 14).

Drainage Features

The Sacramento Drainage Canal occurs within the southern terminus of the BSA. Within the BSA, the Sacramento Drainage Canal is earthen bottomed with regularly maintained banks. No riparian vegetation is associated with the canal, but in-channel emergent vegetation is present. Flow directionality within the BSA is in the southward direction. This feature is currently isolated from the Sacramento River (a water of the U.S. and State) through a lock system adjacent to a water treatment plant, but would have connectivity to the Sacramento River should those locks be removed; therefore, the Sacramento Drainage Canal is considered a water of the U.S. and State.

The above-ground storm drainage feature collects the stormwater run-off from the adjacent urban environment flowing westward and ultimately drains into the Sacramento Drainage Canal. Within the BSA, the feature transitions from a fully concrete lined drainage channel to an earthen bottomed channel containing in-channel wetland vegetation. Within the area of potential disturbance, the feature is completely concrete lined with no in-channel vegetation. As this feature drains into the Sacramento Drainage Canal, it is considered a jurisdictional water of the U.S. and State. Only a small portion of the channel, located west of Freeport Boulevard and north of 14th Street, contains riparian vegetation. The remainder of the channel is partially lined by ruderal/disturbed grassland and an urban vegetation community (ornamentals and mixed native and non-native oaks).

Depressional Wetland Features

The two depressional wetland features are vegetated with low growing hydrophytic herbs and grasses, but provide minimal aquatic habitat and do not hold adequate water to support a wetland community that could be classified as "emergent". The wetlands are isolated, closed digressional ponding features with no downstream surface connectivity to other jurisdictional water features. These features were assessed using the methods described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008). As these features were found to be consistent

THIS PAGE IS LEFT INTENTIONALLY BLANK

- Biological Study Area
- Proposed ESA
- Proposed Linework
- Impacts To Jurisdictional Waters**
- Drainage Temporary Impact (0.01 acre)
- Drainage (Full Avoidance)

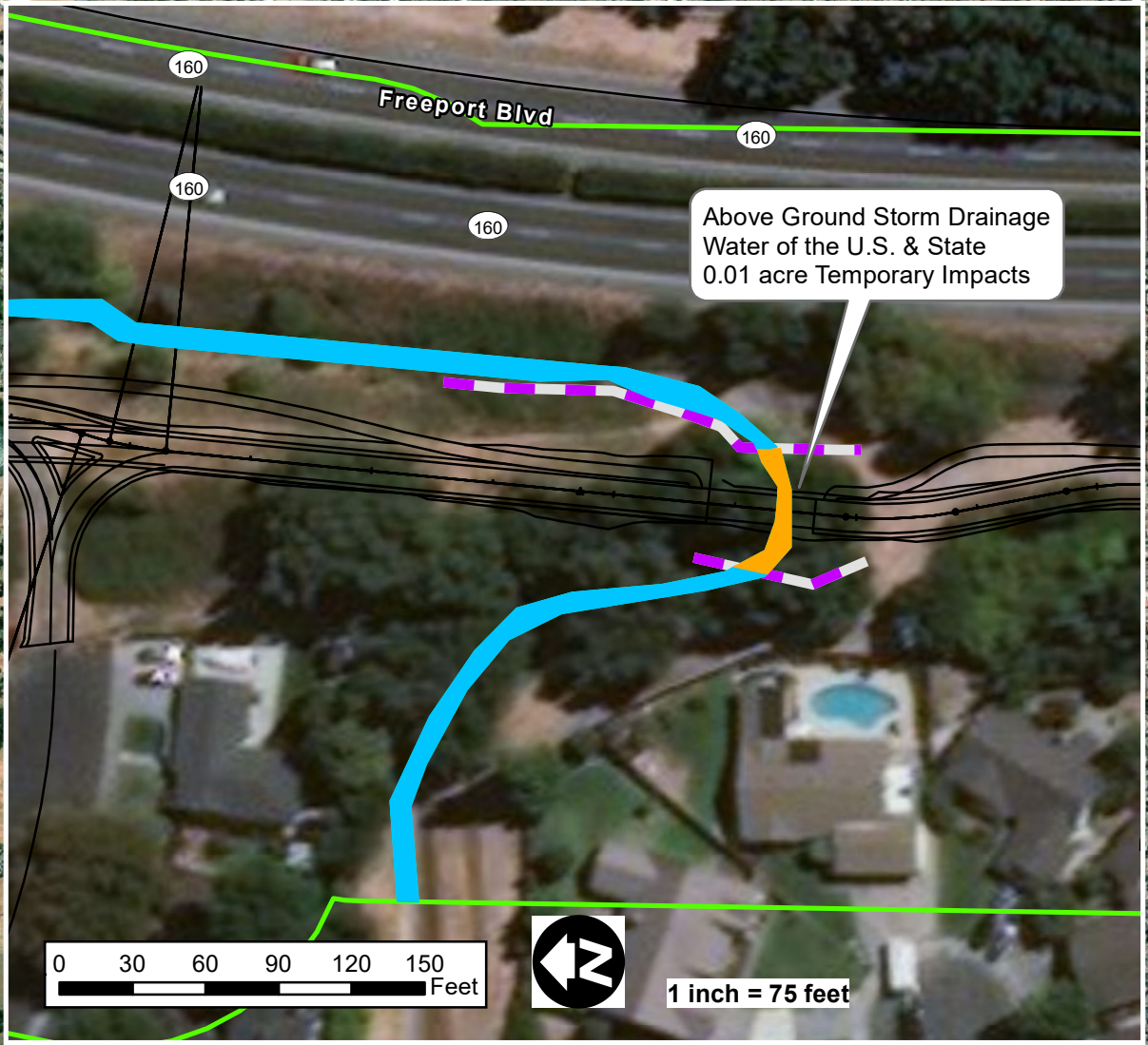


V:\2290_Del Rio Bike Trail\BIF-14-Impacts to waters-2017_10_30.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



1 inch = 2,000 feet



1 inch = 75 feet

FIGURE 14
Project Impacts to Jurisdictional Waters
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

with the definition of a wetland, but are completely isolated from waters of the U.S. or State; therefore, they are not considered jurisdictional features.

Vegetation

Botanical surveys were conducted during the May 12, and May 17, 2017 biological surveys. Following the biological surveys, the Project area vegetation was classified using the CDFW *A Guide to Wildlife Habitats of California* (1988). The Project area is highly disturbed and the dominant vegetative communities within the BSA include: drainage, depressional wetland, ruderal/disturbed grassland, urban (grass lawns, ornamentals, hedges), and barren. Many of the urban tree plantings include thick patches of ornamentals interspersed with native and non-native oak trees. Minor habitat types include mixed willow scrub, and small portions of valley foothill riparian where the Project area borders the Sacramento River (see Figure 13: Vegetation Communities and Waters within the BSA).

Moderate to large diameter native oak and non-oak trees species occur within the BSA and the Project alignment. Any trees requiring removal shall meet the City's requirements as a private protected tree pursuant to Sacramento City Ordinance 2016-0026, Chapter 12.56 City and Private Protected Trees.

Regional Species and Habitats of Concern

Of the species identified by the database searches, the Swainson's hawk (*Buteo swainsoni*) has been identified to have a low to moderate potential of occurring within the BSA. In addition, based on the observance of emergence exit holes on elderberry shrubs within the BSA, the valley elderberry longhorn beetle (VELB) (*Desmocerus californicus dimorphus*) is presumed present within the BSA. However, all elderberry shrubs are outside the Project impact area. No critical habitat occurs within or adjacent to the BSA.

Swainson's Hawk

The Swainson's hawk is State-listed as threatened. Swainson's hawk migrates annually from wintering areas in South America to breeding locations in northwestern Canada, the western U.S., and Mexico. In California, Swainson's hawks nest throughout the Sacramento and San Joaquin Valleys in large trees in riparian habitats and in isolated trees in or adjacent to agricultural fields.

No Swainson's hawk or Swainson's hawk nests were observed during the May 12th and May 17th biological surveys. The BSA does not contain suitable large nesting trees or suitable grassland foraging areas. However, the northern and southern termini of the Project area are within proximity to the Sacramento River and some riparian areas are present. The nearest CNDDDB occurrence is less than 1 mile from the southern terminus of the Project area along the Sacramento River. Due to the close proximity to the Sacramento River riparian habitats, and the local occurrences, the species is considered to have a low to moderate potential to occur.

Valley Elderberry Longhorn Beetle

VELB is a Federal listed threatened species. Critical habitat for the species was designated by the USFWS on August 8, 1980 (45 Federal Register [FR] 52803). Elderberry shrubs are obligate hosts for VELB larvae. Elderberry shrubs are often associated with species common to the riparian forests and adjacent uplands in the Central Valley and foothills the elderberry inhabits, such as, cottonwood (*Populus* spp.), willow, ash (*Fraxinus* spp.), oak (*Quercus* spp.), and walnut (*Juglans* spp.) (Barr 1991). The VELB's range has been reduced and greatly fragmented due to a loss of elderberry inhabited communities, most especially riparian habitat loss. Habitat loss is derived from agricultural development, urbanization, levee maintenance, and pesticide drift where aerial application or fogging of crops occurs near riparian habitats (USFWS 1984 and Barr 1991).

Adult VELB feed on elderberry foliage and are present from March through early June. During this time, the adults mate within the canopy and females lay their eggs, either singularly or in small clusters, in

living elderberry bark crevices or at the junction of stem/trunk or leaf petiole/stem (Barr 1991). After eggs hatch, the first instar larvae burrow into the host elderberry stems to feed on pith for one to two years. As the larvae become ready to pupate, it chews outward from the center of the stem through the bark. After the larvae plugs the newly constructed emergent hole with shavings, it returns to the pupal chamber to metamorphose, and will emerge in mid-March through June as adults. Elderberry stems with emergence holes indicate current and/or previous VELB presence. VELB utilize stems greater than 1-inch diameter and produce circular to oval emergent holes 7 to 10 millimeters in diameter with the majority occurring 4 feet or less above the ground (Barr 1991).

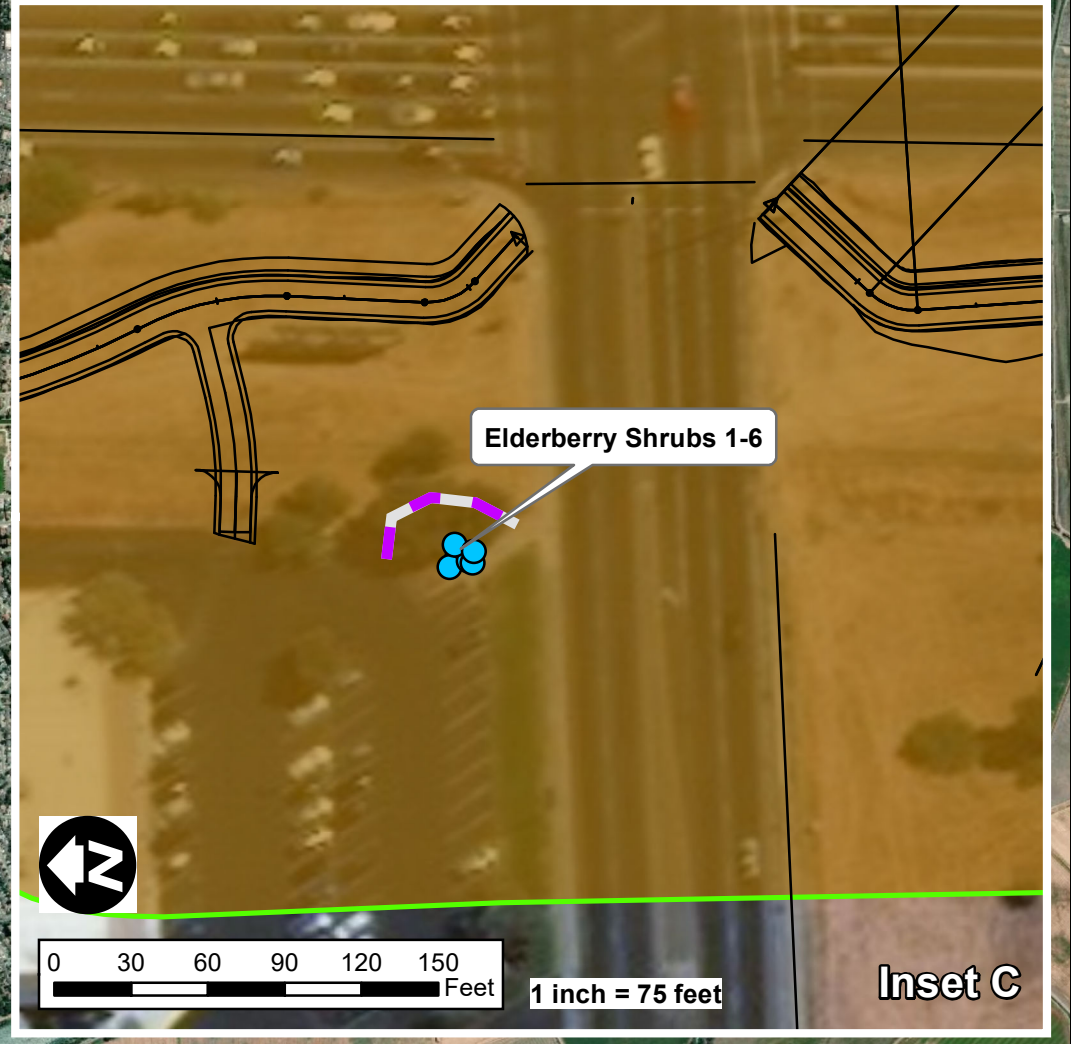
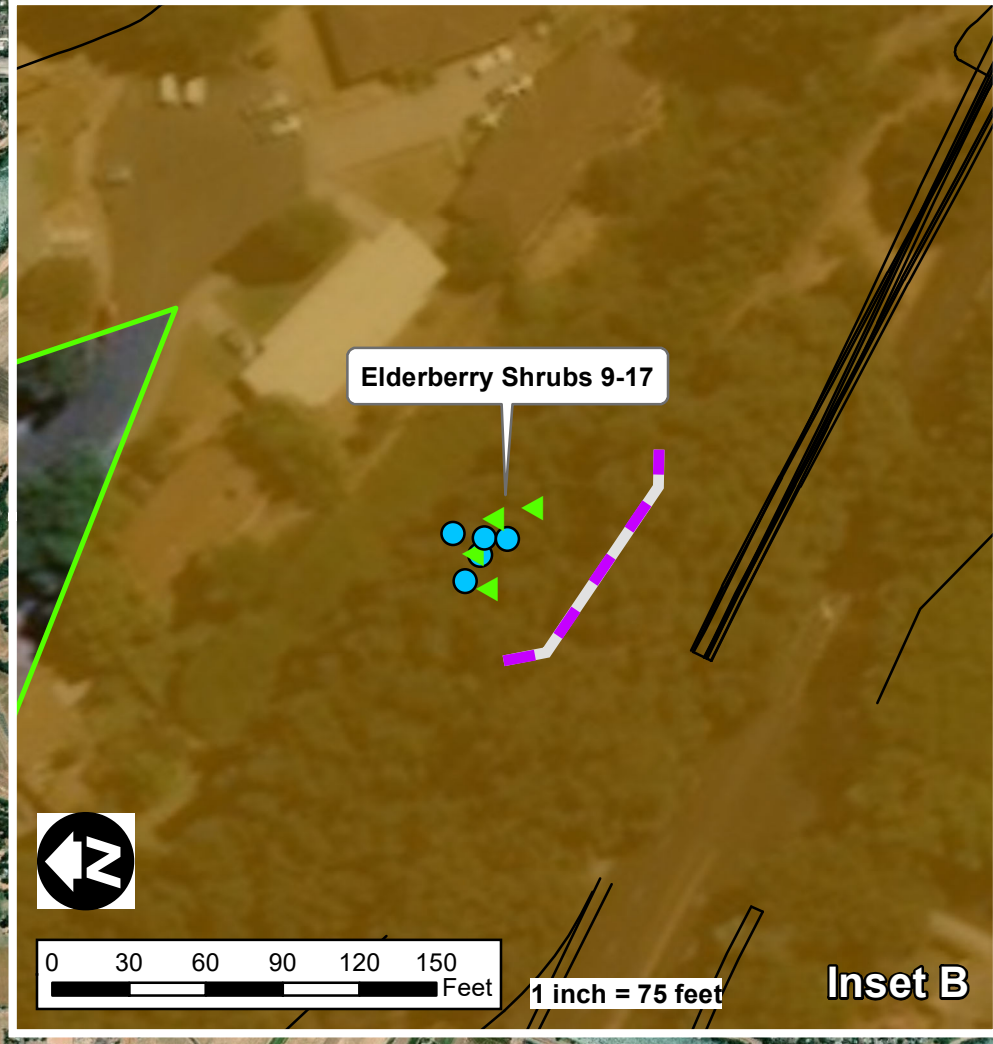
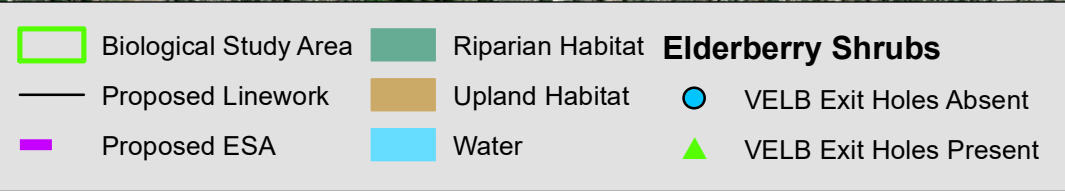
Based on the *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (USFWS 2017a), adverse impacts to elderberry shrubs can occur either at a habitat scale or at an individual shrub scale. If elderberry shrubs are found on or within 50 meters (165 feet) of the Project site, a habitat assessment is conducted to determine if the Project area is in riparian or non-riparian habitat. If the Project site is non-riparian and contains elderberry shrubs, exit hole surveys are used to evaluate the site for occupancy. Exit hole surveys are not essential in riparian areas but may be conducted in order to assess the level and significance of adverse effects. All shrubs are also evaluated for their distance from riparian habitats. Isolated, non-riparian elderberry clumps are less likely to be occupied or become colonized by VELB and those beyond 800 meters (2,526 feet) from the nearest elderberry clump become increasingly less likely to be occupied. Lastly, a Project site is evaluated on a shrub's proximity to historic riparian corridors because isolated elderberry clumps that were part of a historic riparian community may still support VELB.

Based on USFWS Critical Habitat maps, the Project area is not located within designated critical habitat for VELB; however, the proposed Project is within the current range of the species. Focused elderberry surveys and habitat assessments, conducted by Dokken Engineering biologists on May 12th and May 17th, noted 17 elderberry shrubs within the BSA. Utilizing the CDFW's *A Guide to Wildlife Habitats of California*, all of the shrubs within the BSA are located within a highly disturbed, urban habitat (upland) (Figure 15 - Elderberry Shrubs within the BSA). An exit hole survey determined that of the 17 elderberry shrubs observed, only 4 contained exit holes. Table 8, below, displays the elderberry shrubs observed within the BSA, the presence/absence of exit holes, the habitat in which the shrubs were found, and the distance to the nearest riparian habitat.

Table 8. Elderberry Shrubs located within the BSA

Elderberry Shrub Number	Habitat Type	Exit holes	Distance from Nearest Riparian Habitat
1	Upland, Non-riparian	Absent	6,190 feet
2	Upland, Non-riparian	Absent	6,190 feet
3	Upland, Non-riparian	Absent	6,190 feet
4	Upland, Non-riparian	Absent	6,190 feet
5	Upland, Non-riparian	Absent	6,190 feet
6	Upland, Non-riparian	Absent	6,190 feet
7	Upland, Non-riparian	Absent	1,150 feet
8	Upland, Non-riparian	Absent	1,150 feet
9	Upland, Non-riparian	Present	1,190 feet
10	Upland, Non-riparian	Absent	1,190 feet
11	Upland, Non-riparian	Absent	1,190 feet
12	Upland, Non-riparian	Absent	1,190 feet
13	Upland, Non-riparian	Present	1,190 feet
14	Upland, Non-riparian	Absent	1,190 feet
15	Upland, Non-riparian	Absent	1,190 feet
16	Upland, Non-riparian	Present	1,190 feet
17	Upland, Non-riparian	Present	1,190 feet

THIS PAGE IS LEFT INTENTIONALLY BLANK



V:\2290_Del Rio Bike Trail\BIO\F15_ElderberryShrubs_2017_10_30.mxd

Source: ESRI Maps Online; Dokken Engineering 8/30/2018; Created By: aasaro

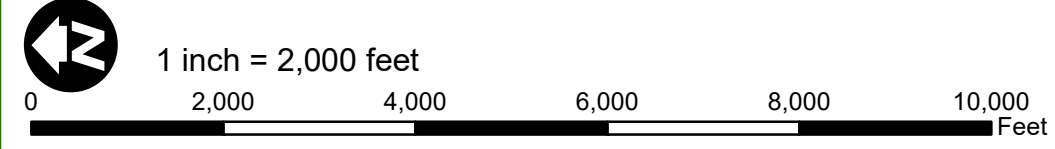


Figure 15
Elderberry Shrubs within the BSA
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, California

Migratory Birds

CFG Code Section 3513 prohibits the take or possession of any migratory non-game bird as designated in the MBTA or any part of such migratory non-game bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA. Additionally, CFG Code Section 3503 prohibits the destruction of bird nests and Section 3503.5 prohibits the killing of raptor species and destruction of raptor nests. During the biological surveys, evidence of potentially suitable nesting habitat was observed within the trees and shrubs within the BSA.

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to biological resources. When an impact is determined to be significant, mitigation measures have been identified that would reduce or avoid that impact.

Methodology of Analysis

For the purposes of this environmental document, an impact would be significant if any of the following conditions, or potential thereof, would result with implementation of the proposed Project:

- Creation of a potential health hazard, or use, production or disposal of materials that would pose a hazard to plant or animal populations in the area affected;
- Substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animal; or,
- Affect other species of special concern to agencies or natural resource organizations (such as regulatory waters and wetlands).

For the purposes of this document, "special-status" has been defined to include those species that are:

- Listed as endangered or threatened under the federal Endangered Species Act (or formally proposed for, or candidates for, listing);
- Listed as endangered or threatened under the California Endangered Species Act (or proposed for listing);
- Designated as endangered or rare, pursuant to California Fish and Game Code (Section 1901);
- Designated as fully protected, pursuant to California Fish and Game Code (Section 3511, 4700, or 5050);
- Designated as species of concern by U.S. Fish and Wildlife Service (USFWS), or as species of special concern to California Department of Fish and Game (CDFG); or,
- Plants or animals that meet the definition of rare or endangered under the California Environmental Quality Act (CEQA).

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant environmental impacts to biological resources. Where an impact finding is determined to be significant, an overview of mitigation measures have been identified that would reduce and/or avoid the potential for impact.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact BIO-1: Potential to have a substantial adverse effect, either directly or through habitat modifications, on any species in local or regional plans, policies, or regulations, or regulated by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

The proposed Project would not result in substantial degradation of the quality of the environment, reduction of the habitat, reduction of population below self-sustaining levels of threatened or endangered species of plant or animals. There is low to moderate potential for Swainson's hawk (*Buteo swainsoni*) and high potential for VELB (*Desmocerus californicus dimorphus*).

Swainson's hawk

Although Swainson's hawk was not observed during the 2017 biological surveys, the species could nest in the Project vicinity. However, the species is unlikely to nest within the Project footprint, as the BSA is predominantly located in an urban habitat with little to no foraging habitat, which minimizes the species' potential for onsite nesting. Considering no trees containing existing Swainson's hawk nests will be removed and with the implementation of avoidance and minimization measure **BIO-9**, no impacts or take of Swainson's hawk are anticipated.

Valley Elderberry Longhorn Beetle

Although VELB exit holes were observed in a small number of elderberry shrubs within the BSA, the shrubs are extremely isolated from other elderberry shrubs or riparian habitat. Considering all shrubs are in upland habitats and no trimming or removal of elderberry shrubs would occur, take of the VELB would not occur. Therefore, based on the *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle*, the Project would have no effect on VELB and further FESA consultation is not required. In addition, no designated Critical Habitat occurs within the Project area; therefore, no FESA consultation for Project effects to Critical Habitat is required. The incorporation of measures **BIO-1** through **BIO-12** will further minimize and avoid any potential impacts to the species.

Migratory Birds

Native birds, protected under the MBTA and similar provisions under CFG code, currently nest or have the potential to nest within the BSA and the Project impact area. During the 2017 biological surveys, evidence of potentially suitable nesting habitat was observed within the trees and shrubs within the BSA. Trees will be removed throughout the Project corridor as a result of the proposed Project; however, nesting bird surveys will take place prior to removal. With the implementation of **BIO-3** and **BIO-4**, no impacts to MBTA birds are expected.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Required Mitigation: **BIO-1** through **BIO-12**.

Impact BIO-2: Potential to have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service.

Sensitive Natural Communities

Prior to field surveys, a list of regional special status plant species with potential to occur within the Project vicinity was compiled from database searches and 24 sensitive plants were found to have the potential to occur within the BSA (Table 7). The potential for each species to occur within the BSA was determined by analyzing the habitat requirements of each species and comparing the habitat requirements to available habitat within the BSA. However, the May 12th and May 17th biological/botanical surveys did not identify any special status plant species within the BSA. No impacts to special status plant species are anticipated. To further minimize and avoid potential impacts to special status plant species, avoidance and minimization measure **BIO-4** will be implemented:

Riparian Habitat

The Sacramento Drainage Canal occurs within the southern terminus of the BSA. Within the BSA, the Sacramento Drainage Canal is earthen bottomed with regularly maintained banks. No riparian vegetation is associated with the canal, but in-channel emergent vegetation is present. No other riparian habitat is

present within the BSA. During final design, should temporary impacts to the above-ground storm drainage feature be determined to “substantially adversely affect existing fish or wildlife resources”. Pursuant to the CFG Code 1602, a Section 1602 Streambed Alteration Agreement would also be acquired from the CDFW. In addition to full implementation of any permit requirements, the incorporation of avoidance and minimization measures **BIO-13** through **BIO-18** will further mitigate any potential impacts to jurisdictional waters within the Project area.

Level of Significance: Less Than Significant Impact with Mitigation Incorporated.

Mitigation Required: **BIO-13** through **BIO-18**.

Impact BIO-3: Potential to have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

A jurisdictional delineation was conducted on May 12, and May 17, 2017 by Dokken Engineering biologists Angela Scudiere and Courtney Owens to identify jurisdictional waters of the U.S. and State associated with the proposed Project. The results of this jurisdictional delineation and field observations were used to delineate jurisdictional features within the BSA.

Survey Results

Based on survey results, four water features were found within the BSA (USGS 2017; FEMA 2017; and NWI 2017). Of the four features identified within the limits of the BSA, only two are considered waters of the U.S. and State (the Sacramento Drainage Canal and an above-ground storm drainage feature). The remaining two aquatic features identified within the BSA are small, non-jurisdictional, depressional wetland features (Wetland 1 and Wetland 2) (see Figure 13: Vegetation Communities and Waters within the BSA).

Drainage Features

The Sacramento Drainage Canal occurs within the southern terminus of the BSA. Within the BSA, the Sacramento Drainage Canal is earthen bottomed with regularly maintained banks. No riparian vegetation is associated with the canal, but in-channel emergent vegetation is present. Flow directionality within the BSA is in the southward direction. This feature is currently isolated from the Sacramento River (a waters of the U.S. and State) through a lock system adjacent to a water treatment plant, but would have connectivity to the Sacramento River should those locks be removed; therefore, the Sacramento Drainage Canal is considered a water of the U.S. and State.

The above-ground storm drainage feature collects the stormwater run-off from the adjacent urban environment. Flows are generated from sump pumps along the drainage facility in a westward direction and ultimately drain into the Sacramento Drainage Canal. Within the BSA, the feature transitions from a fully concrete-lined drainage channel to an earthen bottomed channel containing in-channel wetland vegetation. Within the area of potential disturbance, the feature is completely concrete lined with no in-channel vegetation. As this feature drains into the Sacramento Drainage Canal, it is considered a jurisdictional water of the U.S. and State. Only a small portion of the channel, located west of Freeport Boulevard and north of 14th Street, contains riparian vegetation. The remainder of the channel is partially lined by ruderal/disturbed grassland and an urban vegetation community (ornamentals and mixed native and non-native oaks).

Depressional Wetland Features

The two depressional wetland features are vegetated with low growing hydrophytic herbs and grasses, but provide minimal aquatic habitat and do not hold adequate water to support a wetland community that

could be classified as “emergent”. The wetlands are isolated, closed digressional ponding features with no downstream surface connectivity to other jurisdictional water features. These features were assessed using the methods described in the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0)* (USACE 2008). As these features were found to be consistent with the definition of a wetland, but are completely isolated from waters of the U.S. or State; therefore, they are not considered jurisdictional features.

Project Impacts

It is anticipated that a new bridge would be built across the above-ground storm drainage feature. The new bridge is anticipated to clear-span the drainage and no permanent impacts to jurisdictional waters are anticipated at this location. All impact to the above-ground storm drainage feature will be temporary for a total of 0.01 acre of temporary impacts to waters of the U.S. and State (see Figure 14: Project Impacts to Jurisdictional Waters). No impacts to the Sacramento Drainage Canal are anticipated. A summary of impacts to jurisdictional waters is provided in Table 9.

Table 9. Project Impacts to Jurisdictional Waters

Jurisdictional Water Feature	Waters of the U.S. & State	
	Permanent Impacts	Temporary Impacts
Above Ground Storm Drainage	0	0.01 acre
Sacramento Drainage Canal	0	0
Total	0 acre	0.01 acre

Based on the minimal, temporary impacts to waters of the U.S. and State, the proposed Project currently qualifies for a non-notifying USACE Nationwide 14 permit. In addition, as some temporary impacts to waters are anticipated, a RWQCB Section 401 Water Quality Certification would be obtained prior to the start of construction. During final design, should temporary impacts to the above-ground storm drainage feature be determined to “substantially adversely affect existing fish or wildlife resources” pursuant to the CFG Code 1602, a Section 1602 Streambed Alteration Agreement would also be acquired from the CDFW.

In addition to full implementation of any permit requirements, the incorporation of measures **BIO-18** will further mitigate any potential impacts to the jurisdictional waters within the Project area.

Level of Significance: Less than Significant with Mitigation Incorporated.

Required Mitigation: **BIO-18** .

Impact BIO-4: Potential to interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors or impede the use of native wildlife nursery sites.

The proposed Project is not anticipated to have any effects to the existing habitat connectivity for birds, fish, or small and medium terrestrial wildlife. The minimal footprint of the proposed multi-use trail would retain habitat connectivity for wildlife moving along the Project corridor. No significant loss of habitat connectivity is anticipated; therefore, this impact is less than significant.

Level of Significance: Less Than Significant.

Required Mitigation: None Required

Impact BIO-5: Potential to conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy; ordinance conflicting with the provisions of an

adopted habitat conservation plan; natural community conservation plan; or other approved local, regional, or state habitat conservation plan.

There are no adopted Habitat Conservation Plans, Natural Community Conservation Plans, or other approved local, regional, or State habitat conservation plans within or adjacent to the Project area; therefore, the Project would have no impact or conflict with any habitat conservation plan. Moderate to large diameter native oak and non-oak trees species occur within the BSA and the Project alignment. The proposed Project would require the removal of approximately 161 trees within City right of way which meet the City's requirements as a protected City Tree. The proposed Project would also require the removal of approximately 59 trees within State Parks right of way. No trees on private property are anticipated to be removed. The City would comply with City Code 12.56.040 and establish a replacement plan prior to removal of the protected trees pursuant to Sacramento City Ordinance 2016-0026, Chapter 12.56 City and Private Protected Trees. With the implementation of measure **BIO-20**, the proposed Project would have a less than significant impact on protected trees.

Level of Significance: Less than Significant with Mitigation Incorporated.

Mitigation Required: **BIO-19** and **BIO-20**.

Mitigation Measures

BIO-1: Prior to initiating construction, an ESA fence will be installed around any elderberry shrubs with driplines extending within 20 feet, as feasible, of the Project impact area. All areas to be avoided during construction activities will be fenced and/or flagged as close to construction limits as feasible. The ESA will be positioned as far from the shrubs as practicable and will be installed under the direction of the Project biologist.

BIO-2: In accordance with the *Swainson's Hawk Technical Advisory Committee Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley* (2000), protocol level surveys will be conducted during the appropriate survey periods immediately prior to construction to determine presence/absence of the species in areas in proximity to the Sacramento River. If Swainson's hawk nests are discovered within 0.5 mile of the Project area, appropriate protective measures will be developed in coordination with CDFW.

BIO-3: If possible, vegetation removal should occur outside the nesting bird season (February 15th – September 1st). If vegetation removal is to take place during the nesting season, a pre-construction nesting bird survey must be conducted within seven days prior to vegetation removal. Within two weeks of the nesting bird survey, all vegetation cleared during these surveys must be removed by the contractor.

A minimum 100-foot no-disturbance buffer for songbirds and a 250-foot buffer for raptors must be established around any active nests. The contractor must immediately stop work in the nesting area until the appropriate buffer is established and is prohibited from conducting work that could disturb the birds (as determined by the Project biologist and in coordination with wildlife agencies) in the buffer area until a qualified biologist determines the young have fledged.

BIO-4: If construction on the existing bridge is planned to occur during the swallow nesting season, measures will be taken to avoid impacts to migratory swallows. To protect migratory swallows, unoccupied nests must be removed from the existing bridge structure and swallow exclusionary devices installed prior to the nesting season (February 15th – September 1st). During the nesting season, the bridge structure must be maintained through the active removal of partially constructed nests. Swallows can complete nest construction in approximately 3 days. After a nest is completed, it can no longer be removed until an approved biologist has determined that all birds have fledged, and the nest is no longer being used.

BIO-5: Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction:

- Implementation of the Project will require approval of a site-specific Storm Water Pollution Prevention Plan (SWPPP) that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques;
- Existing vegetation will be protected in place where feasible to provide an effective form of erosion and sediment control; and
- As a permanent BMP, slope roughening by equipment tracking will be implemented to create unevenness on bare soil. Surface roughening reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing water infiltration.

BIO-6: The contractor must dispose of all food-related trash in closed containers and must remove it from the Project area each day during construction. Construction personnel must not feed or attract wildlife to the Project area.

BIO-7: The Project biologist will periodically inspect the construction areas to ensure elderberry shrubs within the ESA limits are not disturbed.

BIO-8: The Project biologist must conduct pre-construction clearance surveys of the areas of disturbance prior to ground disturbance. Should a sensitive species be observed, the Project will mark the area as an ESA and coordinate with the appropriate wildlife agencies.

BIO-9: All construction personnel will attend an environmental awareness training before conducting work in the Project area. The training program will notify construction personnel of the sensitive biological resources occurring within the Project area, including the VELB, their legal status, and penalties for not complying with the conditions of any permits issued for the proposed Project. During the environmental awareness training, construction personnel will also be briefed on the need to avoid damage to the elderberry host plant and the possible penalties for not complying with these requirements.

BIO-10: If any wildlife is encountered during the course of construction, said wildlife must be allowed to leave the construction area unharmed.

BIO-11: No insecticides, herbicides, fertilizers, or other chemicals that might harm the beetle or its host plant will be used within 100 feet of elderberry shrubs.

BIO-12: Plastic mono-filament netting (erosion control matting) or similar material that could trap wildlife must not be used. Acceptable substitutes include jute, coconut coir matting, or tackified hydroseeding compounds.

BIO-13: To conform to water quality requirements, the SWPPP must include the following:

- Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must be a minimum of 50 feet from surface waters. Any necessary equipment washing must occur where the water cannot flow into surface waters.
- The Project specifications will require the contractor to operate under an approved spill prevention and clean-up plan;
- Construction equipment will not be operated in flowing water;
- Construction work must be conducted according to site-specific construction plans that minimize the potential for sediment input to surface waters;
- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life must be prevented from contaminating the soil or entering surface waters;

- Equipment used in and around surface waters must be in good working order and free of dripping or leaking contaminants; and
- Any concrete rubble, asphalt, or other debris from construction must be taken to an approved disposal site.

BIO-14: Should a special status plant species be observed within or immediately adjacent to the Project area, ESA fencing (orange construction barrier fencing) will be installed around special status plant populations, where feasible.

BIO-15: Prior to arrival at the Project site and prior to leaving the Project site, construction equipment that may contain invasive plants and/or seeds will be cleaned to reduce the spreading of noxious weeds.

BIO-16: All hydroseed and plant mixes must consist of a biologist-approved plant palette seed mix of native and sterile species.

BIO-17: The contractor must not apply rodenticide or herbicide within the Project area during construction.

BIO-18: Prior to the start of construction activities, the Project limits in proximity to jurisdictional waters must be marked with high visibility Environmentally Sensitive Area (ESA) fencing or staking to ensure construction will not further encroach into jurisdictional waters.

BIO-19: Prior to tree removal, the Project biologist will conduct surveys to determine if “bat habitat trees” exist within the Project footprint. Potential bat habitat trees typically are mature trees with features such as open cavities, crevices, or loose bark. Potential “bat habitat trees” that will be removed as a result of the Project (including utility relocation), must be removed between September 1st and March 31st outside of the maternity season (April 1st –August 31st). Additional specific tree removal procedures (including potential exclusions, removal of bark et.) will be determined on a case-by-case basis by the Project biologist. Potential bat habitat trees not requiring removal will be protected in place with ESA fencing.

BIO-20: The City shall protect in place, where feasible, all City or Private Protected Trees, defined under Sacramento City Ordinance 2016-0026, Chapter 12.56 City and Private Protected Trees. City Trees are characterized as trees partially or completely located in a City park, on City owned property, or on a public right-of-way, including any street, road, sidewalk, park strip, mow strip or alley. Private Protected Trees are defined as the following:

1. A tree that is designated by City council resolution to have special historical value, special environmental value, or significant community benefit, and is located on private property;
2. Any native valley oak (*Quercus lobata*), blue oak (*Quercus douglasii*), interior live oak (*Quercus wislizenii*), coast live oak (*Quercus agrifolia*), California buckeye (*Aesculus californica*), or California sycamore (*Platanus racemosa*), that has a DSH of 12 inches or more, and is located on private property;
3. A tree that has a DSH of 24 inches or more located on private property that:
 - is an undeveloped lot; or
 - does not include any single unit or duplex dwellings; or
4. A tree that has a DSH of 32 inches or more located on private property that includes any single unit or duplex dwellings.

The City will comply with City Code 12.56.040 and establish a replacement plan prior to removal of the protected trees pursuant to Sacramento City Ordinance 2016-0026, Chapter 12.56 City and Private Protected Trees.

2.4 CULTURAL RESOURCES AND TRIBAL CULTURAL RESOURCES

This section describes the environmental and regulatory setting for cultural resources and Tribal Cultural Resources (TCRs). It also describes impacts on cultural resources and TCRs that could result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

Federal

National Historic Preservation Act Section 106

Section 106 of the National Historic Preservation Act (NHPA) of 1966 requires Federal agencies to take into account the effects of their undertakings on historic properties and to provide the Advisory Council on Historic Preservation (ACHP) with a reasonable opportunity to comment. In addition, Federal agencies are required to consult on the Section 106 process with State Historic Preservation Offices (SHPO), Tribal Historic Preservation Offices (THPO), Indian Tribes (to include Alaska Natives) [Tribes], and Native Hawaiian Organizations (NHO). This Project will be partially funded using Caltrans Active Transportation Program Cycle 2 funds; therefore, Caltrans is the NEPA lead.

Section 106 Programmatic Agreement

Pursuant to the X.B.1 of the January 2014 First Amended Programmatic Agreement among the Federal Highway Administration, the Advisory Council on Historic Preservation, the California State Historic Preservation Officer, and the California Department of Transportation Regarding Compliance with Section 106 of the National Historic Preservation Act (Section 106 PA), as well as under Public Resources Code 5024 and pursuant to the January 2015 Memorandum of Understanding Between the California Department of Transportation and the California State Historic Preservation Office Regarding Compliance with Public Resources Code Section 5024 and Governor's Executive Order W-26-92 (5024 MOU), the Caltrans District may make a finding of "No Adverse Effect with Standard Conditions" when standard conditions that will avoid adverse effects to historic properties are imposed in accordance with Attachment 5 of the Section 106 PA. The Caltrans District shall submit its finding and supporting documentation to the Caltrans Cultural Services Office (CSO) for review. Should CSO approve the finding, the undertaking shall not be subject to further review under the Section 106 PA.

National Register Criteria for Evaluation of Historic Resources

Criteria for Evaluation

The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of significant persons in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded or may be likely to yield, information important in history or prehistory.

Criteria Considerations

Ordinarily cemeteries, birthplaces, graves of historical figures, properties owned by religious institutions or used for religious purposes, structures that have been moved from their original locations, reconstructed historic buildings, properties primarily commemorative in nature, and properties that have achieved significance within the past 50 years shall not be considered eligible for the National Register. However,

such properties will qualify if they are integral parts of districts that do meet the criteria or if they fall within the following categories:

- A. A religious property deriving primary significance from architectural or artistic distinction or historical importance; or
- B. A building or structure removed from its original location, but which is primarily significant for architectural value, or which is the surviving structure most importantly associated with a historic person or event; or
- C. A birthplace or grave of a historical figure of outstanding importance if there is no appropriate site or building associated with his or her productive life; or
- D. A cemetery that derives its primary importance from graves of persons of transcendent importance, from age, from distinctive design features, or from association with historic events; or
- E. A reconstructed building when accurately executed in a suitable environment and presented in a dignified manner as part of a restoration master plan, and when no other building or structure with the same association has survived; or
- F. A property primarily commemorative in intent if design, age, tradition, or symbolic value has invested it with its own exceptional significance; or
- G. A property achieving significance within the past 50 years if it is of exceptional importance.

State

California Environmental Quality Act (CEQA)

CEQA consists of statutory provisions in the PRC and Guidelines promulgated by the Office of Planning and Research. The CEQA requires public agencies to evaluate the implications of their Project(s) on the environment and includes significant historical resources as part of the environment. A Project that causes a substantial adverse change in the significance of an historical resource has a significant effect on the environment CCR 14 Section 15064.5; California PRC Section 21098.1). CEQA defines a substantial adverse change as follows.

- Physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of a historical resource would be materially impaired (CCR 14 Section 15064.5[b][1]).

The CEQA Guidelines provide that the significance of an historical resource is materially impaired when a Project results in the following:

- Demolishes or materially alters in an adverse manner those physical characteristics of an historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources (CRHR); or
- Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to PRC Section 5020.1(k) or its identification in an historical resources survey meeting the requirements of PRC Section 5024.1(g), unless the public agency reviewing the effects of the Project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
- Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the CRHR as determined by a Lead Agency for purposes of CEQA (CCR 14 Section 15064.5[b][2]).

California Register of Historical Resources: Public Resources Code Section 5024

The term historical resource includes, but is not limited to, any object, building, structure, site, area, place, record, or manuscript which is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of PRC (PRC Section 5020.1[j]).

Historical resources may be designated as such through three different processes:

1. Official designation or recognition by a local government pursuant to local ordinance or resolution (PRC Section 5020.1[k]);
2. A local survey conducted pursuant to PRC Section 5024.1(g); or
3. The property is listed in or eligible for listing in the NRHP (PRC Section 5024.1[d][1]).

The process for identifying historical resources is typically accomplished by applying the criteria for listing in the CRHR, which states that a historical resource must be significant at the local, state, or national level under one or more of the following four criteria.

It is associated with events that have made a significant contribution to the broad patterns of:

1. California's history and cultural heritage;
2. It is associated with the lives of persons important in our past;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of a master or possesses high artistic values; or
4. It has yielded, or may be likely to yield, information important in prehistory or history. (CCR 14 Section 4852).

To be considered a historical resource under the CEQA, the resource must also have integrity, which is the authenticity of a resource's physical identity evidenced by the survival of characteristics that existed during the resource's period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. It must also be judged with reference to the criteria under which a resource is eligible for listing in the CRHR (CCR 14 Section 4852[c]).

Assembly Bill 52 (Public Resources Code Section 21084.2)

Effective July 1, 2015, CEQA was revised to include early consultation with California Native American tribes and consideration of TCRs. These changes were enacted through Assembly Bill 52 (AB 52). By including TCRs early in the CEQA process, AB 52 intends to ensure that local and Tribal governments, public agencies, and Project proponents would have information available, early in the Project planning process, to identify and address potential adverse impacts to TCRs. The CEQA now establishes that a "Project with an effect that may cause a substantial adverse change in the significance of a TCR is a Project that may have a significant effect on the environment" (PRC § 21084.2).

To help determine whether a Project may have such an adverse effect, the PRC requires a lead agency to consult with any California Native American tribe that requests consultation and is traditionally and culturally affiliated with the geographic area of a proposed Project. The consultation must take place prior to the determination of whether a negative declaration, mitigated negative declaration, or environmental impact report is required for a Project (PRC § 21080.3.1). Consultation must consist of the lead agency providing formal notification, in writing, to the tribes that have requested notification or proposed Projects within their traditionally and culturally affiliated area. AB 52 stipulates that the Native American Heritage Commission (NAHC) shall assist the lead agency in identifying the California Native American tribes that are traditionally and culturally affiliated within the Project area. If the tribe wishes to engage in consultation on the Project, the tribe must respond to the lead agency within 30 days of receipt of the formal notification. Once the lead agency receives the tribe's request to consult, the lead agency must then begin the consultation process within 30 days. If a lead agency determines that a Project may cause a substantial adverse change to TCRs, the lead agency must consider measures to mitigate that impact.

Consultation concludes when either: 1) the parties agree to measures to mitigate or avoid a significant effect, if a significant effect exists, on a TCR, or 2) a party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached (PRC § 21080.3.2). Under existing law, environmental documents must not include information about the locations of an archaeological site or sacred lands or any other information that is exempt from public disclosure pursuant to the Public Records act. TCRs are also exempt from disclosure. The term “tribal cultural resource” refers to either of the following:

Sites, features, places, cultural landscapes, sacred places, and objects with cultural value to a California Native American tribe that are either of the following:

- Included or determined to be eligible for inclusion in the California Register of Historical Resources
- Included in a local register of historical resources as defined in subdivision (k) of California Public Resources Code (PRC) Section 5020.1
- A resource determined by a California lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of the PRC Section 5024.1.

Discovery of Human Remains

Section 7050.5 of the California Health and Safety Code (CHSC) states the following regarding the discovery of human remains:

- a. Every person who knowingly mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor, except as provided in Section 5097.99 of the [PRC]. The provisions of this subdivision shall not apply to any person carrying out an agreement developed pursuant to subdivision (l) of Section 5097.94 of the [PRC] or to any person authorized to implement Section 5097.98 of the [PRC].
- b. In the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains until the coroner of the county in which the human remains are discovered has determined, in accordance with Chapter 10 (commencing with Section 27460) of Part 3 of Division 2 of Title 3 of the California Government Code [CGC], that the remains are not subject to the provisions of Section 27491 of the CGC or any other related provisions of law concerning investigation of the circumstances, manner and cause of any death, and the recommendations concerning the treatment and disposition of the human remains have been made to the person responsible for the excavation, or to his or her authorized representative, in the manner provided in Section 5097.98 of the PRC. The coroner shall make his or her determination within two working days from the time the person responsible for the excavation, or his or her authorized representative, notifies the coroner of the discovery or recognition of the human remains.
- c. If the coroner determines that the remains are not subject to his or her authority and if the coroner recognizes the human remains to be those of a Native American or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the Native American Heritage Commission (NAHC) (CHSC Section 7050.5).
- d. Of particular note to cultural resources is subsection (c), which requires the coroner to contact the NAHC within 24 hours if discovered human remains are determined to be Native American in origin. After notification, NAHC will follow the procedures outlined in PRC Section 5097.98, which include notification of most likely descendants (MLDs), if possible, and recommendations for treatment of the remains. The MLD will have 24 hours after notification by the NAHC to make their recommendation (PRC Section 5097.98). In addition, knowing or willful possession of Native American human remains or artifacts taken from a grave or cairn is a felony under State law (PRC Section 5097.99).

Local

City of Sacramento 2035 General Plan (2015)

The following City of Sacramento 2035 General Plan, Historic and Cultural Resources (HCR) Element, goals and policies are applicable to cultural resources.

Goal HCR 2.1 Identification and Preservation of Historic and Cultural Resources. Identify and preserve the City's historic and cultural resources to enrich our sense of place and our understanding of the city's prehistory and history.

Policy HCR 2.1.1 Identification. The City shall identify historic and cultural resources including individual properties, districts, and sites (e.g., archaeological sites) to provide adequate protection of these resources.

Policy HCR 2.1.2 Applicable Laws and Regulations. The City shall ensure compliance with City, State, and Federal historic preservation laws, regulations, and codes to protect and assist in the preservation of historic and archaeological resources, including the use of the California Historical Building Code as applicable. Unless listed in the Sacramento, California, or National registers, the City shall require discretionary Projects involving resources 50 years and older to evaluate their eligibility for inclusion on the California or Sacramento registers for compliance with the California Environmental Quality Act.

Policy HCR 2.1.3 Consultation. The City shall consult with appropriate organizations and individuals (e.g., California Historical Resources Information System (CHRIS) Information Centers, the NAHC, the CA Office of Planning and Research (OPR) "Tribal Consultation Guidelines", etc.) and shall establish a public outreach policy to minimize potential impacts to historic and cultural resources.

Policy HCR 2.1.10 Early Consultation. The City shall minimize potential impacts to historic and cultural resources by consulting with property owners, land developers, and the building industry early in the development review process.

Policy HCR 2.1.11 Compatibility with Historic Context. The City shall review proposed new development, alterations, and rehabilitation/remodels for compatibility with the surrounding historic context. The City shall pay special attention to the scale, massing, and relationship of proposed new development to surrounding historic resources.

Policy HCR 2.1.13. Historic Surveys and Context Statements. Where historic resource surveys may no longer be valid, or for areas that have not been surveyed, the City shall seek funding to prepare new historic context surveys. In these surveys, the potential eligibility of all properties 45 years and older for listing in National, California, or Sacramento registers shall be evaluated.

Policy HCR 2.1.16 Archaeological and Cultural Resources. The City shall develop or ensure compliance with protocols that protect or mitigate impacts to archaeological and cultural resources including prehistoric resources.

Historic Preservation Zoning Ordinance

The City of Sacramento's historic preservation program began in 1975 with the enactment of the City's first Historic Preservation Ordinance. The current Historic Preservation Ordinance (No. 2006-063) was enacted in October 2006. The purpose of the Historic Preservation Ordinance is to do the following: identify, protect, and encourage the preservation of significant resources; maintain an inventory and ensure the preservation of these resources; encourage maintenance and rehabilitation of the resources; encourage retention, preservation, and re-use of the resources; safeguard city resources; provide consistency with state and federal regulations; protect and enhance the city's attraction to tourists; foster civic pride in the city's resources; and encourage new development to be aesthetically compatible.

Environmental Setting

In accordance with the CEQA, the Project Area Limits (PAL) for the proposed Project was established in consultation with Caltrans and the City. The PAL is the same as the Project study area which is included in Figure 3.

The horizontal extent of the PAL was established as the area of direct and indirect effects which encompasses an area of approximately 103 acres. The PAL includes the 4.8-mile length of the Walnut Grove Branch Line of the Southern Pacific Railroad between 11th Ave. and 350 feet south of where I-5 crosses over Freeport Blvd. in Sacramento County. The PAL includes all track removal, right-of-way acquisition areas, trail paving, street crossings, landscaping, drainage facilities, culvert and pipe installation, roadway cut and fill limits, buried utility relocation, vegetation/tree removal, equipment and materials staging, temporary construction easements, and construction access (see Figure 3). The anticipated maximum vertical extent of the PAL consists of a section of berm that would be lowered by approximately 10 feet to accommodate ADA compliance. The majority of the Project area has a vertical PAL of 6-12 inches, though some areas could be as high as 5 feet below the existing ground surface (bgs) needed to accommodate ground disturbance related to trail grading, drainage fill placement compaction, and vegetation clearing/grubbing. Any location where the vertical PAL is greater than 6 inches will be located within the human-made railroad grade. The vertical PAL extends 6 inches bgs in the berm, as this is the maximum extent of potential impacts to the berm.

Background research was conducted to identify previous studies and recorded cultural resources within, and adjacent to, the PAL. The background research consisted of a record search, literature and map review, and consultation with the NAHC and Native American groups.

Records Search

Dokken Engineering obtained a records search for the Project area and a ¼-mile radius surrounding the Project area from the North Central Information Center (NCIC) at California State University, Sacramento on June 22, 2017. The records search was conducted by Nathan Hallam from the NCIC. The search examined the Office of Historic Preservation (OHP) Historic Properties Directory, OHP Determinations of Eligibility, and California Inventory of Historical Resources. Dokken Engineering staff reviewed historical literature and maps, Caltrans Bridge Inventory listings, General Land Office (GLO) and/or Rancho Plat Maps, and soil survey maps. The records search conducted at the NCIC identified five prehistoric cultural resources (including one that was mismapped) and five historic-era cultural resources within ¼-mile of the PAL, as well as two historic-era resources adjacent to the PAL, and one historic-era resource within the PAL. The historic-era resource within the PAL is the National Register-eligible Walnut Grove Branch of the Southern Pacific Railroad. The Walnut Grove Branch Line of the Southern Pacific Railroad is a National Register-eligible railway line that has been inactive and abandoned since 1978. The tracks originally ran from Walnut Grove to Sacramento to transport agricultural goods from the Delta Region to Sacramento. The tracks run throughout the entire PAL.

Native American Outreach (AB52)

On June 19, 2017, Dokken Engineering sent a letter and a map depicting the Project vicinity to the NAHC in West Sacramento, asking the commission to review the Sacred Lands File (SLF) for any Native American cultural resources that might be affected by the proposed Project (see Appendix F). A list of Native American individuals who might have information or concerns about the Project was also requested. On June 21, 2017, Sharaya Souza, Staff Services Analyst for the NAHC, informed Dokken Engineering via email that a review of the SLF was completed and the Project vicinity was culturally sensitive, and to contact Chairperson Crystal Martinez-Aire of the Lone Band of Miwok Indians and Jason Camp of the United Auburn Indian Community (UAIC).

On July 11, 2017, initial consultation letters were sent to the Native American individuals on the list provided by the NAHC as well as Mr. Camp, who was not included in the NAHC contact list. The letters provided a summary of the proposed Project and requested information regarding comments or concerns

the Native American community might have about the Project (see Appendix F). For those individuals that did not reply to the letter, telephone calls were placed on August 15, 2017 and September 14, 2017. The following discussion presents a summary of consultation efforts for each individual on the list provided by the NAHC.

- *Rhonda Morningstar Pope, Chairperson, Buena Vista Rancheria.* On July 17, 2017, Mike Despain called and stated that the Project area is fairly disturbed but requested that mitigation measures include reference to CFR 7050.5 regarding human remains. Additionally, if any Native American resources are encountered during construction, Mr. Despain requested that the Buena Vista Rancheria be contacted.
- *Crystal Martinez-Aire, Chairperson, Lone Band of Miwok Indians.* There was no response to the initial letter. A follow-up phone call was placed on August 15, 2017. The administration assistant stated that Randy Yonemura will be the point of contact for this Project. No further contact with Chairperson Martinez-Aire will occur as part of this Project.
- *Randy Yonemura, Lone Band of Miwok Indians.* There was no response to the initial letter. A follow-up phone call was placed on August 15, 2017. There was no response and a detailed message was left. Mr. Yonemura returned the call on August 23, 2017. Mr. Yonemura stated that the Project vicinity is of concern for the Tribe. He requested copies of the maps and a meeting to discuss these locations. Maps were emailed to Mr. Yonemura that same day. Emails were sent to Mr. Yonemura on August 31, September 6, and September 11, 2017, requesting meeting availability. Mr. Yonemura replied on August 31, 2017, stating that he needed to check his calendar and would send meeting dates the following week. There have been no other emails from Mr. Yonemura.

In a phone conversation with Mr. Yonemura on September 18, 2017, he said that he would call later in the week with possible meeting times. The meeting with Mr. Yonemura occurred on September 21, 2017. During this meeting, the cultural sensitivity of the Project vicinity was discussed. Mr. Yonemura wanted time to examine and markup maps and meet again. Phone calls and emails were sent to Mr. Yonemura on October 2, 10, and 20, 2017, requesting additional meeting times to review the maps; however, no response has been returned, to-date regarding the status of marked maps.

A phone call was placed on November 1, 2017, to Mr. Yonemura explaining that Phase II hazardous waste testing and inviting him to monitor the testing. During this call and a call on November 7, 2017, Mr. Yonemura stated that he will be monitoring the testing on November 10, 2017. An email was received on November 7, 2017, from Roger Aguilar, on behalf of Mr. Yonemura, requesting information regarding rates of pay for the monitoring of hazardous waste testing. Mr. Yonemura and Mr. Aguilar were informed that the City does not reimburse for monitoring of hazardous waste testing. Mr. Aguilar requested consultation with the Caltrans official in this matter. Caltrans archaeologist, David Price, responded to Mr. Yonemura on November 10, 2017, that Caltrans will not reimburse for monitoring because the testing is minimally invasive and is taking place in a disturbed context.

On November 10, 2017, no Tribal monitor of the lone arrived to monitor the hazardous waste testing. The archaeological monitor, Brian S. Marks, emailed Mr. Yonemura and Mr. Aguilar as to the status and location of the testing throughout the day to keep them apprised of the situation. No cultural material was observed during testing, and there was no email reply. On November 12, 2017, Mr. Aguilar emailed to request information regarding the next phase of the Project, and email reply was sent that same day that he would be kept up to date with the progress of the Project. On November 21, 2017, a digital version of the monitoring results was emailed to Mr. Yonemura and Mr. Aguilar.

- *Cosme Valdez, Interim Chief Executive Officer, Nashville-El Dorado Miwok.* There was no response to the initial letter. A follow-up phone call was placed on August 15, 2017. There was no answer and detailed message was left on a voice mail. A second follow-up phone call was placed on September 14, 2017. There was no answer and detailed message was left on a voice mail.

- *Nicholas Fonseca, Chairperson, Shingle Springs Band of Miwok Indians.* An email was received by Kara Perry on behalf of Chairperson Fonseca on July 18, 2017 regarding the proposed Project. Ms. Perry stated that the Project area is of concern to the Tribe. Therefore, the Shingle Springs Band of Miwok Indians requested that they be afforded a tribal monitor during ground-disturbing activities. An email reply was sent that same day to Ms. Perry informing her that the impacts to the levee will be minimal and that the majority of the work will be in the berm of the abandoned railroad. An email was sent on September 19, 2017, inquiring about information of Native American Resources within the PAL. Ms. Perry requested a copy of the maps for the Project that same day, which were sent to her immediately. Ms. Perry replied on September 26, 2017 and requested Tribal monitoring north of Fruitridge Road. An email was sent on November 7, 2017, to invite the Tribe to monitor Phase II hazardous waste testing. She replied inquiring about when they would get the results. An email was sent on November 21, 2017, with a digital copy of the monitoring results.
- *Don Ryberg, Chairperson, T'si-Akim Maidu.* There was no response to the initial letter. A follow-up phone call was placed on August 15, 2017. There was no answer and detailed message was left on a voice mail. A second follow-up phone call was placed on September 14, 2017. There was no answer and detailed message was left on a voice mail.
- *Grayson Coney, Cultural Director, T'si-Akim Maidu.* There was no response to the initial letter. A follow-up phone call was placed on August 15, 2017. There was no answer and detailed message was left on a voice mail. A second follow-up phone call was placed on September 14, 2017. Mr. Coney expressed that the Project area was of concern to the Tribe and requests that all the workers be given cultural awareness training. If anything is found during construction, he requested to be contacted.
- *Gene Whitehouse, Chairperson, UAIC.* A reply was received via email on July 11, 2017 from Cherilyn Neider as part of AB 52 consultation, on behalf of Chairperson Whitehouse and Marcos Guerrero (UAIC Cultural Resources Manager) and requested to be part of the pedestrian survey. She also requested cultural documentation record search results and GIS files. Ms. Neider accompanied Dokken Engineering archaeologists on the pedestrian survey on July 19, 2017 and surveyed portions of the PAL that were of cultural interest. After the survey, Ms. Neider stated that the UAIC would like to have monitors present on ground-disturbing activities deeper than 6 inches on the Sacramento River Levee at the end of Sutterville Road, at the excavation of the berm near the proposed realignment of Normandy Lane, and the area south of the entrance to the waste treatment facility.

GIS files were provided on July 13, 2017, and records search results were provided that same day. An email was received from Matthew Rippey on July 27, 2017, requesting that the possible isolates they observed during the pedestrian inspection be noted on the map. Mr. Guerrero surveyed the Project area on August 28, 2017 and stated that all ground disturbance is located within a railroad berm and that no Tribal monitoring is necessary for the proposed Project. A phone call and an email were sent on September 14, 2017, and another email was sent on September 20, 2017 to Cherilyn Neider requesting the status of Section 106 consultation. She replied on October 5, 2017, stating that the mitigation measures associated with AB 52 be included. These measures request that the UAIC be notified of ground-disturbing activities and that they be afforded the opportunity to investigate ground disturbances. An email was sent on November 7, 2017 to invite the UAIC to monitor Phase II hazardous waste testing with a copy of the testing map. A reply was received that same day inquiring about when they would get the results. An email was sent on November 21, 2017 with a digital copy of the monitoring results.

- *Jason Camp, THPO, UAIC.* There was no response to the initial letter. Based on a conversation with Cherilyn Neider, Marcos Guerrero would be the point of contact for this Project.
- *Raymond Hitchcock, Chairperson, Wilton Rancheria.* There was no response to the initial letter. A follow-up phone call was placed on August 15, 2017. The call was transferred to Antonio Ruiz, the cultural resource officer for Wilton Rancheria. There was no answer and detailed message was left on

a voice mail. A second follow-up phone call was placed on September 14, 2017. There was no answer and Mr. Ruiz's mail box was full, so a message was left on Ed Silva's mailbox.

Summary of Historical Society Consultation

The Project proponents have conducted several public meetings and have contacted several historical societies, including the Sacramento Historical Society, Preservation Sacramento, Center for Sacramento History, California State Railroad Museum and Foundation Library, Sacramento State University Library, California State Library, California State Archives, and Sacramento River Delta Historical Society. These societies and groups did not reveal any the presence of any archaeological sites; however, they did discuss concern for the Walnut Grove Branch Line Railroad.

Field Methods and Results

Archaeologists Dr. Brian S. Marks and Amy Dunay conducted archaeological field surveys of the PAL on July 19, and 20, 2017, as well as October 12, and 26, 2017. The PAL was surveyed using 15-meter wide transect intervals, oriented roughly parallel with the railroad tracks. Periodic boot scrapes were used in areas of dense vegetation to expose the ground surface. All Project area conditions and cultural resources were fully recorded in the field notes.

In addition to the archaeologists, two members of the UAIC, Cheryl Neider and Matthew Rippy, participated in the pedestrian survey serving as Native American Monitors during the July 19th survey. They walked between the archaeologists, who were no more than 15 meters apart.

Exposed subsurface cuts, such as ditches, roadway cuts, and bank cuts were visually examined for the presence of archaeological resources, soil color change, and/or staining that could indicate past human activity or buried deposits.



During Phase II testing for hazardous waste on November 10, 2017, an archaeological monitor was present to document if any cultural material was extracted from the testing areas. The testing was conducted with a 3-inch diameter hand augur to a depth of approximately 18 inches below the rock ballast associated with the railroad. A total of 10 tests were performed throughout the Project area (see Figure 16). The material extracted from the tests that was not needed for sampling was screened through 1/8" mesh.

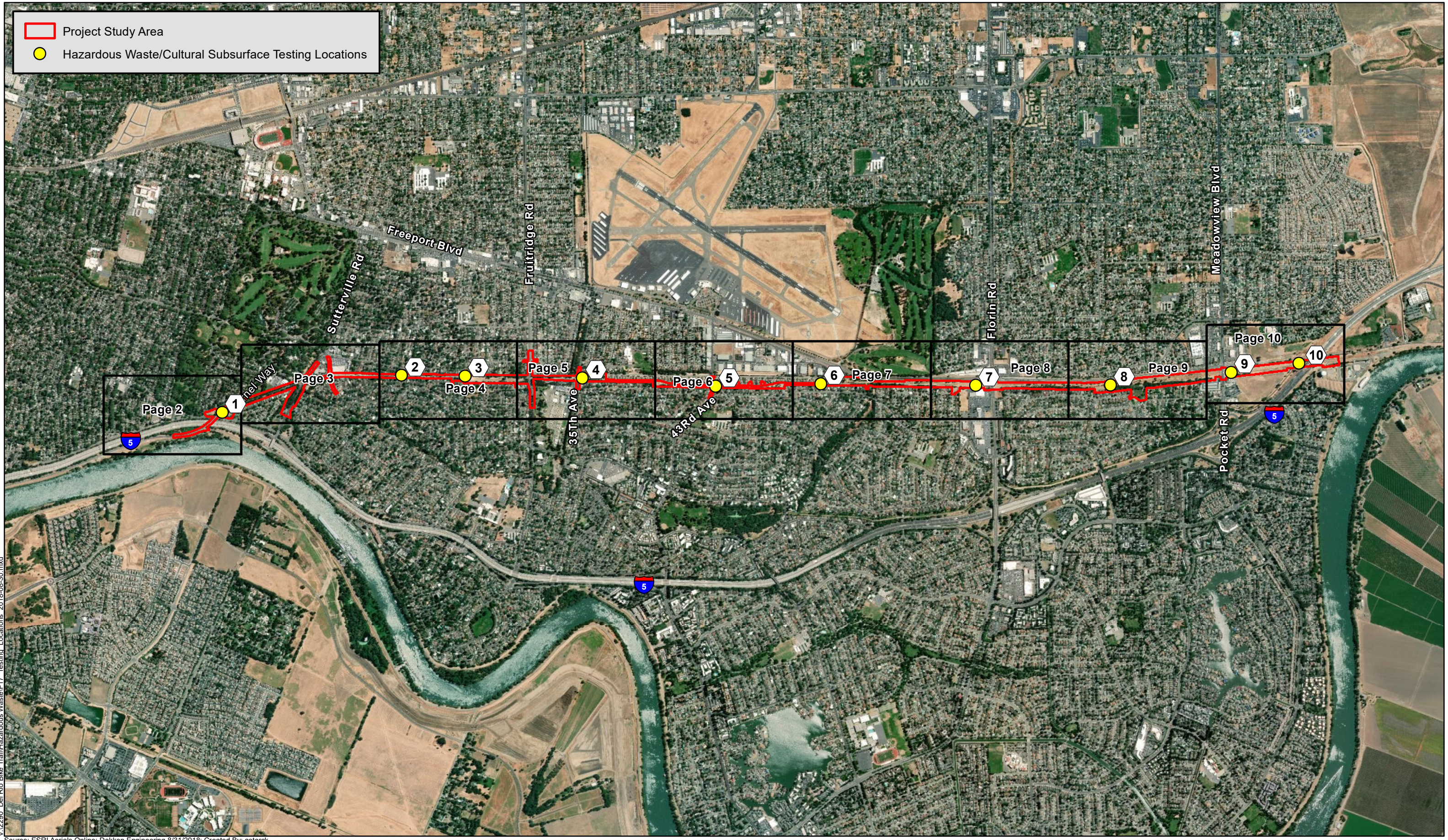
Results

The pedestrian surveys were conducted on July 19, and 20, 2017, as well as October 12, and 26, 2017. Surveyors did not observe any cultural resources within the PAL other than the abandoned railroad track.

The pedestrian survey confirmed that the terrain has been subjected to intense modification during the construction of the railroad. The railroad was atop a grade for the majority of the Project area. The only exception was an 800-foot section in the area roughly between Claremont Way and Birchwood Lane (approximately 900 feet south of South Land Park Drive where the railroad had been cut into a hill that extended to the east.

No cultural resources were found within the testing samples. The Native American monitors noted several possible isolated artifacts within the Project corridor. These possible isolated artifacts were separated by as much as 3 miles and were located along the human-made berm and within an excavated drainage, out of context. As per Attachment 4 of the Programmatic Agreement, these possible isolated artifacts are exempt from evaluation. Additionally, during AB 52 consultation, the UAIC determined that these possible isolated artifacts were not connected to TCRs and the UAIC had no concerns with the proposed Project. No other indications of prehistoric habitation were observed.

-  Project Study Area
-  Hazardous Waste/Cultural Subsurface Testing Locations



VA2290_Del Rio Bike Trail\Hazardous Waste\F17_Testing_Locations_2018-08-30.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck



0 1,000 2,000 3,000 4,000 5,000 Feet

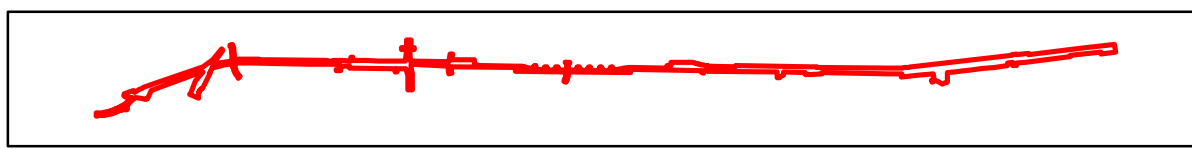


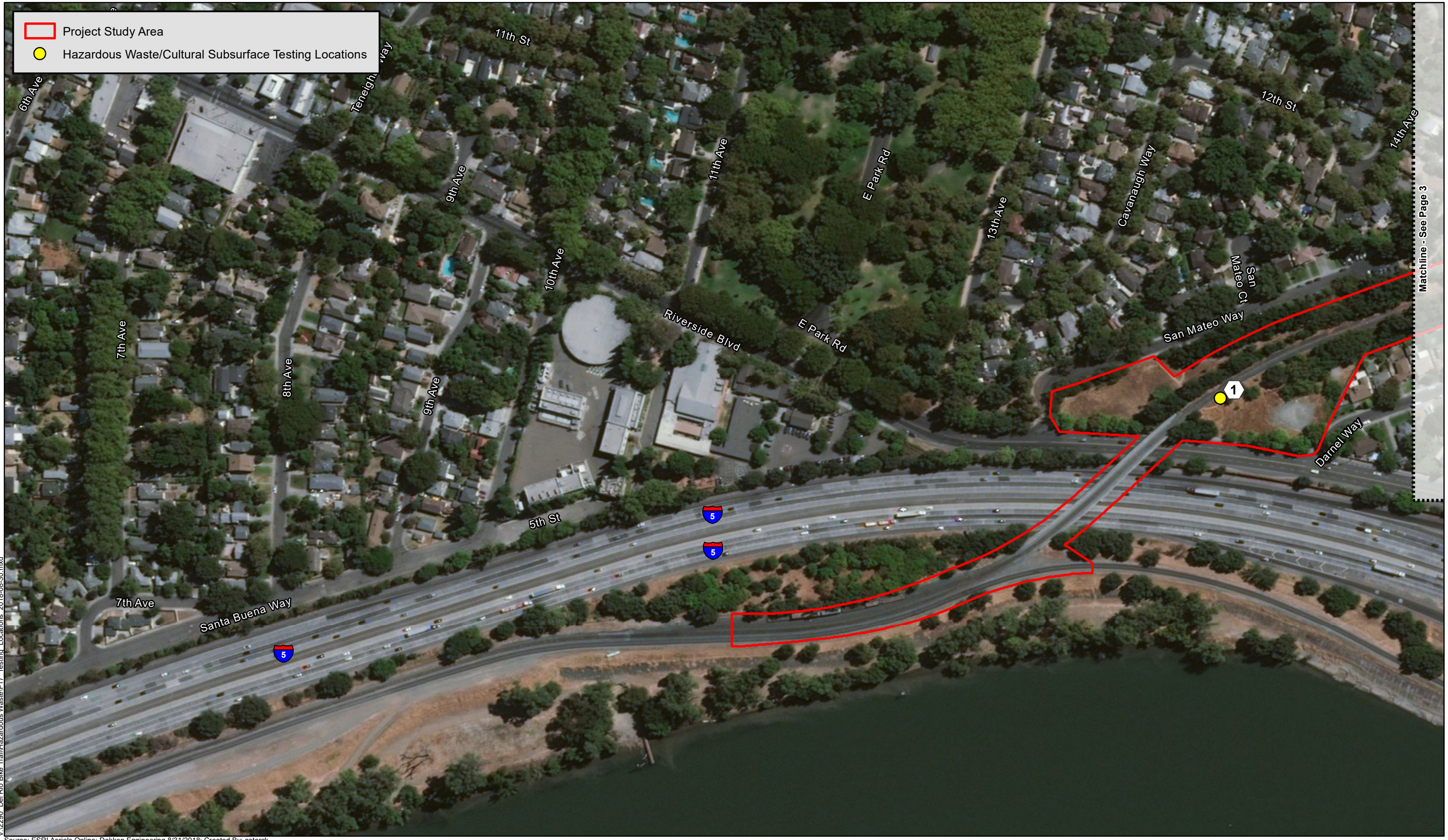


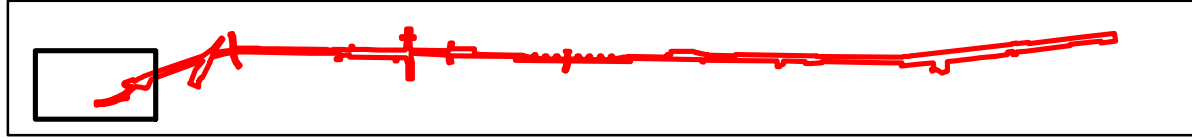
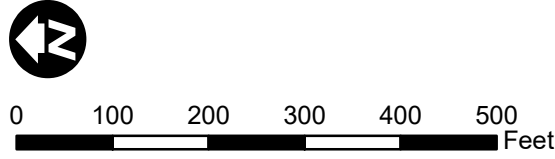
FIGURE 16
Cultural Resources and Hazardous Waste Testing Locations
 Page 1 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

-  Project Study Area
-  Hazardous Waste/Cultural Subsurface Testing Locations





VA2290_Del Rio Bike Trail\Hazardous Waste\F17_Testing_Locations_2018-08-30.mxd

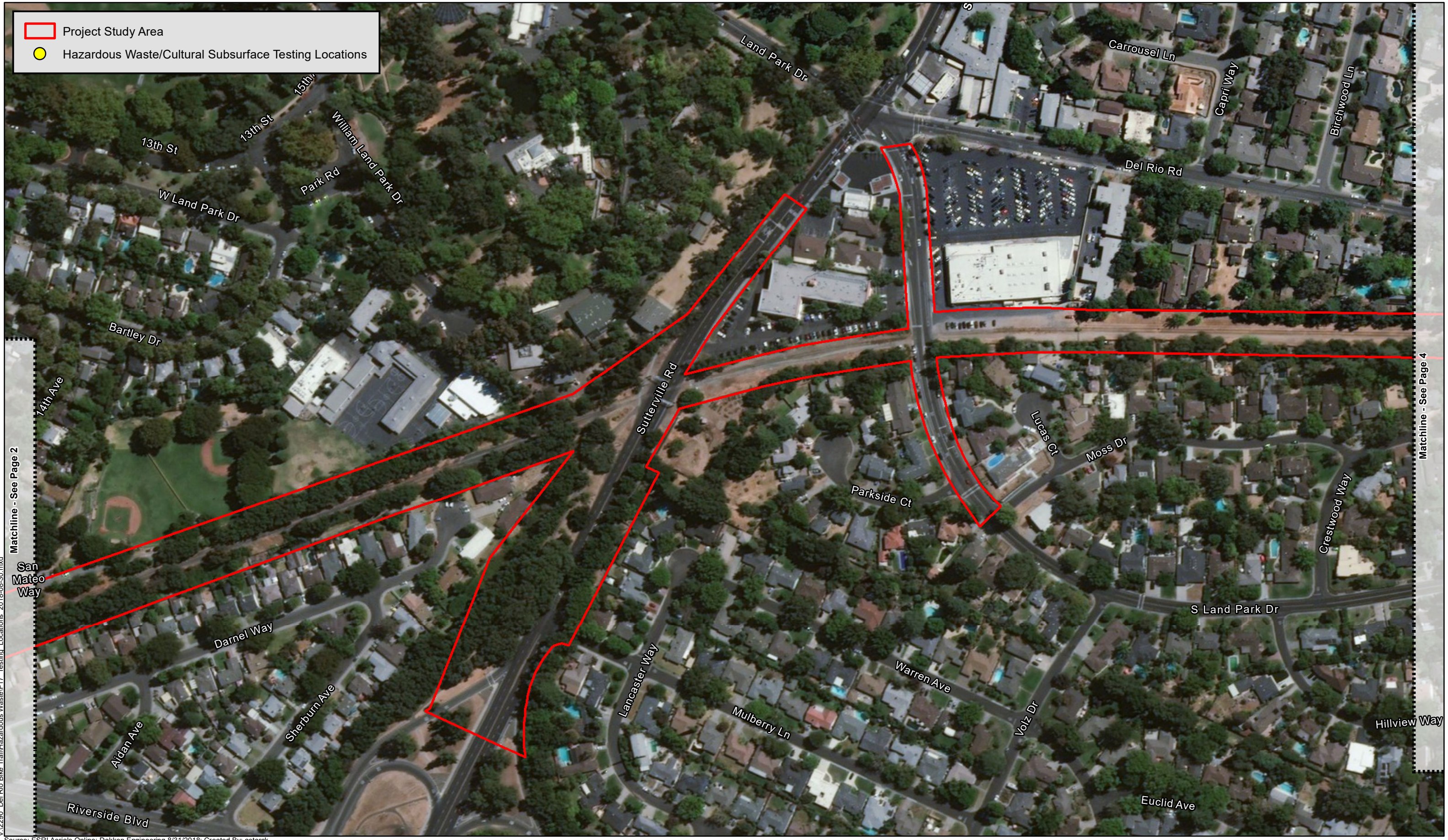
Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck



Matchline - See Page 3

FIGURE 16
Cultural Resources and Hazardous Waste Testing Locations
 Page 2 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

-  Project Study Area
-  Hazardous Waste/Cultural Subsurface Testing Locations



Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

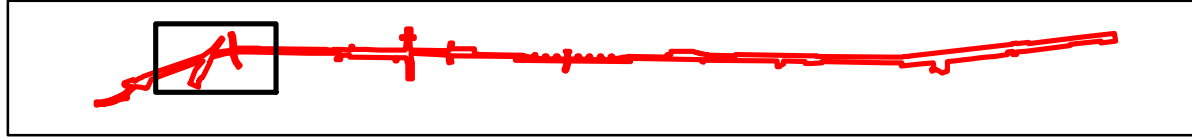
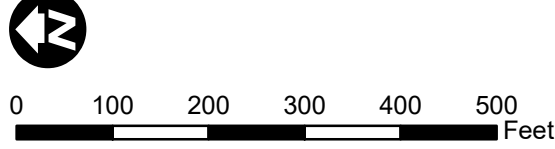




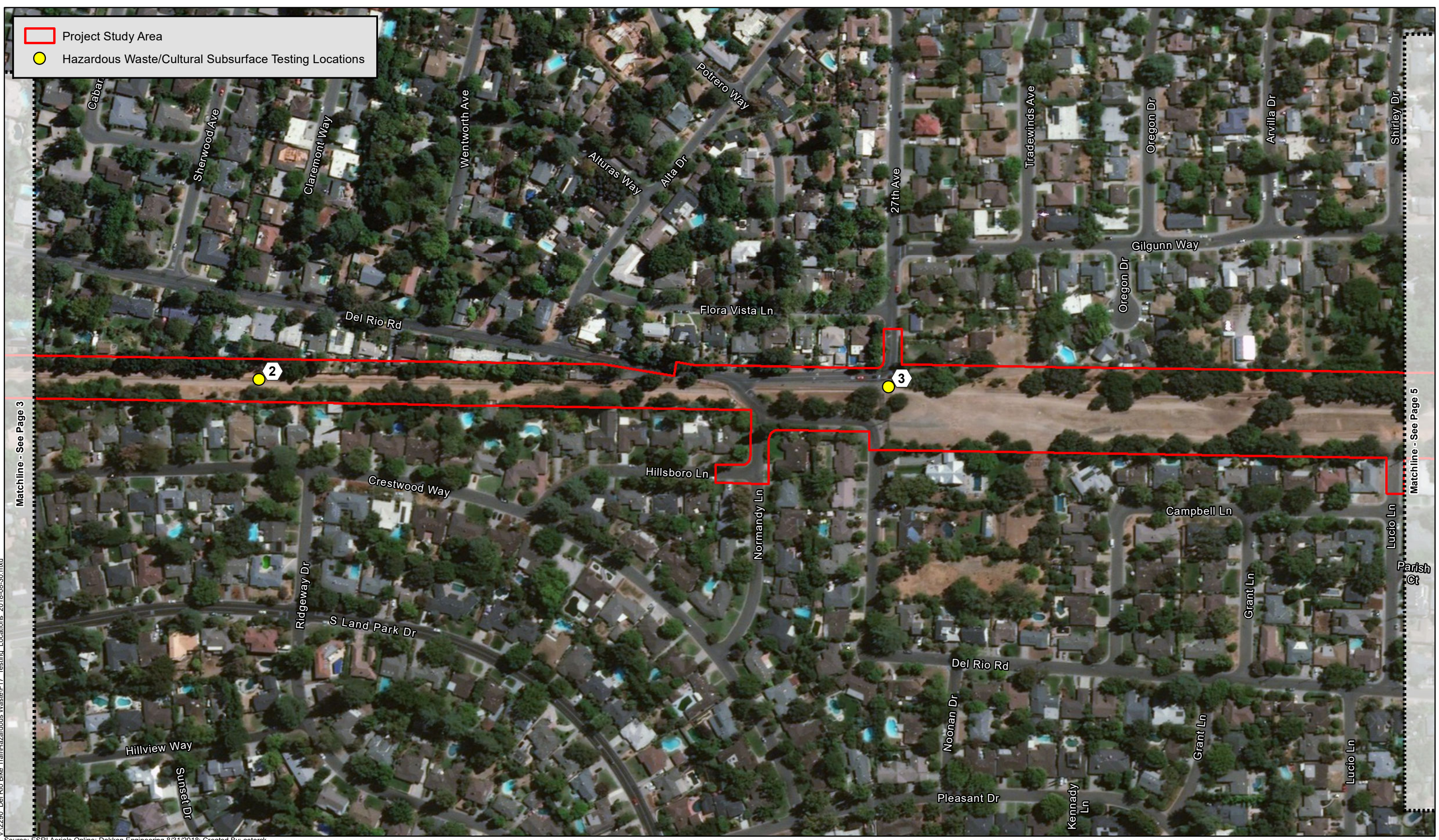
FIGURE 16
Cultural Resources and Hazardous Waste Testing Locations
 Page 3 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

VA2290_Del Rio Bike Trail\Hazardous Waste\F17_Testing_Locations_2018-08-30.mxd

Matchline - See Page 2

Matchline - See Page 4

-  Project Study Area
-  Hazardous Waste/Cultural Subsurface Testing Locations



Matchline - See Page 3

Matchline - See Page 5

VA2290_Del Rio Bike Trail\Hazardous Waste\F17_Testing_Locations_2018-08-30.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck



0 100 200 300 400 500 Feet

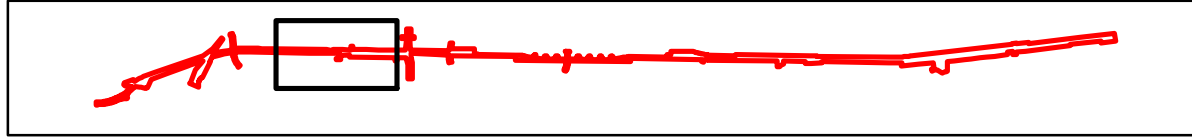
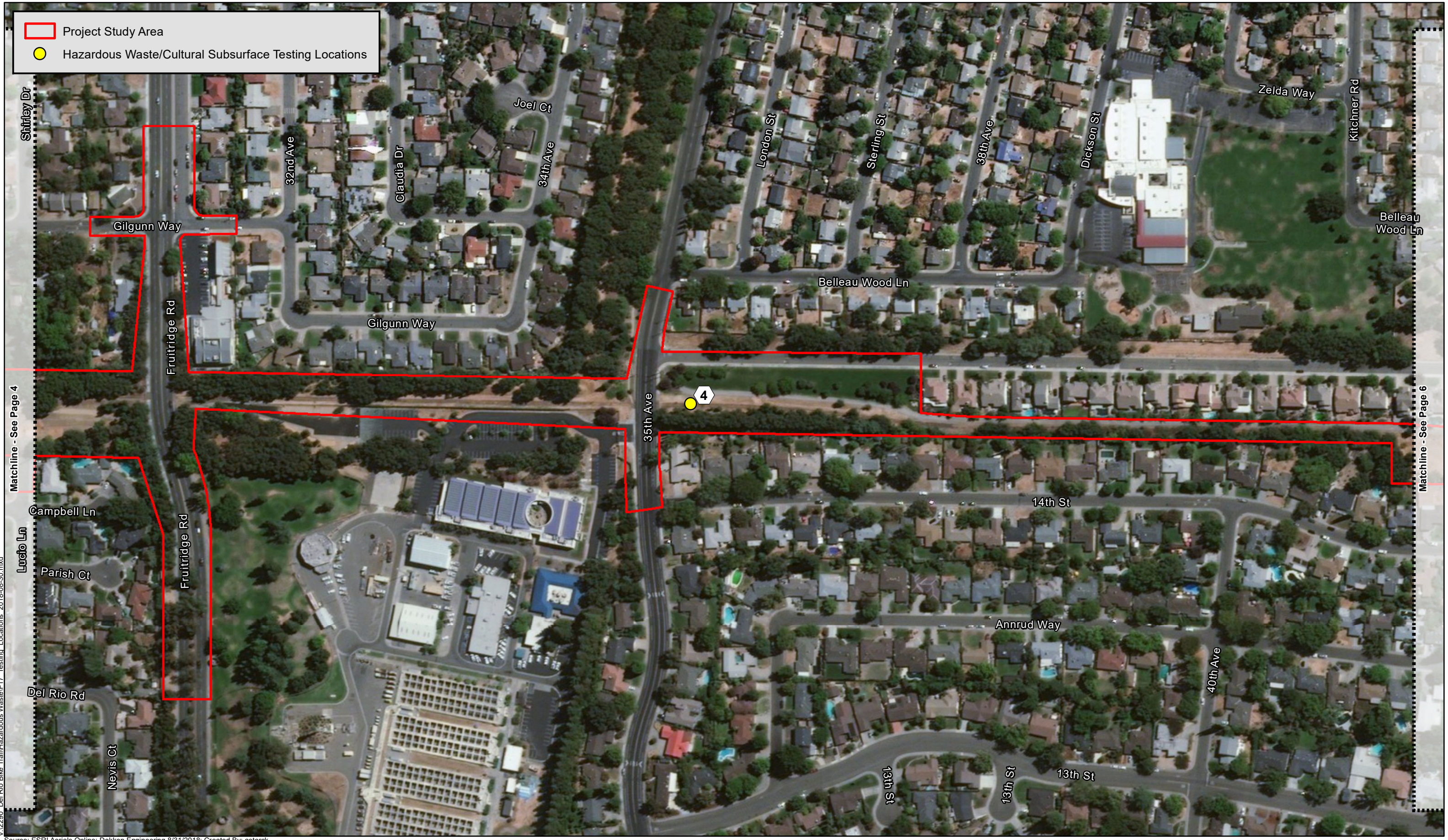


FIGURE 16
Cultural Resources and Hazardous Waste Testing Locations
 Page 4 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Project Study Area
● Hazardous Waste/Cultural Subsurface Testing Locations



VA2280_Del Rio Bike Trail\Hazardous Waste\F17_Testing_Locations_2018-08-30.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

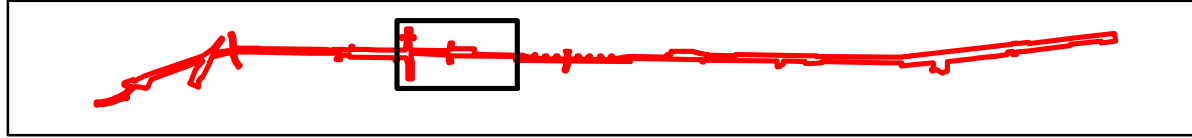
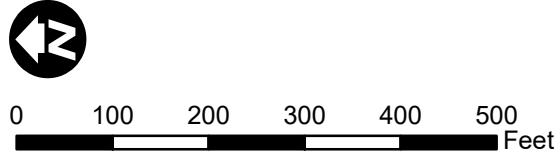


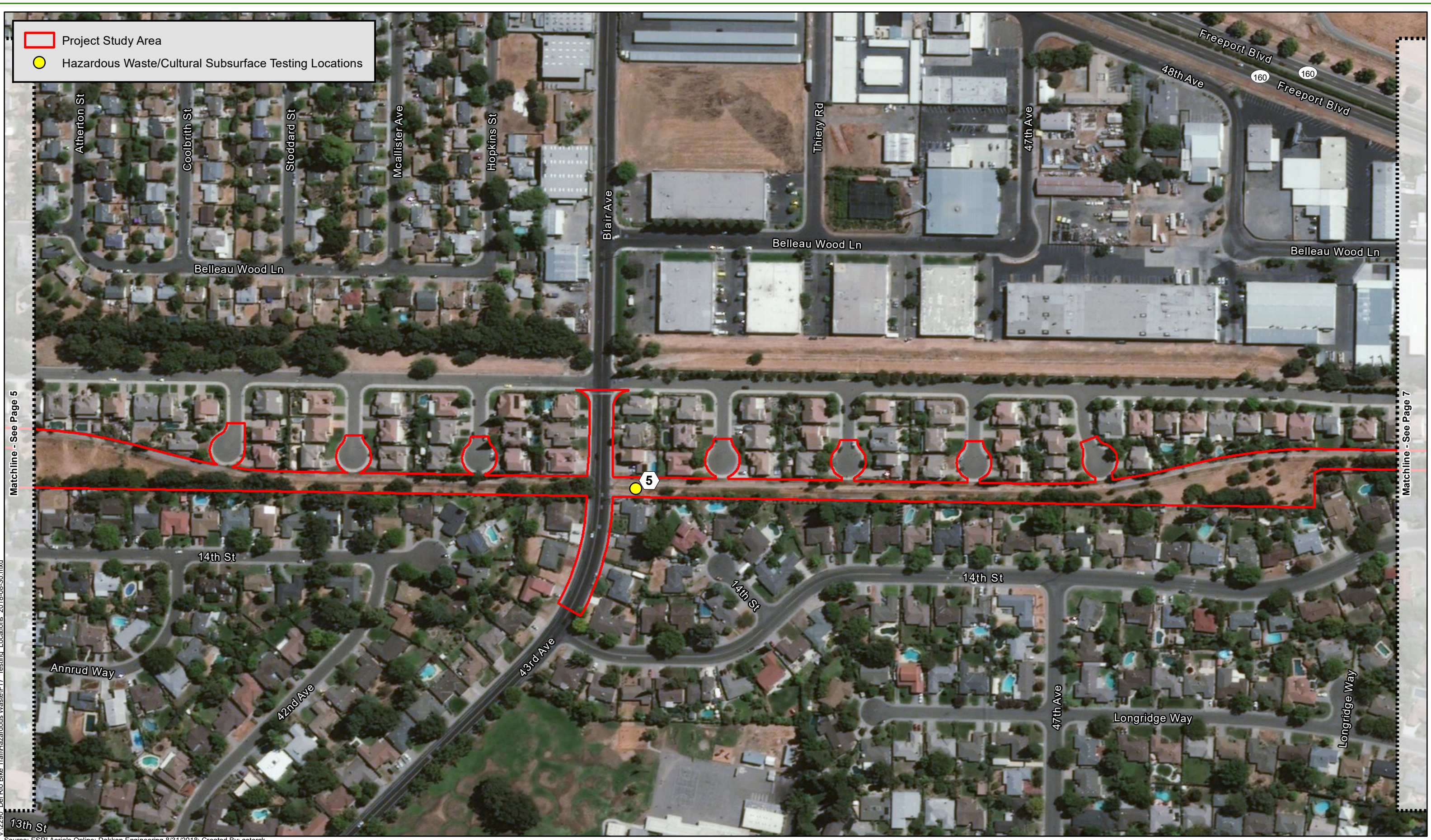


FIGURE 16
Cultural Resources and Hazardous Waste Testing Locations
 Page 5 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

-  Project Study Area
-  Hazardous Waste/Cultural Subsurface Testing Locations



VA2290_Del Rio Bike Trail\Hazardous Waste\F17_Testing_Locations_2018-08-30.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

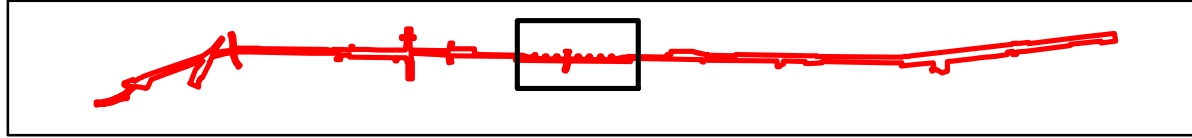
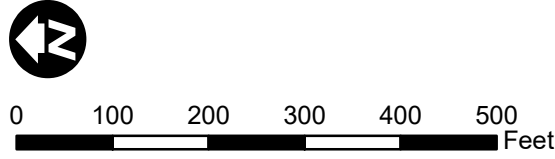
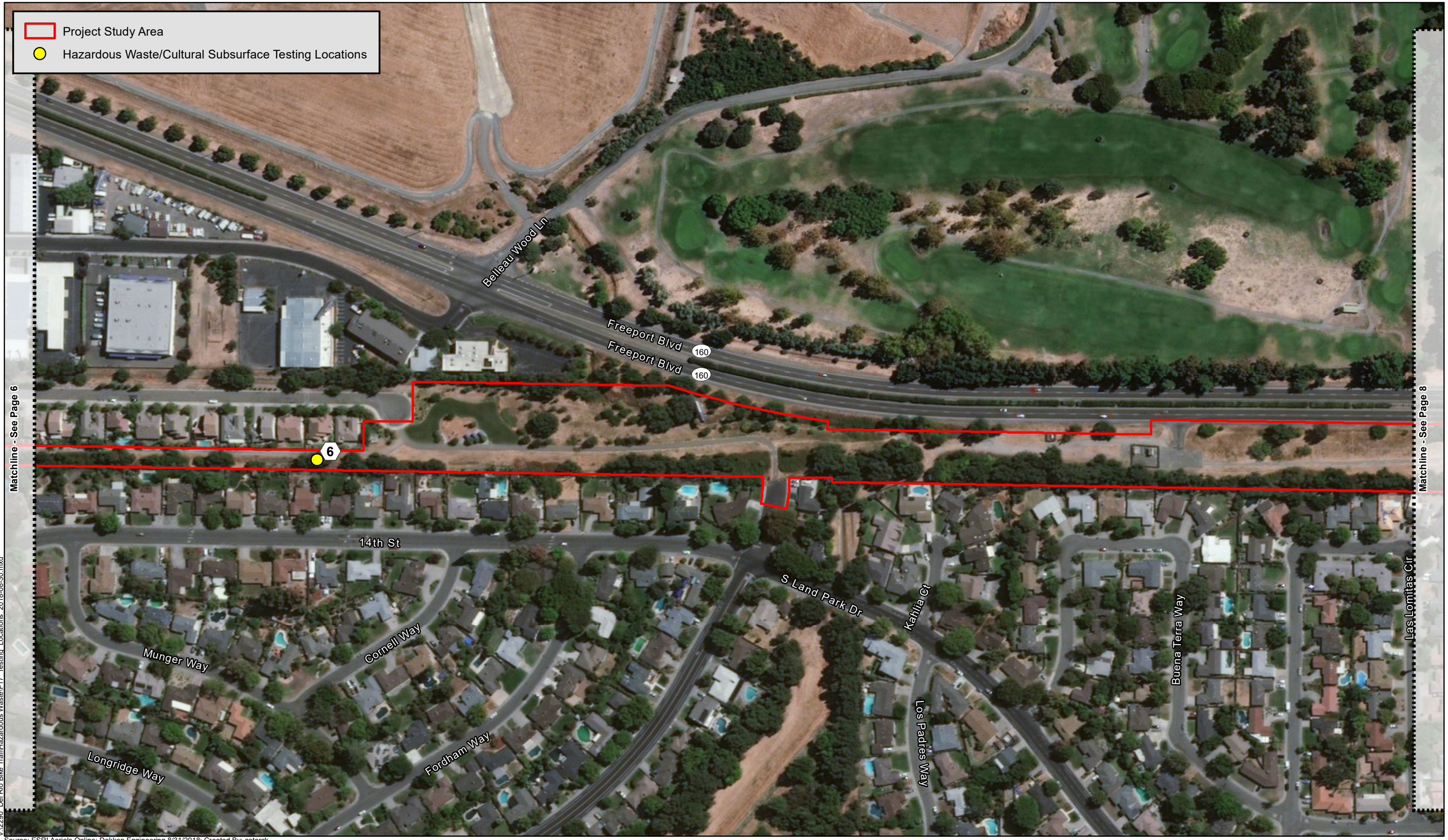


FIGURE 16
Cultural Resources and Hazardous Waste Testing Locations
 Page 6 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Project Study Area
● Hazardous Waste/Cultural Subsurface Testing Locations



VA2290_Del Rio Bike Trail\Hazardous Waste\F17_Testing_Locations_2018-08-30.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

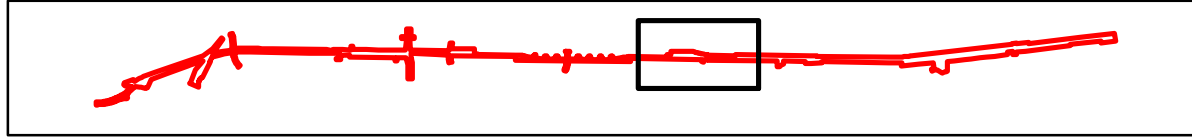
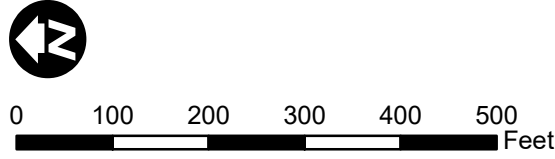




FIGURE 16
Cultural Resources and Hazardous Waste Testing Locations
 Page 7 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

-  Project Study Area
-  Hazardous Waste/Cultural Subsurface Testing Locations



Matchline - See Page 7

Matchline - See Page 9

VA2290_Del Rio Bike Trail\Hazardous Waste\F17_Testing_Locations_2018-08-30.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

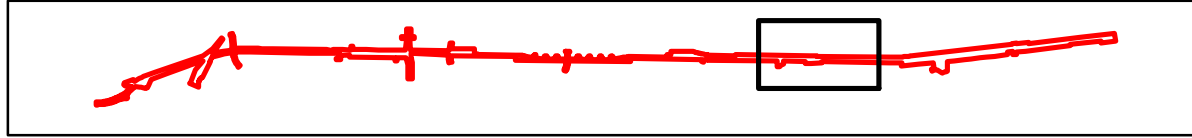
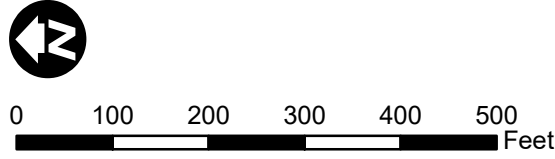


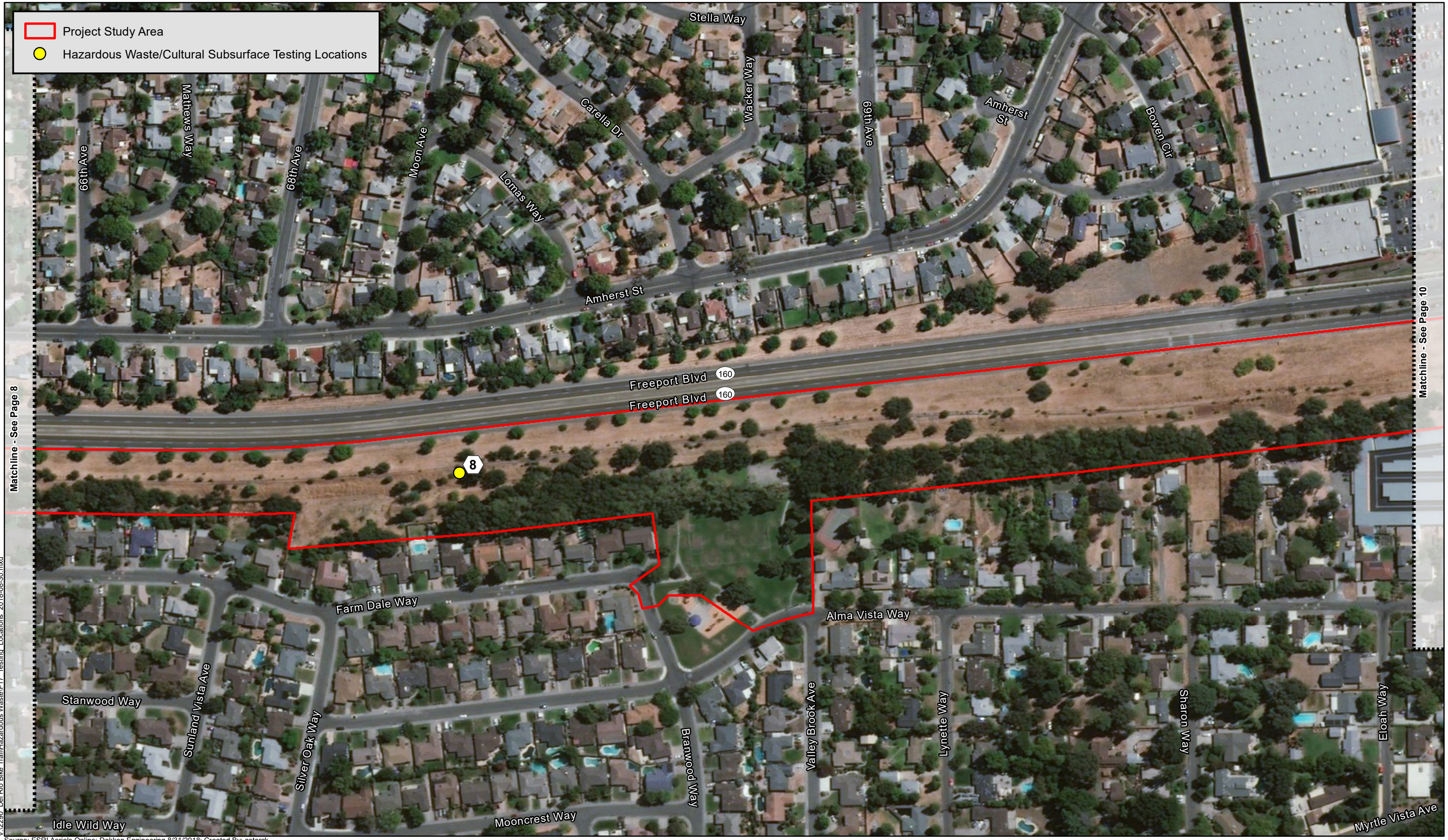


FIGURE 16
Cultural Resources and Hazardous Waste Testing Locations
 Page 8 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

-  Project Study Area
-  Hazardous Waste/Cultural Subsurface Testing Locations



Matchline - See Page 8

Matchline - See Page 10

VA2290_Del Rio Bike Trail\Hazardous Waste\F17_Testing_Locations_2018-08-30.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

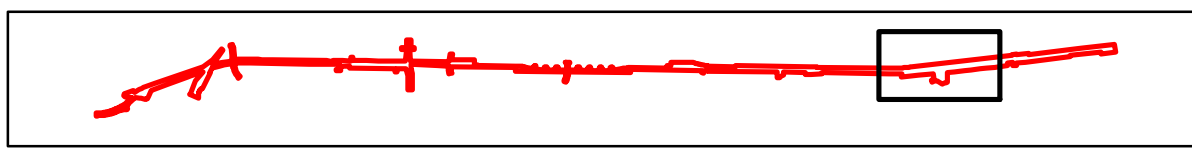
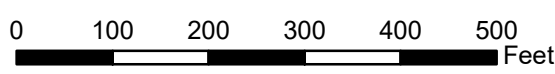




FIGURE 16
Cultural Resources and Hazardous Waste Testing Locations
 Page 9 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

-  Project Study Area
-  Hazardous Waste/Cultural Subsurface Testing Locations



Matchline - See Page 9

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

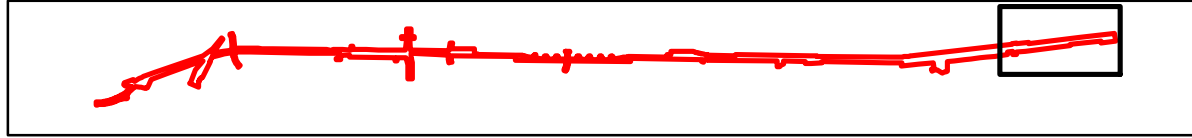
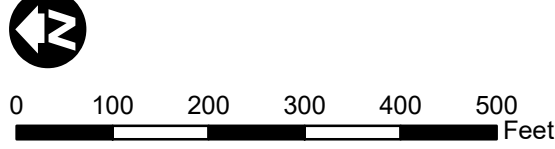


FIGURE 16
Cultural Resources and Hazardous Waste Testing Locations
 Page 10 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Historic Eligibility of the Walnut Grove Branch Line of the Southern Pacific Railroad

The PAL for the proposed Project includes a segment of one historic property: the Walnut Grove Branch Line of the Southern Pacific Railroad. GPA Consulting Senior Architectural Historian, Laura O'Neill, prepared a Finding of Effect report in August of 2018 to evaluate the potential impacts of the proposed Project on the historic property.

History

The original extent of the branch line was documented in a National Register nomination in 1991 by Mary L. Maniery of PAR Environmental Services, Inc. as part of the Sacramento Urban Area Flood Control Project. When evaluated within its historic context, a property must be shown to be significant for one or more of the four Criteria for Evaluation - A, B, C, or D (listed earlier in the Federal Regulatory Framework section). The Criteria describe how properties are significant for their association with important events or persons, for their importance in design or construction, or for their information potential. Maniery concluded that the

original extent of the branch line appeared eligible at the local level for its significance under Criteria A and C for its association with the development of the region and for embodying a distinctive construction method of the era. In a letter dated April 24, 1991, SHPO at the time, Kathryn Gualtieri, stated that the consultant was "well justified" in concluding that the Walnut Grove Branch Line should be considered eligible and requested additional documentation of its physical condition. Any follow-ups to that letter are unclear; however, the subsequent SHPO Milford Wayne Donaldson clarified the matter in a letter dated October 23, 2006 regarding the Freeport Regional Water Project in Sacramento and San Joaquin Counties, and concurred that the resource was eligible for the NRHP under Criteria A and C. The status code for the resource is 2S2.

Thus, the segment within the PAL is a historic property for the purposes of complying with Section 106 of the NHPA and is a historical resource for the purposes of complying with the CEQA. The period of significance for the property is 1908 to 1934. The boundaries of the property consist of its original 24.5-mile route.¹ The Walnut Grove Branch Line is a 24.5-mile line that was constructed between Sacramento and Walnut Grove in Sacramento County, California. The northernmost point of the line was at the intersection of I Street and Front Street (near the present-day California State Railroad Museum) and continued generally south on the east side of the Sacramento River before terminating at the north end of Walnut Grove.²

Per the National Register Nomination Form prepared by Ms. Maniery, the branch line was constructed between 1908 and 1912 to link agricultural communities in the Sacramento River Delta to Sacramento and more remote markets. This connection and new shipping capability played an important role in boosting agricultural and economic development in the region, including canning and packing endeavors, as well as the formation of several Sacramento River Delta towns, specifically Locke, Hood, and Freeport. The line was found eligible under Criterion A at the local level for its direct association with the agricultural development of the Delta region.³

Massive dredging equipment was used to construct the line, the majority of which was placed on an elevated embankment. These methods were innovative for the era and embody the distinctive characteristics of a period and method of construction. The line was found eligible under Criterion C for these characteristics.⁴

¹ The line was extended south of Walnut Grove in 1929 and again in 1943, ultimately terminating eight miles south of Walnut Grove at Isleton. In the 1970s, this later addition to the line was compromised by flooding and was no longer present or no longer retained integrity by the time of the 1991 documentation. Maniery, 8.

² Maniery, 6.

³ Maniery, 4.

⁴ Ibid.

The period of significance was established as 1908, the year construction began, to 1934, the year Southern Pacific terminated passenger service and reduced the number of freight trains operating on the line after the region was hit by the Great Depression.⁵

Segment Within the PAL

The segment of the Walnut Grove Branch line present within the PAL is an approximately 4.8-mile portion of the larger resource. The north end of the segment within the PAL crosses over I-5 near the intersection of Riverside Boulevard and 13th Street. The segment continues generally south through a series of residential tracts, crosses the major intersection of Meadowview Road and Freeport Boulevard, and runs under the Freeport Boulevard Overhead before terminating adjacent to the Sacramento Water Tower (see Figure 3). The segment consists of a single track of standard-gauge railway⁶ with wood ties, metal rails, and gravel ballast (see Image 1 through Image 4). The segment is on varied terrain. Some of the segment is elevated on an embankment created at the time of construction; other portions of the segment are level with its surroundings while there are further variations in grade such as a non-original overcrossing at I-5 (see Image 5), and notable slope at 27th Avenue (see Image 6).



Image 1: Walnut Grove Branch Line Railroad, view looking south from Sutterville Road.
Source: GPA Consulting, 2017.



Image 2: Walnut Grove Branch Line Railroad, detail view of typical conditions, along 27th Avenue.
Source: GPA Consulting, 2017.



Image 3: Walnut Grove Branch Line Railroad, detail view of typical conditions, near 27th Avenue.
Source: GPA Consulting, 2017.



Image 4: Walnut Grove Branch Line Railroad, detail view of typical conditions, near Park Village Street.
Source: GPA Consulting, 2017.

⁵ Ibid., 13.

⁶ Donald B. Robertson, *Encyclopedia of Western Railroad History Volume IV: California* (Caldwell, Idaho: Caxton Printers, LTD, 1998), 197.



Image 5: Walnut Grove Branch Line Railroad, Land Park UP (Bridge No. 0226), view looking north from Riverside Boulevard. Source: GPA Consulting, 2017.



Image 6: Walnut Grove Branch Line Railroad, view looking northwest from 27th Avenue. Source: GPA Consulting, 2017.

The following features qualify the segment for the National Register. They have been ranked by how strongly they convey the significance of the segment:

- Most Significant:
 - Location and track alignment
 - Elevated embankment (intermittent)
- Significant:
 - Standard gauge rails
 - Wood ties
 - Gravel ballast
- Less Significant:
 - Agricultural setting

Integrity Statement

The segment of the Walnut Grove Branch Line within the PAL was examined by GPA Consulting according to the seven aspects of integrity: location, setting, design, materials, workmanship, feeling, and association.

Location

Research indicates that the integrity of location is generally intact. The majority of the segment's alignment has not been moved since its completion in 1912. A portion of the alignment was altered and elevated over I-5 sometime after 1967, following the completion of the interstate (see Image 7 through Image 10). Another portion was moved slightly west to accommodate a mid-twentieth century housing development. This change took place sometime between 1967 and 1975. Research did not indicate any further changes to the alignment within the PAL, and the integrity of location is otherwise intact. The location of the resource helps to convey a sense of why the railroad branch line was constructed and the subsequent impact it had on the region.

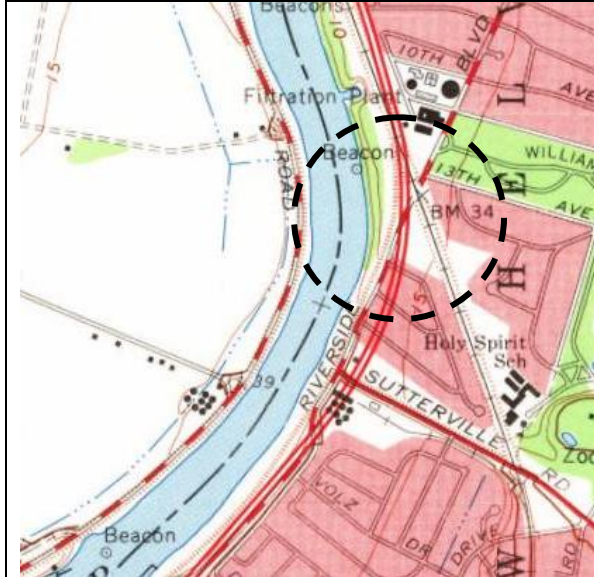


Image 7: Sacramento West Quadrangle, 1967. Minor alignment change circled with dashed line.

Source: <http://historicalmaps.arcgis.com/usgs>.

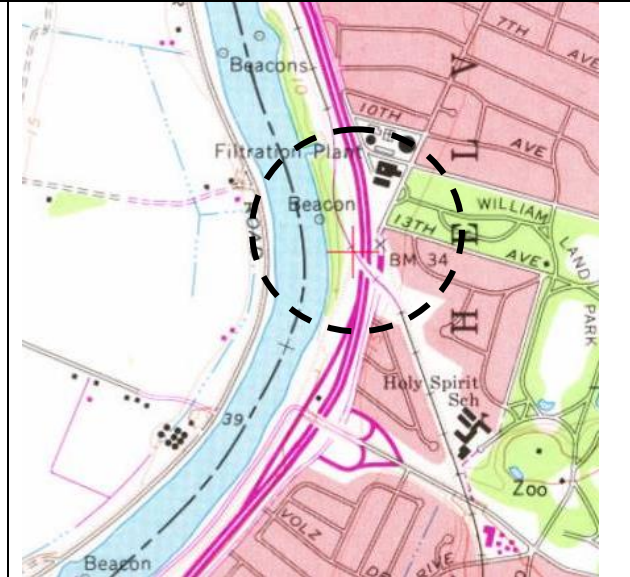


Image 8: Sacramento West Quadrangle, 1967. Photo Revised 1980. Minor alignment change circled with dashed line.

Source: <http://historicalmaps.arcgis.com/usgs>.

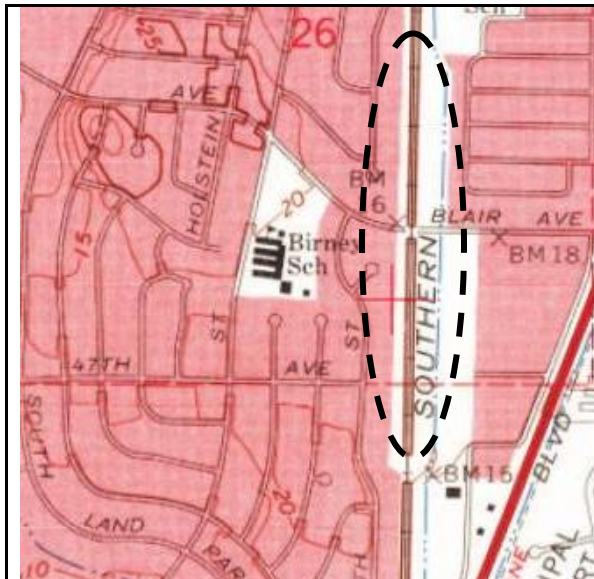


Image 9: Sacramento West Quadrangle, 1967. Minor alignment change circled with dashed line.

Source: <http://historicalmaps.arcgis.com/usgs>.

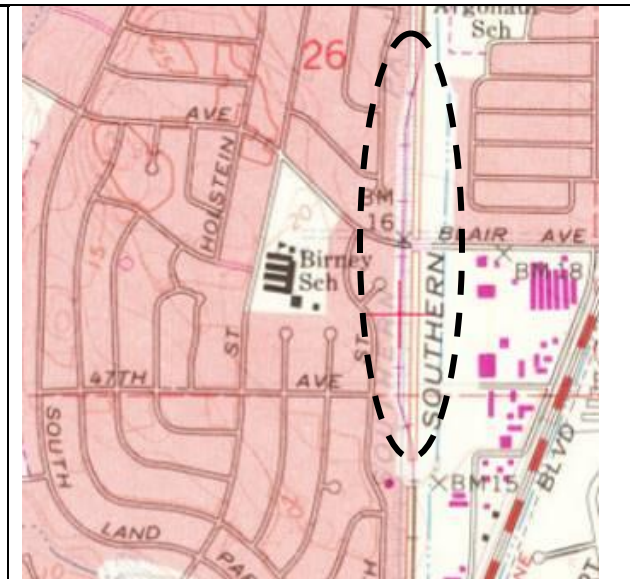


Image 10: Sacramento West Quadrangle, 1967. Photo Revised 1980. Minor alignment change circled with dashed line.

Source: <http://historicalmaps.arcgis.com/usgs>.

Design

The integrity of design is generally intact. Although original wood overcrossings at Sutterville Road, 35th Avenue, and 43rd Avenue were replaced with a culvert and filled, or lowered to grade in the 1960s⁷ (see Image 11 through Image 14), the combination of the remaining elements, including the alignment, sections of elevated embankment, and the preponderance of steel rails and wood ties are sufficient to convey the resource's historic function and aesthetic.

⁷ Maniery, 7.



Image 11: Walnut Grove Branch Line Railroad, view looking northeast at the Sutterville Road crossing.

Source: GPA Consulting, 2017.



Image 12: Walnut Grove Branch Line Railroad, view looking northwest at the 35th Avenue crossing.

Source: GPA Consulting, 2017.



Image 13: Walnut Grove Branch Line Railroad, view looking southwest at the 43rd Avenue crossing.

Source: GPA Consulting, 2017.



Image 14: Detail view of what appear to be wood overcrossing remnants at the 43rd Avenue crossing.

Source: GPA Consulting, 2017.

Setting

The integrity of setting for the subject segment has been diminished due to the ongoing development in the Sacramento area: the segment was originally surrounded by rural agricultural land, but today, the alignment runs through commercial areas and residential subdivisions. The resource does, however, retain a topographical relationship to its setting, including its placement in areas atop an elevated embankment, reflecting its historic function—an elevated embankment would help prevent shipping capabilities from being interrupted by flooding, which would be a legitimate and potentially frequent concern in an agricultural region adjacent to a river delta.

Materials

Some short sections of the track within the segment have been partially dismantled or altered. At road crossings, portions of track have been covered in asphalt. However, the majority of the segment retains steel rails, wood ties, and gravel ballast, as it would have during the period of significance. These were the standard materials for constructing a railroad in the early twentieth century, and the extant rails, ties, and ballast reflect the technology of the era as well as the materials that were plentiful and commonly used when the line was built. Overall, the integrity of materials remains intact.

Workmanship

The integrity of workmanship can be seen in details as minute as the individual bolts holding the rails together, or in features as pronounced as the elevated embankment that was dug using massive dredging equipment. The integrity of workmanship is supported by the integrity of materials and design and, like the materials and design, reflect construction technology of the era.

Feeling

The physical integrity of the resource helps it to convey a sense of time and place and evokes the feeling of an early twentieth century railroad segment.

Association

The feeling of association is intact, as the resource retains sufficient physical integrity to convey its associative significance under Criterion A and Criterion C.

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant environmental impacts to cultural and tribal resources. When an impact is determined to be significant, mitigation measures are identified that would reduce or avoid that impact, if feasible.

Methodology for Analysis

The following Thresholds of Significance are established by CEQA guidelines Section 15065, 15126, and Appendix A. According to these guidelines, a Project would have a significant environmental impact if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature;
- Disturb any human remains, including those interred outside of formal cemeteries;
- Cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:
 - listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code Section 5020.1(k); or a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact CUL-1: Potential to cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.

According to 36 CFR 800.5(a)(1), an adverse effect is found when an undertaking may alter, directly or indirectly, any of the characteristics of a historic property that qualify the property for inclusion in the NRHP in a manner that would diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

Examples of adverse effects on historic properties include, but are not limited to:

- i. Physical destruction of or damage to all or part of the property;
- ii. Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation, and provision of handicapped access, that is not consistent with the Secretary's Standards for the Treatment of Historic Properties (36 CFR part 68) and applicable guidelines;
- iii. Removal of property from its historic location;
- iv. Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance;
- v. Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features;
- vi. Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization; and
- vii. Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance.⁸

The proposed Project includes the construction of a Class I multi-use trail along the abandoned railway corridor, and repurposing sections of the existing railroad track where feasible. According to example ii, above, to avoid adverse effect, all work must comply with the Secretary of the Interior's Standards. Because the proposed Project includes adaptive reuse, the appropriate treatment for the historic property is Rehabilitation.

Project Details

The proposed Project includes limited removal of existing railroad track only where necessary for safety, particularly at major arterial intersections or where the skew of the existing track against the alignment of the proposed multi-use trail will cause a safety hazard. Where it exists, the majority of the track will be retained, including its metal rails, wood ties, and gravel ballast. Where other Project constraints make it necessary for the walking path to overlap with the existing track, sections of the track will be converted to a walking trail by infilling the area between the metal rails with a traversable surface such as decomposed granite (DG). Other portions of track will remain but not be converted to a walking path. Some of these portions will be incorporated into the Project through the use of landscaping, such as drought-tolerant and native plantings, as well as park-like fixtures such as benches, and trash receptacles. Overgrown and excess vegetation will also be removed where necessary for safety. Other components of the proposed Project include providing access points at various locations along the trail, as well as landscape and hardscape improvements.

Analysis of Adverse Effect

This section applies the Criteria of Adverse Effect as outlined in 36 CFR 800.5 to the proposed undertaking. The proposed Project will not involve the removal of the property from its historic location or neglect of a property which causes its deterioration. The property is not under Federal ownership. While there is limited removal of fabric, introduction of visual elements, and a change in use proposed as part of the Project, each of these aspects of the Project fall within the scope of rehabilitation. As the Secretary of the Interior's Standards for the Treatment of Historic Properties apply to this type of Project, separate

⁸ 36 CFR 800.5(a)(2)(i through vii).

analysis under each criterion of adverse effect is not necessary. To avoid adverse effect, however, the work must comply with the Secretary of the Interior's Standards for Treatment of Historic Properties. Following is an analysis of the proposed Project for compliance with the Rehabilitation Standards:

1. *A property shall be used for its historic purpose or be placed in a new use that requires minimal change to the defining characteristics of the building and its site and environment.*

The property was historically used as a rail line until the route was inactivated and abandoned in the 1970s. Its most significant defining characteristics are its location, horizontal track alignment, and intermittent elevated embankment. The location and horizontal track alignment will not be altered by the Project. The elevated embankment will be retained at all but one location. At the intersection of 27th Avenue/Normandy Lane/Del Rio Road, the existing embankment and ramps do not meet current ADA requirements and must be lowered accordingly in order to meet the Project goals. The vast majority of the property's most significant characteristics will be retained as a part of this Project.

Other defining characteristics of the property include its steel rails, wood ties, and gravel ballast. Track removal is limited to 2 percent of the existing material and is only proposed where necessitated for safety reasons. In areas where the existing railroad tracks will be converted to a walking trail, all the existing materials will be retained and the space between the steel rails will be infilled with a non-paved traversable surface such as DG. The DG (or similar treatment) is compatible with the gravel ballast that would be found historically along a railroad alignment. Furthermore, it is a reversible, non-permanent change that would not alter the integrity of the resource. In certain areas of the Project alignment, park-like features such as drought-tolerant native landscaping and benches will be introduced among the existing tracks and rails in a manner that does not disturb the historic fabric. Lighting will be added at roadway crossings only. If a material, such as ballast, must be removed in order to install a new element, such as irrigation or plantings, the material will be replaced in kind after the work is completed. Two sections of track that require removal for safety or ADA requirements are proposed to be salvaged and reused in adjacent areas where track is already missing, in order to reduce net loss of track resulting from the Project. Other sections of track at certain major intersections will be encased in concrete—leaving the steel rails visible—to increase safety. The tracks have already been altered at these major intersections.

Less significant defining characteristics of the property include its agricultural setting, which has been diminished by continuous development outside the period of significance. The resource's integrity of setting is now primarily represented by the resource's topographical relationship to its site; this will be retained as part of the undertaking, apart from the intersection of 27th Avenue/Normandy Lane/Del Rio Road, as discussed above. The majority of new construction proposed as part of the Project will take place adjacent to the historic structure. The new construction is linear and will be constructed at or below the same height as the historic structure, using asphalt and concrete. These materials already exist in the vicinity of the resource.

The proposed Project will meet the Project goals while requiring only minimal changes to the property and its environment. Therefore, the undertaking complies with Standard 1.

2. *The historic character of a property shall be retained and preserved. The removal of historic materials or alteration of features and spaces that characterize a property shall be avoided.*

Track removal is only proposed where necessary for safety reasons, particularly when the skew of the proposed bike path against the existing track would create a safety hazard. Two sections of track that require removal for safety or ADA requirements are proposed to be salvaged and reused in adjacent areas where track is already missing, in

order to reduce net loss of track resulting from the Project. Other sections of track at certain major intersections will be encased in concrete—leaving the steel rails visible—to increase safety.

In areas where the existing railroad tracks will be converted to a walking trail, all the existing materials will be retained and the space between the steel rails will be infilled with a non-paved traversable surface such as decomposed granite (DG).

In certain areas of the Project alignment, park-like features such as drought-tolerant native landscaping and benches will be introduced among the existing tracks and rails in a manner that does not disturb the historic fabric. Lighting will be added at roadway crossings only. If a material, such as ballast, must be removed in order to install a new element, such as irrigation or plantings, the material will be replaced in kind after the work is completed.

Overall, track removal will only constitute approximately 2 percent of the total remaining historic fabric where necessitated for safety reasons and will otherwise be avoided. The alterations to the resource in order to convert sections to a walking trail are limited to infilling the areas between the existing steel rails with a material such as DG, which is similar in nature to the gravel ballast that would historically be found along a railroad alignment. Therefore, the undertaking complies with Standard 2.

Track removal is limited to the following areas:

- North of Z'Berg park, where the skew of the existing track against the proposed bike path creates a safety hazard
- Roadway approaches, where the skew of the existing track against the proposed bike path creates a safety hazard
- At the intersection of Sutterville Road, to increase safety at the crossing. In addition to increasing safety, track removal at this location will facilitate other Project goals and safety features, including reducing the intersection length and improving the visibility of new signals.
- A wooden trestle bridge that was partially burned in an accidental fire and is now unsafe.

Track will be retained in place and encased in concrete at the following locations:

- South Land Park Drive
- Del Rio Road
- 35th Avenue
- 43rd Avenue

Track will be salvaged and reused in adjacent areas to the following locations:

- The vicinity of the 27th Avenue/Normandy Lane/Del Rio Road intersection
- Across the waterway south of Charlie Jensen Park

3. *Each property shall be recognized as a physical record of its time, place, and use. Changes that create a false sense of historical development, such as adding conjectural features or architectural elements from other buildings, shall not be undertaken.*

There is no proposed addition of conjectural features. There are two sections of track that are proposed for removal for safety reasons that are also proposed for salvage and reuse. The material removed from these sections is proposed to be salvaged and reused in adjacent areas where track has already been removed. This is not conjecture,

however, as the track materials in adjacent areas would have been identical prior to their removal. Therefore, the undertaking complies with Standard 3.

4. *Most properties change over time; those changes that have acquired historic significance in their own right shall be retained and preserved.*

Alterations to the property have taken place outside the period of significance and have not acquired historic significance in their own right. As such, Standard 4 does not apply to the undertaking. Regardless, the majority of the resource will be retained in place, apart from the approximately 2 percent of track removal where necessitated for safety or accessibility reasons.

5. *Distinctive features, finishes, and construction techniques or examples of craftsmanship that characterize a historic property shall be preserved.*

As a standard gauge railroad constructed using common materials, the resource does not have any distinctive features or finishes. The resource primarily derives its significance from its location and alignment. It is, however, a distinctive example of the construction technique in which massive dredging equipment was used to create an elevated embankment. This elevated embankment, where it exists, will be retained in place with the exception of one area: At the intersection of 27th Avenue/Normandy Lane/Del Rio Road, the existing embankment and ramps do not meet current ADA requirements and must be lowered accordingly. This small portion is the only area where the grade will be substantially altered; the character-defining feature will still exist in the remainder of the segment and will be sufficient to convey the property's significance. Therefore, the undertaking complies with Standard 5.

6. *Deteriorated historic features shall be repaired rather than replaced. Where the severity of deterioration requires replacement of a distinctive feature, the new feature shall match the old in design, color, texture, and other visual qualities and, where possible, materials. Replacement of missing features shall be substantiated by documentary, physical, or pictorial evidence.*

The proposed Project does not involve the repair or replacement of any historic features. Therefore, Standard 6 does not apply.

7. *Chemical or physical treatments, such as sandblasting, that cause damage to historic materials shall not be used. The surface cleaning of structures, if appropriate, shall be undertaken using the gentlest means possible.*

There are no proposed chemical or physical treatments. Therefore, Standard 7 does not apply.

8. *Significant archeological resources affected by a Project shall be protected and preserved. If such resources must be disturbed, mitigation measures shall be undertaken.*

If archaeological resources are found during the construction of the Project, work will be halted and the resources will be handled according to the procedures set forth in the Caltrans Section 106 PA and Caltrans Standard Environmental Reference.

9. *New additions, exterior alterations, or related new construction shall not destroy historic materials that characterize the property. The new work shall be differentiated from the old and shall be compatible with the massing, size, scale, and architectural features to protect the historic integrity of the property and its environment.*

The majority of new construction proposed as part of the undertaking will take place adjacent to the historic structure. The new construction is linear and will be located along the historic alignment of the Walnut Grove Branch Line. It will be constructed at or below the same height as the historic structure, using asphalt and concrete. These materials already exist in the vicinity of the resource. In the areas of the Project where the walking trail intersects the historic rail line, the tracks will be retained in place and the space between the steel rails will be infilled with a non-permanent traversable surface such as DG.

Certain areas of the Project require encasing track in concrete or the full removal of track in order to address safety hazards or ADA requirements. However, this work is generally limited to roadway intersections where the resource has typically already been altered and will not further diminish the existing level of integrity.

In certain areas of the Project alignment, park-like features such as drought-tolerant native landscaping and benches will be introduced among the existing tracks and rails in a manner that does not disturb the historic fabric. Lighting will be added at roadway crossings only. If a material, such as ballast, must be removed in order to install a new element, such as irrigation or plantings, the material will be replaced in kind after the work is completed.

Overall, the undertaking is compatible with the historic resource in its size, scale, and new use. The majority of the work is additive rather than subtractive, and new features of the Project will be differentiated from the historic resource through the use of distinguishable materials that already exist in the immediate surroundings, including concrete and asphalt. The conversion of portions of track into a walking path using DG, or a similar material, is a reversible, non-permanent change that will not damage the integrity of the existing historic fabric. Therefore, the undertaking complies with Standard 9.

10. *New additions and adjacent or related new construction shall be undertaken in such a manner that if removed in the future, the essential form and integrity of the historic property and its environment would be unimpaired.*

The majority of new construction proposed as part of the undertaking will take place adjacent to the historic structure. The most significant distinguishing characteristics of the property are its location and horizontal linear alignment, which constitute its essential form. If the elements of the Project were removed, the essential form of the Walnut Grove Branch Line segment would remain. The resource's integrity of setting has already been diminished by continuous development outside the period of significance. Its integrity of setting is now primarily represented by the resource's topographical relationship to its site; this will be retained as part of the undertaking, apart from the intersection of 27th Avenue/Normandy Lane/Del Rio Road. At this location, the existing embankment and ramps do not meet current ADA requirements and must be lowered accordingly in order to meet the Project goals. All other topographical grade changes will be retained. Therefore, the undertaking complies with Standard 10.

Conditions Proposed

The plans for the undertaking were in the early design stages when the Finding of Effect was prepared. To ensure that it continues to comply with the Rehabilitation Standards as design and construction progress, an Action Plan (Action Plan) was developed. It identifies the specific tasks during each stage of the undertaking that will be required to ensure the work complies with the Rehabilitation Standards, as well as the responsible parties for ensuring that each task is completed. Table 10 provides a summary of the Action Plan.

Table 10. Summary of Action Plan

Stage	Responsible Parties	Task	Date Completed ⁹
<p>Plan Development/ Construction Documents</p>	<p>Caltrans Architectural Historian (CAH)¹⁰ City Staff (CS) Project Manager (PM) Project Engineer (PE)</p>	<ul style="list-style-type: none"> • PM, PE, and CS will provide to CAH for review: <ul style="list-style-type: none"> ○ Project plans for trail at 60 percent and 90 percent completion ○ Project plans for concrete bridge at 60 percent and 90 percent completion. ○ Salvage and reuse plan for portions of existing track. ○ Landscape plan at 60 percent and 90 percent completion. • CAH will review the plans for compliance with the Rehabilitation Standards and work with the PM, PE, and CS to resolve any outstanding issues. • CAH will provide formal approval in the form of a memo. 	

⁹ This column will be completed when each task is complete.

¹⁰ Caltrans may elect to have a qualified consultant conduct some its monitoring responsibilities. In this case, Caltrans PQS would review and approve the consultant's work.

Table 10. Summary of Action Plan

Stage	Responsible Parties	Task	Date Completed ⁹
Pre-Construction/ Construction	CAH CS PM PE	<ul style="list-style-type: none"> • All responsible parties will create an on-site monitoring schedule in accordance with the construction schedule prior to the start of construction. • The on-site monitoring schedule will include inspection and approval of the following milestones, at minimum: <ul style="list-style-type: none"> ○ A 25-foot long mock-up segment of the Class I Multi-Use Trail ○ A 25-foot long mock-up segment of the converted railroad track with DG (or similar material) ○ One instance of encasing tracks in concrete at a roadway intersection ○ One instance of salvaged materials installed in new adjacent location ○ Test plantings along sections of track not proposed for conversion to walking trail ○ The monitors will be available on call if additional issues related to historic fabric and setting not listed here arise during construction. 	

Table 10. Summary of Action Plan

Stage	Responsible Parties	Task	Date Completed ⁹
During construction	CAH CS PM PE	<ul style="list-style-type: none"> • CS, PM, and PE will notify CAH in advance when events requiring monitoring will occur. • CAH will be present to monitor required construction events and will prepare monitoring reports summarizing activities and results. 	
Post-construction	CAH CS PM PE	<ul style="list-style-type: none"> • CS, PM, and PE will notify CAH when construction is complete. • CAH will investigate the finished alignment at regular intervals to ensure that all work was completed according to the plans and that it complies with the Rehabilitation Standards. • All responsible parties will work together to resolve outstanding issues. • CAH will provide formal approval in the form of a memo. 	

CSO Consultation

Caltrans applied the Criteria of Adverse Effect to the historic property within the PAL and considered any views concerning such effects which have been provided by consulting parties and the public, as per CFR 800.5(a). The proposed undertaking complies with the Secretary of the Interior’s Standards for Rehabilitation. Therefore, Caltrans proposed that a Finding of No Adverse Effect with Standard Conditions through the use of the Secretary of the Interior’s Standards for the Treatment of Historic Properties would be appropriate. Consultation with the CSO was initiated on October 12, 2018 pursuant to 36 CFR 800.5(c) and Section 106 PA Stipulation X.B(1). The CSO concurred on October 23, 2018 that a **Finding of No Adverse Effect with Standard Conditions through the use of the Secretary of the Interior’s Standards for the Treatment of Historic Properties would be appropriate**. See Appendix G for the CSO concurrence letter.

Level of Significance: Less than Significant With Mitigation Incorporated.

Required Mitigation: CR-1.

Impact CUL-2: Potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.

In an effort to identify archaeological resources that might be affected by the undertaking, a pedestrian survey, background research, and consultation with individuals and organizations were conducted. A record search conducted at the NCIC identified five prehistoric cultural resources (including one that was

mismapped) and five historic-era cultural resources within a one-quarter mile radius of the PAL, as well as two historic-era resources adjacent to the PAL, and one historic-era resource within the PAL. The historic-era resource within the PAL includes the Nationally-Registered Walnut Grove Branch of the Southern Pacific Railroad. The pedestrian survey did not observe any cultural resources within the PAL.

A review of the historic land use indicated that the majority of the Project area has been extensively modified as a result of agriculture followed by the construction of the railroad, and eventually the buildup of housing and commercial development. Such large-scale ground disturbances leave little potential for the presence of buried prehistoric or historic era cultural resources.

Although Native American Monitors noted several possible isolated artifacts within the Project corridor, these isolated artifacts are exempt from evaluation under the existing Programmatic Agreement. Additionally, during AB52 consultation, the United Auburn Indian Community determined that these possible isolated artifacts were not connected to Tribal Cultural Resources and had the United Auburn Indian Community had no concerns with the Project. No other indications of prehistoric habitation were observed.

At this time, no further archaeological study is recommended unless Project plans change to include areas not previously included in the PAL or if additional information is received from other sources or special interest groups. With the findings of the visual survey, record search, and Native American consultation, no impacts are anticipated for the Project related to archaeological resources. With any Project requiring ground disturbance, there is always the possibility that unknown cultural resources may be unearthed during construction. With the implementation of Mitigation Measure CR-2 through CR-7, potential impacts from the Project would be less than significant with mitigation incorporated.

Level of Significance: Less than Significant with Mitigation

Required Mitigation: CR-2 through CR-7.

Impact CUL-3: Potential to directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

No findings of unique paleontological resources, sites or unique geological features were identified during the record search and pedestrian survey within the Project area; therefore, no impacts are anticipated for the Project related to paleontological resources.

Level of Significance: No Impact.

Required Mitigation: None Required.

Impact CUL-4: Potential to disturb human remains, including those interred outside of formal cemeteries.

With any Project requiring ground disturbance, there is always the possibility that unmarked burials may be unearthed during construction. This impact is considered potentially significant. Implementation of Mitigation Measure CR-6 would reduce this impact to a less-than significant level.

Level of Significance: Less than Significant with Mitigation

Required Mitigation: CR-6.

Impact CUL-5: Potential to cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code Section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is 1) listed or eligible for listing in the California Register of Historical Resources, or in a local register

of historical resources as defined in Public Resources Code Section 5020.1(k); or 2) a resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1.

The proposed Project is not anticipated to cause a substantial adverse change in the significance of a Tribal Cultural Resource (TRC) listed or eligible for listing in the California Register of Historical Resources, or in a local register of historic resources as defined in Public Resources Code section 5020.1(k). The Project is not anticipated to cause a substantial adverse change to a Tribal Cultural Resource (TRC) pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. No cultural resources were identified during the visual survey, record search, and Native American consultation. No impacts are anticipated for the Project related to archaeological resource; however, with any Project requiring ground disturbance, there is always the possibility that unmarked cultural resources may be unearthed during construction. This impact would be considered potentially significant. Implementation of Mitigation Measure **CR-2** through **CR-7** would reduce this impact to a less-than significant level.

Level of Significance: Less than Significant with Mitigation

Mitigation Required: CR-2 through CR-7.

Mitigation Measures

CR-1: The City shall implement the Caltrans approved Action Plan during each stage of the undertaking that will be required to ensure the work complies with the Rehabilitation Standards, as well as the responsible parties for ensuring that each task is completed.

CR-2: Additional archaeological survey would be needed if Project limits are extended beyond the present survey limits.

CR-3: The United Auburn Indian Community of Auburn Rancheria and the Lone Band of Miwok Indians shall be notified 7 days in advance of each phase of ground disturbance as part of the Project.

CR-4: A cultural resources awareness training program will be developed which will include relevant information regarding cultural resources; respectful treatment of cultural resources; applicable regulations; consequences of violating regulations; applicable avoidance and minimization measures; and the protocols and notification chain of command/points of contact should a cultural resource be discovered. The program will also underscore the requirement for confidentiality and culturally-appropriate treatment of any cultural. Cultural resource awareness training will be provided to all construction crew working on-site throughout the duration of the Project.

CR-5: If previously unidentified archaeological materials are unearthed during construction, all work shall be halted within 100 feet of the discovery until a qualified archaeologist can assess the significance of the find. Should the archaeological resource be Native American in origin, the United Auburn Indian Community of Auburn Rancheria, the Lone Band of Miwok Indians, the Buena Vista Rancheria, and the T'si-Akim Maidu shall be contacted and consulted on the discovery. Work shall not resume until the archaeologist, Caltrans District 3, the City, and if the resource is Native American in origin, the United Auburn Indian Community of Auburn Rancheria, the Lone Band of Miwok Indians, the Buena Vista Rancheria, and the T'si-Akim Maidu have determined the significance of the resource and appropriate mitigation, if necessary.

CR-6: Section 5097.94 of the Public Resources Code and Section 7050.5 of the California Health and Safety Code protect Native American burials, skeletal remains and grave goods, regardless of age and provide method and means for the appropriate handling of such remains. If human remains are encountered, work should halt in that vicinity and the county coroner should be notified immediately. At the same time, an archaeologist should be contacted to evaluate the situation. If the human remains are

of Native American origin, the coroner must notify the Native American Heritage Commission within 24 hours of such identification. CEQA and 43 CFR 10.3 details steps to be taken if human burials are of Native American origin.

CR-7: If previously unidentified Native American cultural resources are unearthed during construction, all work shall be halted within 100 feet of the discovery and the United Auburn Indian Community of Auburn Rancheria (UAIC), shall be contacted and consulted on the discovery to assist the City and the City designated archaeologist on determining the significance of the discovery. Should the resource be determined a TCR, then the UAIC shall provide recommendations for further evaluation and/or treatment, as necessary, within 48 hours. The City will document these recommendations in their records. After review and consultation, the City will determine the most appropriate and respectful action and will document justification for the final action in their files.

2.5 GEOLOGY AND SOILS

This section describes applicable regulations pertaining to geology and soil resources and evaluates the proposed Project's potential impacts to the established baseline environmental setting using established thresholds of significance. Paleontological resources as they relate to geological features are addressed in Section 3.4, "Cultural Resources and Tribal Cultural Resources."

Regulatory Framework

Federal

Uniform Building Code Chapter 18, Division 1 Section 1803.2 and 1804.5

Uniform Building Code Chapter 18, Division 1 Section 1803.2 and 1804.5 The Uniform Building Code (UBC) 1994, Chapter 18. Division 1 Section 1803.2 mandates that special foundation design consideration be employed if the soil Expansion Index is 20, or greater in accordance with Table 18-1-B below. The methodology and scope for a geotechnical investigation are described in UBC Section 1803, and requires an assessment of a variety of factors, such as slope stability, soil strength, adequacy of load-bearing soils, the presence of compressible or expansive soils, and the potential for liquefaction. The required content of the geotechnical report includes recommendations for foundation type and design criteria. These recommendations can include foundation design provisions that are intended to mitigate the effects of expansive soils, liquefaction, and differential settlement. In general, mitigation can be accomplished through a combination of ground modification techniques (i.e., stone columns, reinforcing nail and anchors, deep soil mixing, etc.), selection of an appropriate foundation type and configuration, and use of appropriate building/foundation structural systems. Section 1804.5 Excavation, Grading, and Fill require the preparation of a geotechnical report where a building will be constructed on compacted fill. (UBC 1994)

TABLE 18-1-B—CLASSIFICATION OF EXPANSIVE SOIL

EXPANSION INDEX	POTENTIAL EXPANSION
0-20	Very low
21-50	Low
51-90	Medium
91-130	High
Above 130	Very high

The International Building Code (IBC) replaced earlier regional building codes (including the Uniform Building Code) in 2000 and established consistent construction guidelines for the nation. In 2006, the IBC was incorporated into the 2007 California Building Code (CBC) (see State regulations below in Section 3.5.1.2), and currently applies to all structures being constructed in California. The national model codes are therefore incorporated by reference into the building codes of local municipalities. The CBC includes building design and construction criteria that take into consideration the State's seismic conditions.

Clean Water Act

The Clean Water Act (CWA, 33 USC 1344) focuses primarily on waters of the United States, and is more thoroughly described in Section 3.3 (Biological Resources). However, the CWA focuses on sediment control in two aspects. First, the United States Army Corp of Engineers (USACE) administers Section 404, which regulates the discharge of fill into waters of the United States. Secondly, the State Water Resources Control Board (SWRCB) administers Section 401 which applies to stormwater discharges, where erosion control is an integral part of achieving permit compliance.

Earthquake Hazards Reduction Act of 1977

The Earthquake Hazards Reduction Act of 1977 established the National Earthquake Hazards Reduction Program (NEHRP) "to reduce the risks of life and property from future earthquakes in the

United States through the establishment and maintenance of an effective earthquake hazards reduction program.” The four principal goals of the NEHRP are:

- Develop effective practices and policies for earthquake loss reduction and accelerate their implementation;
- Improve techniques for reducing earthquake vulnerabilities of facilities and systems;
- Improve earthquake hazards identification and risk assessment methods, and their use; and
- Improve the understanding of earthquakes and their effects.

Many of the tools used to assess, as well as mitigate, earthquake hazards and impacts were developed under the NEHRP.

State

Alquist-Priolo Fault Zoning Act

The Alquist-Priolo Fault Zoning Act (AP Act), administered by the California Geological Survey (CGS), provides a mechanism for reducing losses from surface fault ruptures on a statewide basis. The AP Act requires the mapping of zones around active faults in California, in an effort to prohibit the construction of structures for human occupancy on active faults and minimize damage due to rupture of a fault. Active faults are those that have ruptured within the past 11,000 years. Where the AP Act identifies an Earthquake Fault Zone, a geologic investigation and report is necessary to prevent siting of buildings on active fault traces.

Seismic Hazard Mapping Act

The Seismic Hazard Mapping Act governs the responsibilities of city, county, and state agencies in identifying and mapping seismic hazard zones and mitigation seismic hazards to protect public health and safety in accordance with the provision of the California Public Resources Code, Division 2. Geology, Mines and Mining, Seismic Hazards Mapping – Chapter 7.8. The publication delineates zones where earthquakes could cause hazardous ground shaking and ground failure, including liquefaction and landslides. Currently, zones near the San Andreas Fault in the urban centers of the Greater San Francisco Bay Area and Los Angeles have been delineated. Local cities and counties within these zones regulate construction in order to minimize loss associated with these seismic hazards.

California Standard Building Code

Title 24, Part 2 of the California Building Standards Code of the California Code of Regulations contains specific requirements for construction with respect to earthquakes and seismic hazards intended to be protective of public health. Chapter 16 Section 1613 Earthquake Loads of the 2016 California Building Code (effective January 1, 2017) deals with Structural Design and requires that every structure, and portion thereof, including nonstructural components that are permanently attached to structures and their supports and attachments, shall be designed and constructed to resist the effects of earthquake motions. (California 2016).

Local

City of Sacramento 2035 General Plan (City of Sacramento 2015a)

Goal EC 1.1 Hazards Risk Reduction. Protect lives and property from seismic and geologic hazards and adverse soil conditions.

Policy EC 1.1.1 Review Standards. The City shall regularly review and enforce all seismic and geologic safety standards and require the use of best Management Practices (BMPs) in site design and building construction methods.

Policy EC 1.1.2 Geotechnical Investigations. The City shall require geotechnical investigations to determine the potential for ground rupture, earth shaking, and liquefaction due to seismic events, as well as expansive soils and subsidence problems on sites where these hazards are potentially present.

Policy ER 1.1.7 Construction Site Impacts. The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinances.

City of Sacramento Multi-Hazard Emergency Plan

The Multi-Hazard Emergency Plan addresses the City of Sacramento's planned response to extraordinary emergency situations associated with natural disasters, including flood events, seismic events, technological incidents, and nuclear defense operations. It provides operational concepts related to various emergency situations, identifies components of the local emergency management organization, and describes the City's overall responsibilities for protecting life and property during an emergency. The Emergency Plan also identifies possible sources of outside support (through mutual aid and specific statutory authorities) from other jurisdictions, and the private sector.

Sacramento County Multi-Hazard Mitigation Plan

The Sacramento County Multi-Hazard Mitigation Plan aims to reduce or eliminate long term risk to people or property from natural disasters, including flood and seismic events.

Sacramento City Code

Chapter 15.88 Grading and Erosion and Sediment Control

The City's grading ordinance is enacted for the purpose of regulating grading on property within the City to safeguard life, limb, health, property and the public welfare; to avoid pollution of watercourses with nutrients, sediments, or other materials generated or caused by surface water runoff from construction sites; to comply with the City's National Pollutant Discharge Elimination System (NPDES) Permit issued by the Regional Water Quality Control Board (RWQCB); and to ensure that the graded site within the City limits complies with all applicable City ordinances and regulations. The grading ordinance is intended to control all aspects of grading operations within the City.

Chapter 17.720 Surface Mining and Reclamation

This chapter provides effective and comprehensive surface mining and reclamation policies and regulations to properly carry out the requirements of Surface Mining and Reclamation Act (SMARA), and other applicable regulations to ensure that: adverse environmental and other effects of surface mining operations will be prevented or minimized and that the reclamation of mined lands will provide for the beneficial, sustainable, long-term productive use of the mined and reclaimed lands; and the production and conservation of minerals will be encouraged, while eliminating hazards to public health and safety and avoiding or minimizing adverse effects on the environment.

Department of Utilities

The City of Sacramento Department of Utilities (DOU) maintains policies and guidelines regarding grading, erosion control, stormwater drainage design, inspection, and permitting with responsibility for Grading Permits and Construction Permits.

Building Permit - Site-Specific Geotechnical Investigation

A site-specific geotechnical investigation is required prior to construction. The geotechnical evaluation must provide grading and design recommendations to address slope, channel-wall, and foundation instability; groundwater level and need for dewatering; erosion control; expansive soils; and differential settlement. The investigation must evaluate the soil types, test for shrink-swell potential, and determine preliminary load-bearing and strength characteristics. The geotechnical evaluation must be provided to the City as part of the City's building permit process. The City must review the geotechnical report along with Project design to confirm that the recommendations in the geotechnical report are reflected in Project design.

Environmental Setting

Regional Geology

The proposed Project site is located within the geomorphic province of the Great Valley of California, which is characterized by a flat alluvial plain that is approximately 50 miles wide and 400 miles long. This region is within the Sacramento Valley which is drained by the Sacramento River and the San Joaquin Valley which is drained by the San Joaquin River. The mountain regions surrounding the Great Valley include the Sierra Nevada to the East, Tehachapi Mountains to the South, the Coastal Range to the West, and Cascade Range to the North. The region is considered to be relatively flat with gradual slopes ranging from sea level to 75 feet amsl (Sacramento 2009).

Local Geology

Project Site Soils

Prior to construction a site-specific geotechnical report would be prepared for the Project area to discuss the basic soil condition of the area in order to identify the specific soil properties of the Project corridor. The results of the Natural Resource Conservation Service (NRCS) Web Soil Survey were therefore used to identify the broader Project area soils that have the potential to occur in the region.

Based on the United States Department of Agriculture's (USDA) NRCS Web Soil Survey for Sacramento, the Project site is composed of a variety of Holocene-age imported fill materials consisting mostly of well-drained coarse-loamy soils that have a low to moderate expansion potential. The Riverbank Formation is present at depths of 60-70 feet or more below the ground surface (Fugro William Lettis & Associates, Inc. 2015).

Ground Failure, Liquefaction, and Landslides

Soil liquefaction occurs when ground shaking from an earthquake causes a sediment layer saturated with groundwater to lose strength and take on the characteristics of a fluid, thus becoming similar to quicksand. Factors determining the liquefaction potential are soil type, the level and duration of seismic ground motions, the type and consistency of soils, and the depth to groundwater. Loose sands and peat deposits, along with recent Holocene age deposits, are more susceptible to liquefaction, while older deposits of clayey silts, silty clays, and clays deposited in freshwater environments are generally stable under the influence of seismic ground shaking. The Project site consists of well drained, coarse-loamy soils that have a low potential for liquefaction or ground failure to occur. However, the relatively shallow groundwater table and ground shaking that could occur from the surrounding earthquakes could increase the liquefaction potential in the Project area. Key design standards would be implemented in order to reduce the liquefaction potential and ensure structure stability.

Landslides occur most frequently during or following large storms or earthquakes. Landslides are most likely to take place in areas where they have previously occurred. According to the CGS Landslide Map, there are no potential areas for landslides or liquefaction within the proposed Project area (CGS 2015).

Seismic Activity

No seismic hazard zones have been recorded in the proposed Project area under the Seismic Hazard Mapping Act. Additionally, there are no known faults that occur within or adjacent to the City of Sacramento. The nearest fault is the Bear Mountains Fault, located approximately 26 miles east of the Project area, and the nearest active fault is the Green Valley Fault located approximately 42 miles south west.

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to geology and soils. When an impact is determined to be potentially significant, mitigation measures have been identified that would reduce or avoid that impact.

Methodology for Analysis

Using the City of Sacramento 2035 General plan, the NRCS Web Soil Survey, CGS regulatory maps, and the CEQA Checklist for guidance, the following thresholds of significance for evaluating potential impacts were established. These thresholds are evaluated in Section 3.5.3.2 based on data reviewed from these sources to determine whether potential geology and soils impacts from the proposed Project baseline setting (Sections 3.5.1 and 3.5.2) would be significant.

A potential impact would be significant if the proposed Project would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
 - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault or strong seismic ground shaking;
 - Seismic-related ground failure, including liquefaction; or,
 - Landslides.
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Be located on expansive soil, as (previously) defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property; or,
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact GEO-1: Potential to expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:

- **Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the state geologist for the area or based on other substantial evidence of a known fault as defined by the Division of Mines and Geology Special Publication 42;**
- **Strong seismic ground shaking;**
- **Seismic-related ground failure, including liquefaction; or,**
- **Landslides.**

The Project area is located approximately 42 miles northeast of the nearest active fault and is not within an Alquist-Priolo Earthquake Fault Zone. Therefore, the change of fault rupture within the Project area is very low. Since previously identified fault lines are not within or near the Project site, the potential of fault rupture is negligible within the Project site, but in the event of an earthquake on a nearby fault, the Project site could experience ground shaking.

General Plan Goal EC 1.1 and Policies 1.1.1 to 1.1.3 would ensure that lives and property within the Project area protected from seismic hazards. These policies include regular review and enforcement of seismic and geologic safety standards, and geotechnical investigations to determine potential for hazards such as ground rupture, ground shaking, and liquefaction due to seismic events, as well as expansive soils and subsidence problems on sites where these hazards may be present. This impact is within the scope of the General Plan and was analyzed in the Master EIR. By complying with the General Plan

policies and City Code, the proposed Project would have a less-than-significant impact on exposing life and property to seismic hazards. While the northern portion of the Project adjacent to Darnell Way will encroach on the eastern slope of the levee, the trail will be designed in compliance with Department of Water Resources (DWR) urban levee design criteria and USACE engineering requirements to prevent potential levee failure. Impacts related to the possibility of landslides would be less than significant.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact GEO-2: Potential to result in substantial soil erosion or the loss of topsoil.

Due to the relatively flat nature of the Project area, substantial soil loss from stormwater runoff is not anticipated; however, the proposed Project would include the excavation and movement of large quantities of soil which could result in the loss of topsoil if not properly handled. Temporary stockpiles of soil have the potential to result in loss of top soil during construction when soils are exposed and being transported, however, all Projects in the City are required to comply with the City's Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control (City of Sacramento DOU 2013). These procedures include requirements for obtaining a grading permit and general design standards as well as BMPs for construction related grading and drainage activities. **BIO-5** would incorporate the principals outlined in these procedures in an Erosion Control Plan for the City and the Contractor to follow which would minimize the potential erosion and loss of topsoil from the proposed Project construction activities. The Erosion Control Plan would include requirements from the NPDES Permit related to stormwater, erosion, and sediment control. Therefore, construction related erosion and loss of top soils would be considered less than significant.

Once constructed, all topsoil exposed as a part of the proposed Project would be revegetated. As such, the potential for substantial erosion would be limited since the site would be revegetated. In addition, and site grading would be designed for adequate drainage which would reduce the potential for water flowing or ponding in unintended areas, thus limiting exposed soils that could be subject to erosion. Therefore, operational impacts from the proposed Project related to erosion and loss of top soil would be considered less than significant.

Level of Significance: Less than Significant with Mitigation Incorporated

Mitigation Required: BIO-5

Impact GEO-3: Potential to be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the Project, and potentially result in on or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

As discussed above, the potential for ground shaking in the Project area is considered low and it is not expected that soil issues resulting from interaction with groundwater from the groundwater table or seismic related ground failure would occur. The Project area consists mostly of well-drained coarse-loamy soils that have a low to moderate expansion potential not known to be unstable. Therefore, landslides, lateral spreading, subsidence, liquefaction or collapse in the Project area during construction or the operation of the proposed Project is not expected. Therefore, impacts would be considered less than significant.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact GEO-4: Potential to be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

Expansive or collapsible soils are characterized by the ability to undergo significant volume change (shrink and swell) as a result of variation in soil moisture content. Expansive soils are commonly very fine-grained with a high to very high percentage of 2:1 clays (NRCS 1993). Soil moisture content can change due to many factors, including perched groundwater, landscape irrigation, rainfall, and utility leakage. Engineering standards govern expansion potential evaluations and the Expansion Index (UBC Table 18-I-B) is calculated pursuant to the UBC Test Standard 18-1 (ASTM D-4829) in the 1994 UBC. Section 1803.2 of the 1994 Uniform Building Code directs expansive soil tendency be graded by this method. The UBC mandates that “special [foundation] design consideration” be employed if the Expansion Index is 20, or greater (UBC Table 18-1-B).

The proposed Project is not known to occur in an area with soils that have high clay content. The soils in the Project area consist mostly of well-drained coarse-loamy soils and have a low to moderate expansion potential. A site-specific geotechnical investigation and report to determine soil classification would be conducted during final design. This report would help determine if the site is located on an expansive soil type and the feasibility of constructing the proposed Project. Therefore, the impact associated with expansive soils in conjuncture with the proposed Project would be less than significant.

Level of Significance: Less than Significant

Mitigation Required: None

Impact GEO-5: Potential to have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of wastewater.

The proposed Project would construct a multi-use trail along the abandoned railway corridor west of Freeport Boulevard from south of Meadowview Road/Pocket Road to the Sacramento River Parkway north of Sutterville Road. The Project does not consist of additional structures or facilities that would require the use of septic tanks or alternative waste water disposal systems. The proposed Project is consistent with the General Plan roadway designations and zoning for the Project site and would not create a demand for new utility facilities during construction or operation. No impact would occur to developing septic tanks or alternative wastewater disposal systems.

Level of Significance: No Impact

Mitigation Required: None Required

Mitigation Measures

See BIO-5 in Section 2.3.

2.6 GREENHOUSE GAS EMISSIONS

This section describes the environmental and regulatory setting for greenhouse gas (GHG) emissions. It also describes impacts on GHG emissions that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

Federal

Over the past decade, a number of applicable federal requirements have been developed. The following are actions regarding the federal government, GHGs, and fuel efficiency.

Greenhouse Gas Endangerment. In *Massachusetts v. Environmental Protection Agency (EPA)* (Supreme Court Case 05-1120), decided on April 2, 2007, the Supreme Court found that four GHGs, including carbon dioxide (CO₂), are air pollutants subject to regulation under Section 202(a)(1) of the Clean Air Act (CAA) and that the Administrator must determine whether emissions of GHGs from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding GHGs under section 202(a) of the CAA:

- **Endangerment Finding:** The Administrator finds that the current and Projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations.
- **Cause or Contribute Finding:** The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing GHG emissions standards for vehicles, as discussed in the section “Clean Vehicles” below. After a lengthy legal challenge, the U.S. Supreme Court declined to review an Appeals Court ruling that upheld the EPA Administrator findings (EPA 2009b).

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On May 7, 2010, the EPA and the Department of Transportation’s National Highway Safety Administration announced a joint final rule establishing a national program that would reduce GHG emissions and improve fuel economy for new cars and trucks sold in the United States. A petition for writ of certiorari to the United States Court of Appeals for the District of Columbia Circuit was denied by the Supreme Court on October 15, 2013.

The first phase of the national program applies to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards would cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and the National Highway Safety Administration issued final rules on a second-phase joint rulemaking establishing national standards for light-duty vehicles for model years 2017 through 2025 in August 2012 (EPA 2012c). The new standards for model years 2017 through 2025 apply to passenger cars, light-duty trucks, and medium duty passenger vehicles. The final standards are Projected to result in an average industry fleetwide level of 163 grams per mile of CO₂ in

model year 2025, which is equivalent to 54.5 miles per gallon (mpg) if achieved exclusively through fuel economy improvements.

The EPA and the U.S. Department of Transportation issued final rules for the first national standards to reduce GHG emissions and improve fuel efficiency of heavy-duty trucks and buses on September 15, 2011, effective November 14, 2011. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and a 15 percent reduction for diesel vehicles by 2018 model year (12 and 17 percent respectively if accounting for air conditioning leakage). Lastly, for vocational vehicles, the engine and vehicle standards would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions from the 2014 to 2018 model years.

Mandatory Reporting of Greenhouse Gases. The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases Rule, which became effective January 1, 2010. The rule requires reporting of GHG emissions from large sources and suppliers in the United States, and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to the EPA.

New Source Review. The EPA issued a final rule on May 13, 2010 that establishes thresholds for GHGs that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. This final rule “tailors” the requirements of these CAA permitting programs to limit which facilities would be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the federal code of regulations, EPA states:

This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to greenhouse gas sources, starting with the largest greenhouse gas emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources, but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for greenhouse gas emissions until at least April 30, 2016.

The EPA estimates that facilities responsible for nearly 70 percent of the national GHG emissions from stationary sources would be subject to permitting requirements under this rule. This includes the nation’s largest GHG emitters—power plants, refineries, and cement production facilities.

Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources: Electric Utility Generating Units. As required by a settlement agreement, the EPA proposed new performance standards for emissions of carbon dioxide for new affected fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts would be required to meet an output-based standard of 1,000 pounds of carbon dioxide per megawatt-hour, based on the performance of widely used natural gas combined cycle technology.

Cap and Trade. Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. Successful examples in the United States include the Acid Rain Program and the NOx Budget Trading Program in the northeast. There is no

federal cap and trade program currently; however, some states have joined to create initiatives to provide a mechanism for cap and trade.

State

Legislative Actions to Reduce GHGs

The State of California legislature has enacted a series of bills that constitute the most aggressive program to reduce GHGs of any state in the nation. Some legislation such as the landmark AB 32 California Global Warming Solutions Act of 2006 was specifically enacted to address GHG emissions. Other legislation such as Title 24 and Title 20 energy standards were originally adopted for other purposes such as energy and water conservation, but also provide GHG reductions. This section describes the major provisions of the legislation.

Assembly Bill 32. The California State Legislature enacted Assembly Bill 32 (AB 32), the California Global Warming Solutions Act of 2006. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. “Greenhouse gases” as defined under AB 32 include carbon dioxide, methane, NO_x, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Since AB 32 was enacted, a seventh chemical, nitrogen trifluoride, has also been added to the list of GHGs. The California Air Resources Board (CARB) is the state agency charged with monitoring and regulating sources of GHGs. AB 32 states the following:

“Global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse impacts of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snowpack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.”

The CARB approved the 1990 GHG emissions level of 427 million metric tons of carbon dioxide equivalents (MMT CO₂e) on December 6, 2007 (CARB 2008a). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMT CO₂e. The CARB approved the 1990 GHG emissions level of 427 million metric tons of carbon dioxide equivalents (MMT CO₂e) on December 6, 2007 (CARB 2008a). Therefore, emissions generated in California in 2020 are required to be equal to or less than 427 MMT CO₂e. Emissions in 2020 in a “Business-as-Usual” (BAU) scenario, which do not account for reductions from AB 32 regulations (CARB 2008a). At that level, a 28 percent reduction was required to achieve the 427 MMT CO₂e 1990 inventory. In October 2010, CARB prepared an updated 2020 forecast to account for the recession and slower forecasted growth. The forecasted inventory without the benefits of adopted regulation is now estimated at 545 MMT CO₂e. Therefore, under the updated forecast, a 21.7 percent reduction from BAU is required to achieve 1990 levels (CARB 2010).

Progress in Achieving AB 32 Targets and Remaining Reductions Required

The State has made steady progress in implementing AB 32 and achieving targets included in Executive Order S-3-05. The CARB also prepared updated emission inventories for 2000 through 2011 to show progress achieved to date (CARB 2013). Executive Order S-3-05 includes a target for 2010 of reducing GHG emissions to 2000 levels. As shown below, the 2010 emission inventory achieved this target. Also shown are the average reductions needed from all statewide sources (including all existing sources) to reduce GHG emissions back to 1990 levels.

- 1990: 427 MMT CO₂e (AB 32 2020 Target)
- 2000: 463 MMT CO₂e (an average 8 percent reduction needed to achieve 1990 base)
- 2010: 450 MMT CO₂e (an average 5 percent reduction needed to achieve 1990 base)
- 2020: 545 MMT CO₂e BAU (an average 21.7 percent reduction from BAU needed to achieve 1990 base)

CARB Scoping Plan. The CARB's Climate Change Scoping Plan (Scoping Plan) contains measures designed to reduce the State's emissions to 1990 levels by the year 2020 to comply with AB 32 (CARB 2008b). The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards;
- Achieving a statewide renewables energy mix of 33 percent;
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system;
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets;
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard; and
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation.

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. Capped strategies are subject to the proposed cap-and-trade program. The Scoping Plan states that the inclusion of these emissions within the cap-and trade program would help ensure that the year 2020 emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. Implementation of the capped strategies is calculated to achieve a sufficient amount of reductions by 2020 to achieve the emission target contained in AB 32. Uncapped strategies that would not be subject to the cap-and-trade emissions caps and requirements are provided as a margin of safety by accounting for additional GHG emission reductions.

The CARB approved the First Update to the Scoping Plan (Update) on May 22, 2014. The Update identifies the next steps for California's climate change strategy. The Update shows how California continues on its path to meet the near-term 2020 GHG limit, but also sets a path toward long-term, deep GHG emission reductions. The report establishes a broad framework for continued emission reductions beyond 2020, on the path to 80 percent below 1990 levels by 2050. The Update identifies progress made to meet the near-term objectives of AB 32 and defines California's climate change priorities and activities Climate for the next several years. The Update does not set new targets for the State, but describes a path that would achieve the long term 2050 goal of Executive Order S-05-03 for emissions to decline to 80 percent below 1990 levels by 2050 (CARB 2014).

The CARB has no legislative mandate to set a target beyond the 2020 target from AB 32 or to adopt additional regulations to achieve a post-2020 target. The Update estimates that reductions averaging 5.2 percent per year would be required after 2020 to achieve the 2050 goal. With no estimate of future reduction commitments from the State, identifying a feasible strategy including plans and measures to be adopted by local agencies is not currently possible.

Senate Bill 32

On September 8, 2016, Senate Bill 32 (SB 32) was signed by Governor Brown, this bill would require the state board to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2030.

Executive Orders Related to GHG Emissions

California's Executive Branch has taken several actions to reduce GHGs through the use of Executive Orders. Although not regulatory, they set the tone for the state and guide the actions of state agencies.

Executive Order S-13-08. Executive Order S-13-08 states that “climate change in California during the next century is expected to shift precipitation patterns, accelerate sea level rise and increase temperatures, thereby posing a serious threat to California’s economy, to the health and welfare of its population and to its natural resources.” Pursuant to the requirements in the order, the 2009 California Climate Adaptation Strategy (California Natural Resources Agency 2009) was adopted, which is the first statewide, multi-sector, region-specific, and information-based climate change adaptation strategy in the United States. Objectives include analyzing risks of climate change in California, identifying and exploring strategies to adapt to climate change, and specifying a direction for future research.

Executive Order S-3-05. Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S 3-05, the following reduction targets for GHG emissions:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The 2050 reduction goal represents what some scientists believe is necessary to reach levels that would stabilize the climate. The 2020 goal was established to be a mid-term target. Because this is an executive order, the goals are not legally enforceable for local governments or the private sector.

Executive Order B-30-15s. Governor Jerry Brown signed Executive Order B-30-15s on April 29, 2015. The following are major provisions of the Executive Order:

1. A new interim statewide greenhouse gas emission reduction target to reduce greenhouse gas emissions to 40 percent below 1990 levels by 2030 is established in order to ensure California meets its target of reducing greenhouse gas emissions to 80 percent below 1990 levels by 2050.
2. All state agencies with jurisdiction over sources of greenhouse gas emissions shall implement measures, pursuant to statutory authority, to achieve reductions of greenhouse gas emissions to meet the 2030 and 2050 greenhouse gas emissions reductions targets.
3. The California Air Resources Board shall update the Climate Change Scoping Plan to express the 2030 target in terms of MMT CO₂e.

The executive order does not apply directly to cities, counties, and special use districts such as EID, but would lead to the preparation of a new CARB Scoping Plan and the development of regulations to achieve post-2020 reduction targets.

Executive Order S-01-07 - Low Carbon Fuel Standard. The Governor signed Executive Order S 01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California’s transportation fuels by at least 10 percent by 2020. In particular, the executive order established a Low Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission, the CARB, the University of California, and other agencies to develop and propose protocols for measuring the “life-cycle carbon intensity” of transportation fuels. This analysis supporting development of the protocols was included in the State Implementation Plan for alternative fuels (State Alternative Fuels Plan adopted by California Energy Commission on December 24, 2007) and was submitted to CARB for consideration as an “early action” item under AB 32. The CARB adopted the Low Carbon Fuel Standard on April 23, 2009. The Low Carbon Fuel Standard was challenged in the United States District Court in Fresno in 2011. The court’s ruling issued on December 29, 2011 included a preliminary injunction against CARB’s implementation of the rule. The Ninth Circuit Court of Appeals reversed the decision of the District Court in September 2013 and denied a petition to rehear a challenge on January 22, 2014. The Renewable Fuels Association and Growth Energy filed a petition to the US Supreme Court on March 20, 2014 challenging the Court of Appeals decision. On June 30, 2014, the U.S. Supreme Court announced that it would not review the constitutionality of the California Low Carbon Fuel Standard (LCFS).

To address the Court ruling, CARB was required to bring a new LCFS regulation to the Board for consideration in February 2015. The proposed LCFS regulation was required to contain revisions to the

2010 LCFS as well as new provisions designed to foster investments in the production of the low-CI fuels, offer additional flexibility to regulated parties, update critical technical information, simplify and streamline program operations, and enhance enforcement. The public hearing for the new LCFS regulation was held on February 19, 2015. The Final Approval and Office of Administrative Law action was not yet posted as of April 29, 2015 (CARB 2015).

Local

Sacramento Area Council of Governments Sustainable Communities Strategy

In April 2012, Sacramento Area Council of Governments (SACOG), the designated Metropolitan Planning Organization (MPO) for the Sacramento region, adopted a Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS) (SACOG 2012). Building on prior plans including the Blueprint Growth Strategy discussed below and the 2008 MTP, the SCS accommodates future growth through a more compact land use pattern largely within the region's current development footprint, emphasizes operational improvements over new roadway capacity Projects, and reflects other factors that have tended to reduce motor vehicle use. The SCS demonstrates that, if implemented, the region will achieve a 9 percent per capita GHG reduction in passenger vehicle emissions in 2020 and a 16 percent reduction in 2035. These reductions meet the targets for SACOG of 7 percent and 16 percent per capita GHG reduction from 2005 for the years 2020 and 2035, respectively, established by CARB. In June 2012, CARB issued an Acceptance of GHG Quantification Determination for the SACOG SCS, indicating that CARB concurs with SACOG's quantification of GHG emission reductions from the final MTP/SCS and its determination that the SCS would achieve the 2020 and 2035 targets established by CARB.

City of Sacramento 2035 General Plan

Policy ER 6.1.5 Community Greenhouse Gas Reductions. The City shall reduce community GHG emissions by 15 percent below 2005 baseline levels by 2020, and strive to reduce community emissions by 49 percent and 83 percent by 2035 and 2050, respectively.

ER 6.1.6 Municipal Greenhouse Gas Reductions. The City shall maintain and implement its Phase 1 Climate Action Plan to reduce municipal GHG emissions by 22 percent below 2005 baseline level by 2020, and strive to reduce municipal emissions by 49 percent and 83 percent by 2035 and 2050, respectively.

Policy ER 6.1.8 Additional GHG Emission Programs. The City shall continue to evaluate the feasibility and effectiveness of new policies, programs, and regulations that contribute to achieving the City's long-term GHG emissions reduction goals.

Policy ER 6.1.9 Climate Change Assessment and Monitoring. The City shall continue to assess and monitor performance of GHG emissions reduction efforts beyond 2020, progress toward meeting long-term GHG emission reduction goals, the effects of climate change, and the levels of risk in order to plan a community that can adapt to changing climate conditions and be resilient to negative changes and impacts.

City of Sacramento Climate Action Plan

In order to directly address the issue of climate change and GHG emissions, the City of Sacramento adopted its Climate Action Plan (CAP) on February 14, 2012. Then as part of the General Plan update process, the CAP was incorporated into the 2035 City of Sacramento General Plan. The City additionally, adopted in 2016, a CAP for Internal Operations for City facilities. The CAP describes GHG emissions from uses and activities within the City and establishes policies, actions, and implementation measures to reduce existing and future GHG emissions. As part of the CAP development process, a baseline GHG emissions inventory for the year 2005 was created that determined the City of Sacramento generated approximately 4.1 MMT CO₂e in 2005. The CAP also established a GHG emissions reduction target of 15 percent below 2005 levels by the year 2020 and GHG reduction goals of 38 percent below 2005 levels by the year 2030 and 83 percent below 2005 levels by the year 2050. The City intends to use the CAP to streamline CEQA review for Projects that are determined to be consistent with the CAP, pursuant to Section 15183.5 of the State CEQA Guidelines.

Environmental Setting

GHG and climate change are a cumulative global issue. CARB and the United States Environmental Protection Agency (USEPA) regulate GHG emissions within the State of California and the United States, respectively. While the CARB has the primary regulatory responsibility within California for GHG emissions, local agencies can also adopt policies for GHG emission reduction.

Many chemical compounds found in the Earth's atmosphere act as GHGs, which allow sunlight to enter the atmosphere freely. When sunlight strikes the Earth's surface, some of it is reflected back towards space as infrared radiation (heat). GHGs absorb this infrared radiation and trap the heat in the atmosphere. Over time, the amount of energy sent from the sun to the Earth's surface should be about the same as the amount of energy radiated back into space, leaving the temperature of the Earth's surface roughly constant. Many gases exhibit these "greenhouse" properties. Some of them occur in nature (water vapor, carbon dioxide, methane, and nitrous oxide), while others are exclusively human-made (like gases used for aerosols).

The principal climate change gases resulting from human activity that enter and accumulate in the atmosphere are listed below:

Carbon Dioxide (CO₂): CO₂ enters the atmosphere through the burning of fossil fuels (oil, natural gas, and coal), solid waste, trees and wood products, and chemical reactions (e.g., manufacture of cement). CO₂ is also removed from the atmosphere (or "sequestered") when it is absorbed by plants as part of the biological carbon cycle.

Methane (CH₄): CH₄ is emitted during the production and transport of coal, natural gas, and oil. CH₄ emissions also result from livestock and agricultural practices and the decay of organic waste in municipal solid waste landfills.

Nitrous Oxide (N₂O): N₂O is emitted during agricultural and industrial activities as well as during combustion of fossil fuels and solid waste.

Fluorinated Gases: Hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆) are synthetic, powerful climate-change gases that are emitted from a variety of industrial processes. Fluorinated gases are often used as substitutes for ozone-depleting substances (i.e., chlorofluorocarbons, hydrochloric fluorocarbons, and halons). These gases are typically emitted in smaller quantities, but because they are potent climate-change gases, they are sometimes referred to as high Global Warming Potential (GWP) gases.

Global Warming Potential

Global Warming Potential (GWP) serves as the quantified measure of the relative effectiveness of a gas to absorb infrared radiation, remain in the atmosphere, and contribute towards global warming. CO₂, the most abundant GHG, serves as the reference gas for the GWP, with a GWP of 1.16. The GWPs used by the Bay Area Air Quality Management District (BAAQMD) are shown in Table 11, where CH₄ is 21 times more potent at contributing to global warming than CO₂, while SF₆ is 23,900 times more potent. Thus, CO₂ is used as the reference GHG for all GHGs. GHG emissions, which consider all GHGs, can also be presented as CO₂ equivalent (CO₂e). The CO₂e measure takes into consideration all of the GHGs, as measured by the applicable GWP.

Table 11. Global Warming Potential for Greenhouse Gases

Greenhouse Gas	Relative GWP (GWP of CO₂=1)
CO ₂	1
CH ₄	21
NO _x	310
HFCs and PFCs	9,090-11,700
SF ₆	23,900

Source: BAAQMD 2010

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts from GHG emissions. When an impact is determined to be significant, mitigation measures were identified that would reduce or avoid that impact.

Methodology of Analysis

Using the Sacramento Metropolitan Air Quality Management District (SMAQMD) Guide to Air Quality screening thresholds for significance for CO₂e (SMAQMD 2009), applicable air quality rules and regulations, and the CEQA Environmental Checklist for guidance, the following thresholds of significance for evaluating potential impacts were established. These thresholds are compared with project-specific quantifications to determine whether potential air quality impacts from the proposed Project would be significant. A potential impact would be significant if the proposed Project would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment;
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing GHG emissions.

To quantify the predicted GHG emissions from the proposed Project, CO₂ emissions from construction and operation of a Project were modeled using the Road Construction Emissions Model, Version 8.1.0.

To meet targets established by AB 32, California must reduce current GHG emissions and achieve 1990 emissions levels of 427 MMT CO₂e by 2020. The 2020 BAU emissions baseline used in the 2008 Scoping Plan was 596 MMT CO₂e. On September 8, 2016, SB 32 was approved by California State Governor Jerry Brown, this bill would require the CARB to ensure that statewide GHG emissions are reduced to 40 percent below the 1990 level by 2020.

Due to the global implications of climate change, it is difficult to determine the impacts of a relatively small contribution to GHG emission from an individual project. There is no simple metric that can determine if a project would impact cumulative GHG emission levels or conflict with the goals of AB 32. It is possible to estimate a project's localized GHG emissions, but it is difficult to determine how those emissions would translate into physical impacts to the environment. For this analysis, predicted proposed Project GHG emissions were compared to AB 32 Scoping plan action measures and the SMAQMD Guidance GHG threshold for land use Projects of 1,100 metric tons CO₂e/year (for construction GHG emissions).

The SMAQMD has established GHG emission thresholds for construction phase, operational phase, and stationary source Projects. SMAQMD emissions significance thresholds consider any construction phase of a Project emitting over 1,100 metric tons/year of CO₂e would be considered significant (SMAQMD 2009a).

GHG emissions associated with the proposed Project were estimated using CO₂e emissions as a proxy for all GHG emissions. This is consistent with the current reporting protocol of the California Climate

Action Registry (CCAR). According to CalEEMod, all GHGs are reported in CO₂e. In order to obtain the CO₂e, an individual GHG is multiplied by its GWP. The GWP designates on a pound for pound basis the potency of the GHG compared to CO₂. CalEEMod uses GWP from the Intergovernmental Panel on Climate Change (IPCC) Second Assessment Report (SAR). GWPs from the SAR were selected instead of more recent GWPs since it is the basis used in regulations and international protocols at this time (e.g., California and Federal GHG Reporting Programs, The Climate Registry).

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact GHG-1: Potential to generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.

Short-Term Construction Emissions

During construction of the proposed Project, GHG emissions would be emitted from the operation of construction equipment and from worker supply vendor vehicles. Road Construction Emissions modeling was conducted to estimate the total CO₂ emissions generated by the construction of the Project. The total CO₂ emissions would be 8,988.16 pounds per day during the construction of the Project. The results of the modeling for CO₂ are in Appendix D.

Long-Term Construction Emissions

Because the proposed Project consists of constructing a recreational multi-use trail, and does not increase capacity of a roadway, there are no long-term operational activities associated with the Project. The Project would not lead to changes in vehicular operations and associated emissions. While there may be maintenance visits to the Project site, these visits are expected to be infrequent, and occur for emergency repair or for repaving, which occurs after the lifetime of the installed pavement has been reached. Additionally, the Project would provide a long-term benefit by providing additionally trail connectivity throughout the corridor that supports alternative modes of transportation which helps to reduce CO₂ emissions. Long term operational emissions are thus expected to be negligible.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact GHG-2: Potential to conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

The proposed Project must comply with the 2035 General Plan policies and measures for the reduction of GHGs to comply with the 2035 MTP and AB 32. Because the proposed Project consists of installing a multi-use trail for recreational purposes, and is not traffic increasing, the proposed Project would comply with the 2035 MTP. AB 32 requires an approximate 29 percent reduction from existing emissions on a statewide level in order to achieve the goal of reducing GHG emissions to 1990 levels by 2030. In order for this to occur, the existing and future operations of the City, as well as individual land uses, must reduce their emissions accordingly. The Master EIR for the 2035 General Plan allows for periodic maintenance on recreational facilities, such as the proposed Del Rio Trail Project, therefore the GHG emissions increase that would occur with implementation of the Project has been accounted for in the General Plan. The Project would not impede the City's efforts to comply with AB 32 requirements. Therefore, the Projects cumulative impacts related to construction and operation of the proposed Project conflicting with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions would be less than significant. The Project would not have any significant additional environmental effects relating to GHG emissions or climate change.

Level of Significance: Less than Significant

Mitigation Required: None Required

Mitigation Measures

No mitigation required.

2.7 HAZARDS AND HAZARDOUS MATERIALS

This section describes the environmental and regulatory setting for hazards and hazardous materials. It also describes the existing conditions and potential impacts on hazards and hazardous materials that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

Federal

Hazardous Material Management

Resources Conservation and Recovery Act

The Resources Conservation and Recovery Act (RCRA) set up the federal regulatory program for hazardous substances and gives the United States Environmental Protection Agency (USEPA) the authority to regulate the generation, transport, treatment, and disposal of hazardous substances in a “cradle to grave” system. Under the RCRA, USEPA regulates the generation, transportation, treatment, storage, and disposal of hazardous substances. This regulatory system includes tracking all generators of hazardous waste.

1984 Hazardous and Solid Waste Amendment Act

RCRA was amended by the 1984 Hazardous and Solid Waste Amendment Act, which prohibited the use of certain techniques for the disposal of certain hazardous wastes (USEPA 2016a). The Emergency Planning and Community Right-to-Know Act of 1986 imposes safety requirements to protect local communities in the event of accidental release of hazardous substances. The requirements provide measures so that the risks from interaction with hazardous materials, such as handling, storage, and disposal, are mitigated or prevented. This law protects human health and the environment if the unintended release of hazardous materials was to occur (USEPA 2016b). USEPA has delegated fulfillment of many of the RCRA’s requirements to the California Department of Toxic Substances Control (DTSC).

Clean Air Act

Regulations under the Clean Air Act (CAA) (42 USC 7401 et seq. as amended) are designed to prevent accidental releases of hazardous materials. The regulations require facilities that store a threshold quantity or greater of listed regulated substances to develop a risk management plan, including hazard assessments and response programs to prevent accidental releases of listed chemicals.

Hazardous Materials Transportation

Hazardous Materials Transportation Act

The transport of hazardous materials is regulated by the United States Department of Transportation (Caltrans) under Hazardous Materials Transportation Act (HMTA). To accomplish this, the Federal Aviation Administration, Federal Motor Carrier Safety Administration, Federal Railway Administration, Pipeline and Hazardous Materials Safety Administration, and the U.S. Coast Guard have been given authority to enforce hazardous material transport regulations.

Worker Safety

Occupational Safety and Health Administration

The Occupational Safety and Health Act of 1970 created the Occupational Safety and Health Administration (OSHA), which is responsible for protecting the health of workers, such as during the handling of hazardous materials. OSHA has created regulation to set federal standards of workplace safety including exposure limits, mandatory workplace training, accident and injury reporting, and safety procedures. These regulations are recorded in the CFR Title 29 (GPO 2016).

State

Hazardous Material Management

Hazards Waste Control Act

The Hazardous Waste Control Act created the State hazardous waste management program. The act is implemented by regulations contained in Title 26 of the CCR, which describes the following required aspects for the proper management of hazardous waste: identification and classification; generation and transportation; design and permitting of recycling treatment, storage and disposal facilities; operation of facilities and staff training; and closure of facilities and liability requirements.

These regulations list more than 800 materials that may be hazardous and establish criteria for identifying, packaging, and disposing of such waste. Under the Hazardous Waste Control Act and Title 26, the generator of hazardous waste must complete a manifest that accompanies the waste from generator to transporter to the ultimate disposal location. Copies of the manifest must be filed with the DTSC.

California Environmental Protection Agency

The California EPA (CAL EPA) is responsible for creating and enforcing environmental regulations within California. Within CAL EPA is the DTSC, which was formed under the Hazardous Waste Control Act. The DTSC is responsible for regulating hazardous waste, remediating existing contamination, and identifying ways to reduce production of hazardous wastes. DTSC can delegate enforcement responsibilities to local jurisdictions.

Unified Program

The unified hazardous waste and hazardous materials management regulatory program (Unified Program) is a unified hazardous materials management program that was established by California's Secretary for Environmental Protection following Senate Bill 1082 (1993). The Unified Program consolidates, coordinates, and makes consistent the administrative requirements, permits, inspections, and enforcement activities of the following programs:

- Hazardous Materials Release Response Plans and Inventories
- California Accidental Release Prevention Program
- Underground Storage Tank Program
- Above Ground Petroleum Storage Act Program
- Hazardous Waste Generator and Onsite Hazardous Waste Treatment Programs
- California Uniform Fire Code: Hazardous Material Management Plans and Hazardous Material Inventory Statements

These six environmental programs are implemented at the local government level by Certified Unified Program Agencies (CUPAs). CUPAs provide a central permitting and regulatory agency for permits, reporting, and compliance enforcement. California Public Resources Code Section 21151.4 sets special requirements for environmental impact reports and negative declarations for Projects that involve the construction or alteration of a facility within one-fourth of a mile of school that creates the following conditions:

- Might reasonably be anticipated to emit hazardous air emissions;
- Would handle an extremely hazardous substance or a mixture containing extremely hazardous substances in a quantity equal to or greater than the state threshold quantity specified in Section 25532(j) of the Health and Safety Code; or
- May pose a health or safety hazard to persons who would attend or would be employed at the school.

As part of the CEQA process, the lead agency preparing the EIR must consult with the appropriate school district regarding the potential impact of the Project on the school and the school district must be notified

about the Project in writing at least 30 days before the proposed certification of the EIR or adoption of the mitigated negative declaration (Public Resources Code section 21151.4; 14 California Code of Regulations Section 15186(b)).

Cortese List Government Code Section 65962

Government Code Section 65962 was enacted in 1985 and was amended in 1992. It is used as a planning document to comply with the CEQA and requires information about locations of hazardous materials release sites. It states that through the combined efforts of the DTSC, the Department of Health Service, the State Water Resources Control Board (SWRCB) and local enforcement agencies a list of potential hazardous areas and sites will be compiled and remain up to date (at a minimum annually updated). The list is consolidated by the Secretary for Environmental Protection and is distributed to each city and county which sites on the list are located. The list can be found on the DTSC's data management system known as EnviroStor, which includes information from the SWRCB GeoTracker database.

Worker Safety

Division of Occupational Safety and Health

The Division of Occupational Safety and Health (DOSH), also known as CalOSHA, is responsible for enforcing workplace safety regulations and requirements in California, including hazardous materials requirements recorded under CCR Title 8 (DIR 2016). These regulations include requirements for safety training, availability of safety equipment, accident and illness prevention programs, warnings about hazardous substance exposure (such as asbestos), and preparation of emergency action and fire prevention plans.

The DOSH also enforces hazard-communication program regulations that contain training and information requirements. Such requirements include procedures for identifying and labeling hazardous substances, communicating information about hazardous substances and their handling, and preparing health and safety plans to protect workers and employees at hazardous waste sites. Under the hazard-communication program, employers must make Material Safety Data Sheets available to employees and document employee information and training programs.

Emergency Response

California Emergency Services Act

The California Emergency Services Act provides the basic authority for conducting emergency operations following a proclamation of emergency by the governor and/or appropriate local authorities. Local government and district emergency plans are considered to be extensions of the California Emergency Plan, established in accordance with the Emergency Services Act.

The California Emergency Management Agency (CAL EMA) is the state agency responsible for establishing emergency response and spill notification plans related to hazardous materials accidents. CAL EMA regulates businesses by requiring specific businesses to prepare an inventory of hazardous materials (CCR Title 19). CAL EMA is also the lead state agency for emergency management and is responsible for coordinating the state-level response to emergencies and disasters.

Fire Protection

California state fire safety regulations apply to State Responsibility Areas (SRAs) during the time of year designated as having hazardous fire conditions. California Department of Forestry and Fire Protection (CAL FIRE) has developed a fire hazard severity scale that considers vegetation, climate, and slope to evaluate the level of wildfire hazard in all SRAs. A SRA is defined as the part of the state where CAL FIRE is primarily responsible for providing basic wildland fire protection assistance. Areas under the jurisdiction of other fire protection services are considered to be Local Responsibility Areas or on Federal lands are considered Federal Responsibility Areas.

During the fire hazard season, these regulations include: (a) restrict the use of equipment that may produce a spark, flame, or fire; (b) require the use of spark arrestors on any equipment that has an

internal combustion engine; (c) specify requirements for the safe use of gasoline-powered tools in fire hazard areas; and (d) specify fire suppression equipment that must be provided onsite for various types of work in fire-prone areas. CAL FIRE has primary responsibility for fire protection within SRAs.

Local

Sacramento County Environmental Management Department

The Sacramento County Environmental Management Department (SCEMD) is the CUPA for local implementation of the California Accidental Release Prevention (CAL ARP) and several other hazardous materials and hazardous waste programs. SCEMD is responsible for regulating hazardous materials business plans and chemical inventory, hazardous materials storage, hazardous materials management plans, and risk management plans. The hazardous materials business plan program requires businesses in Sacramento County to prepare business emergency response plans if hazardous materials storage equals or exceeds 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of gas. The goal of SCEMD is to protect human health and the environment by ensuring that hazardous materials and hazardous waste are properly managed.

The SCEMD distributes the information in the hazardous materials business plans and business emergency response plans to emergency response agencies, such as the Fire Department/Hazardous Materials Response Teams. In accordance with Health and Safety Code Chapter 6.95, Section 25500, the SCEMD prepared the Area Plan for Emergency Response to Hazardous Materials Incidents in Sacramento County (2012). The plan describes the responsibilities of local, state, and federal agencies during hazardous materials incidents.

The SCEMD is certified by California's Department of Resource Recycling and Recovery (CalRecycle) for Sacramento County. SCEMD permits and inspects solid waste facilities and enforces state laws pertaining to the storage, processing, and disposal of solid waste. The SCEMD also issues permits for the development and abandonment of groundwater wells, and with respect to the former 28th Street Landfill, the removal and relocation of the soil gas probes and groundwater monitoring wells.

Sacramento County Multi-Hazard Emergency Plan (2011)

The Sacramento County Multi-Hazard Emergency Plan (2011) plan is designed to be a comprehensive disaster preparedness program. The plan identifies goals, objectives, and measures for hazard mitigation and risk reduction for disasters such as earthquakes, flooding, dam or levee failure, hazardous material spills, epidemics, fires, extreme weather, major transportation accidents, and terrorism.

City of Sacramento 2035 General Plan

Applicable goals and policies of the City of Sacramento 2035 General Plan pertaining to Public Health and Safety (PHS) are presented below.

Goal PHS 2.1 Fire Protection and Emergency Medical Services. Provide coordinated fire protection and emergency medical services that support the needs of Sacramento residents and businesses and maintains a safe and healthy community.

Goal PHS 2.2 Fire Prevention Programs and Suppression. The City shall deliver fire prevention programs that protect the public through education, adequate inspection of existing development, and incorporation of fire safety features in new development.

Goal PHS 3.1 Reduce Exposure to Hazardous Materials and Waste. Protect and maintain the safety of residents, businesses, and visitors by reducing, and where possible, eliminating exposure to hazardous materials and waste.

Policy PHS 3.1.1 Investigate Sites for Contamination. The City shall ensure buildings and sites are investigated for the presence of hazardous materials and/or waste contamination before development for which City discretionary approval is required. The City shall ensure appropriate measures are taken to protect the health and safety of all possible users and adjacent properties.

Policy PHS 3.1.2 Hazardous Material Contamination Management Plan. The City shall require that property owners of known contaminated sites work with Sacramento County, the State, and/or Federal agencies to develop and implement a plan to investigate and manage sites that contain or have the potential to contain hazardous materials contamination that may present an adverse human health or environmental risk.

Policy PHS 3.1.4 Transportation Routes. The City shall restrict transportation of hazardous materials within Sacramento to designated routes.

Policy PHS 3.1.6 Compatibility with Hazardous Materials Facilities. The City shall ensure that future development of treatment, storage, or disposal facilities is consistent with the County's Hazardous Waste Management Plan, and that land users near these facilities, or proposed sites for the storage or use of hazardous materials, are compatible with their operation.

Goal PHS 4.1 Natural and Human-made Disasters. Promote public safety through planning, preparedness, and emergency response to natural and human-made disasters.

City of Sacramento Emergency Operations Plan

The purpose of The City of Sacramento Emergency Operations Plan (EOP) is to provide safeguards to minimize loss of life and property damage during natural disasters and emergencies of national defense. The City of Sacramento EOP establishes an Emergency Management Organization and assigns functions and tasks in accordance with California's Standardized Emergency Management System (SEMS). The EOP provides guidance as to disaster response from the initial onset through the cost recovery process. It includes policies, responsibilities, and procedures necessary to protect human health and safety, public and private property, and the environment from the effects of natural and anthropogenic disasters and emergencies. The EOP outlines the specific emergency-related responsibilities of City agencies. For example, the City of Sacramento Police Department is responsible for implementing emergency evacuations, including traffic control plans, while the City of Sacramento Fire Department is the first responder for hazardous materials incidents (City of Sacramento 2005a).

City of Sacramento Evacuation Plan

The purpose of the City of Sacramento Evacuation Plan (2012) is to provide evacuation-specific strategy and information to support and guide the City's Emergency Managers, Emergency Operations Center staff, and other governmental and non-governmental agencies that would be involved with an evacuation event in the City of Sacramento. Therefore, the Evacuation Plan serves as an amendment to the EOP. Flooding is considered the primary threat that would invoke an evacuation in Sacramento. Therefore, much of the Evacuation Plan is dedicated to procedures to be followed in event of a flood emergency. However, the associated strategy and plan details apply to other hazards as well. The City of Sacramento Police Department has divided the City into six districts with each district further divided into three or four police patrol beat areas. The Evacuation Plan provides evacuation routes and locations of sirens and shelters within each police patrol beat area. The City of Sacramento Fire Department maintains updated records of the emergency response and evacuation routes for the City (County of Sacramento 2012) (City of Sacramento 2008).

Hazardous Materials Response

The City's Hazardous Materials Program (HazMat) provides capability for response to hazardous material emergencies (City of Sacramento 2005b). HazMat contains a minimum of 108 firefighters and trained to the Hazardous Materials Response level and includes three Hazardous Materials Response Teams (HMRTs) and one Decontamination Team. Under contractual agreement, HazMat provides 24-hour first response to hazardous materials incidents within the City of Sacramento.

Sacramento Area Council of Governments

In December of 2013, Sacramento Area Council of Governments (SACOG) adopted the Airport Land Use Compatibility Plan (ALUCP) for the Sacramento International Airport. This plan ensures that land uses in and around the Sacramento International Airport are compatible with airport use. The boundaries for this plan, or the Airport Influence Area (AIA), range from the cities of Woodland and Davies to the west, West

Sacramento to the south, the Sutter-Placer County line in the east, and the town of Nicolaus to the north (SACOG 2013). Central and Eastern Sacramento is not included in the AIA.

Sacramento Metropolitan Air Quality Management District

The Sacramento Metropolitan Air Quality Management District (SMAQMD) is responsible for the management and enforcement of a variety of air quality rules including asbestos within the City of Sacramento. Rule 902 of the SMAQMD outlines specific procedures to follow if asbestos is likely to occur within a Project area. These procedures include, but are not limited to, requirements for surveys to be conducted prior to construction, proper worker safety when handling asbestos containing materials, and proper disposal of any of these materials (SMAQMD 2015).

Project Background

Hazardous Materials and Wastes

For purposes of this section, the term “hazardous materials” refers to both hazardous substances and hazardous wastes. A “hazardous material” is defined in the CFR as “a substance or material that...is capable of posing an unreasonable risk to health, safety, and property when transported in commerce” (49 CFR 171.8). California Health and Safety Code Section 25501 defines a hazardous material as follows:

Hazardous material means any material that, because of its quantity, concentration, or physical, or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment. “Hazardous materials” include, but are not limited to, hazardous substances, hazardous waste, and any material which a handler or the administering agency has a reasonable basis for believing that it would be injurious to the health and safety of persons or harmful to the environment if released into the workplace or the environment.

Hazardous wastes are defined in California Health and Safety Code Section 25141(b) as wastes that: Because of their quantity, concentration, or physical, chemical, or infectious characteristics, [may either] cause, or significantly contribute to an increase in mortality or an increase in serious illness [, or] pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, disposed of, or otherwise managed.

Section 25532(j) of the Health and Safety Code defines "regulated substances accident risk" to mean a potential for the accidental release of a regulated substance into the environment that could produce a significant likelihood that persons exposed may suffer acute health effects resulting in significant injury or death.

Section (j) defines "regulated substance" to mean any substance that is either of the following (20 CFR Article 2 § 25532):

- (1) A regulated substance listed in Section 68.130 of Title 40 of the Code of Federal Regulations pursuant to paragraph (3) of subsection (r) of Section 112 of the Clean Air Act (42 U.S.C. Sec. 7412(r)(3)).
- (2) (A) An extremely hazardous substance listed in Appendix A of Part 355 (commencing with Section 355.10) of Subchapter J of Chapter I of Title 40 of the Code of Federal Regulations that is any of the following:
 - I. A gas at standard temperature and pressure.
 - II. A liquid with a vapor pressure at standard temperature and pressure equal to or greater than 10 millimeters mercury.
 - III. A solid that is one of the following:
 - a. In solution or in molten form.
 - b. In powder form with a particle size less than 100 microns.
 - c. Reactive with a National Fire Protection Association rating of 2, 3, or 4.
 - IV. A substance that the office determines may pose a regulated substances accident risk pursuant to subclause (II) of clause (i) of subparagraph (B) or pursuant to Section 25543.3.

Acute Hazardous Wastes

Acute hazardous wastes have been found to be fatal to humans in low doses or, in the absence of data on human toxicity, it has been shown in studies to have an oral LD 50 toxicity (rat) of less than 50 milligrams per kilogram, an inhalation LC 50 toxicity (rat) of less than 2 milligrams per liter, or a dermal LD 50 toxicity (rabbit) of less than 200 milligrams per kilogram or is otherwise capable of causing or significantly contributing to an increase in serious irreversible, or incapacitating reversible, illness (CFR 40 261.11).

Asbestos

Naturally occurring asbestos is found in serpentine soils in the foothills of California and is considered a hazardous material due to exposure related public health concerns. The Naturally Occurring Asbestos Hazard Map was reviewed to determine if the proposed Project would involve construction in areas of relative likelihood for the presence of natural occurring asbestos. Review of information available through USGS indicated that nearest ultramafic rock formation which may be associated with naturally occurring asbestos is approximately 23 miles northeast of the Project area, along the eastern banks of Folsom Lake (USGS, 2015).

Hazardous Air Pollutants

The USEPA defines hazardous emissions, also known as Hazardous Air Pollutants (HAP), as those pollutants that are known or suspected to cause cancer or other serious health effects (USEPA 2017). These pollutants can come from sources such as gasoline, motor oils, asbestos, and paint strippers and can be inhaled or ingested. Fuels such as diesel and gasoline would be required for the operation of construction equipment and are considered Class three, flammable liquid, hazardous materials which can lead to fires or explosions if handled incorrectly. Additionally, oils and lubricants would also be needed for operation of equipment and the control facilities and are also considered Class three hazardous materials.

Schools

The proposed Project site is within the Sacramento City Unified School District. Six schools (Learning Tree Preschool, Alice Birney Elementary, Pony Express Elementary, New Technology High School, Sutterville Preschool, and Sutterville Elementary School) are located within the proposed study area.

Cortese List Government Code Section 65962

As discussed in the regulatory setting above, the Cortese list, which is compiled pursuant to Government Code Section 65962, is used to comply with CEQA requirements and provides a list about the known locations of hazardous material release sites. A record search using Environmental Data Resources (EDR) was used to determine the proximity of a Project to the nearest hazardous materials site.

Emergency Response and Emergency Evacuation Plans

The proposed Project site is within the City's EOP. The City of Sacramento provides fire protection services to the Project area. The Project would be served by the Fire Department Headquarters located at 5770 Freeport Boulevard and Sacramento Fire Station #11 located at 785 Florin Road. Fire stations are located so as to provide a maximum effective service radius of two miles (SGPU DEIR, M-1). This service radius virtually assures blanket coverage of the City. The Sacramento Police Department provides police protection service for the Project area. It is located approximately 0.30 mile from the center of the Project area at 5770 Freeport Boulevard.

Airports and Airstrips

There are no airport plans within the Project area. As discussed in the regulatory setting above, the ALUCP for the Sacramento International Airport is outside of the Central Sacramento area which is where the proposed Project would be located. The nearest public airport to the Project site is the Sacramento Executive Airport which is located approximately 0.30 mile east of the Project site. The nearest private airport is the UC Davis Medical Center Life Flight base heliport located 2.8 miles north east of the Project site

Fire Hazards

CAL FIRE maintains fire hazard severity zone maps for local and State responsibility areas. Fire hazard is a way to measure physical fire behavior so that people can predict the damage a fire is likely to cause. The proposed Project is located in a local responsibility area maintained by the City. The general background risk for the Project and its vicinity is expected to be low, due to the surrounding area being urban and they type of vegetation (fuel) in the area.

Environmental Setting

A Hazardous Waste Environmental Site Assessment (ESA) was prepared by Geocon Consultants, Inc. in October 2017 to obtain information regarding the potential for existing hazardous substances and/or petroleum product impacts within the proposed Project area. Environmental Data Resources, Inc. (EDR) searched federal, state, and local environmental databases for Recognized Environmental Condition (REC) listings pertaining to the Project area and properties/facilities within one mile of the Project area. Review of the information available indicated that there are no current or historical clean-up sites or hazardous waste facilities directly within the Project site. The following table shows the databases that list the Site and/or offsite properties/facilities and the total number of listed properties/facilities for each database.

Table 12. Recognized Environmental Conditions Within One Mile of the Site

Database Name	Number of Listings
FEDERAL DATABASES	
Resource Conservation and Recovery Act [RCRA] – Large Quantity Generators (RCRA-LQG)	2
RCRA – Small Quantity Generators (RCRA-SQG)	16
RCRA - Conditionally Exempt Small Quantity Generators (RCRA-CESQG)	2
Formerly Used Defense Sites (FUDS)	1
Facility Index System/Facility Registry System (FINDS)	15
STATE, LOCAL, AND TRIBAL DATABASES	
Calsites Database (HIST Cal-Sites)	2
School Property Evaluation Program (SCH)	3
Waste Discharge System (WDS)	2
National Pollutant Discharge Elimination System Permits Listing (NPDES)	3
Hazardous Waste & Substance Site List (HIST CORTESE)	17
Recycler Database (SWRCY)	2
Leaking Underground Storage Tank (LUST)	22
Facility Inventory Database (CA FID UST)	11
California Regional Water Quality Control Board's [RWQCB] Spills, Leaks, Investigations, and Cleanup Program (SLIC)	7
Underground Storage Tank (UST)	8
Historical UST Properties/Facilities (HIST UST)	14
Statewide Environmental Evaluation and Planning System UST Listing (SWEEPS UST)	12
California Hazardous Material Incident Report System (CHMIRS)	4
Aboveground Storage Tank (AST)	10

Database Name	Number of Listings
Proposition 65 Records (Notify 65)	6
Cleaner Facilities (DRYCLEANERS)	2
Clandestine Drug Labs (CDL)	1
State Response Sites (RESPONSE)	2
Facility and Manifest Data (HAZNET)	10
Emissions Inventory Data (EMI)	2
Department of Toxic Substances Control [DTSC] Site Mitigation and Brownfields Reuse Program (ENVIROSTOR)	14
EDR PROPRIETARY RECORDS	
EDR Exclusive Historic Gas Stations (EDR Hist Auto)	15
EDR Exclusive Historic Dry Cleaners (EDR Hist Cleaner)	2

Off-Site Properties

Forty-nine properties within 1/8 mile of the Site are listed on various non-release-related databases and therefore are unlikely to have caused an REC at the Site. The following table summarizes information regarding properties less than 1/8 mile from the Site that are listed on one or more release-related databases, the status of their listings, and their potential, if any, to cause (or have caused) an REC at the Site.

Table 13. Recognized Environmental Conditions Less Than 1/8 Mile of the Site

Business	Address	Approximate Distance from the Site	Database	Pertinent Information/Potential to Impact the Site
Freeport Farms Development Company	1301 Florin Road	Adjacent to the west of the central portion (cross-gradient to downgradient)	SLIC, DRYCLEANERS, Sacramento Co. CS, Sacramento Co. ML, FINDS, ECHO, SWRCY, RCRA-SQG, HAZNET	<p>This facility is listed on the SLIC database for a release that affected groundwater and soil vapor with tetrachloroethylene (PCE) and trichloroethylene (TCE). The cleanup case is listed as open as of September 2015 with Central Valley Regional Water Quality Control Board (RWQCB) oversight. Additional information about the release at this facility is provided in Section 4.3.1.</p> <p>The DRYCLEANERS database indicates that this facility is inactive.</p> <p>The Sacramento Co. CS, Sacramento Co. ML, FINDS, and ECHO databases provide no pertinent information.</p> <p>The RCRA-SQG listing is for this facility's generation of hazardous waste. Generated wastes include halogenated solvent wastes. No</p>

Business	Address	Approximate Distance from the Site	Database	Pertinent Information/Potential to Impact the Site
				<p>violations are reported.</p> <p>The HAZNET database reports discharge of various solid wastes, but provides no pertinent information.</p>
Shell	4000 South Land Park Drive	Adjacent to the north of South Land Park Drive in the northern portion (cross-gradient to upgradient)	LUST, Sacramento Co. CS, FINDS, UST, CA FID UST, HIST CORTESE, ECHO Notify 65, HIST UST, SWEEPS UST, RCRA-SQG, Sacramento Co. ML, HAZNET, EDR Hist Auto	<p>This gas station is listed on the LUST and Sacramento Co. CS databases for a release that affected groundwater with gasoline. The LUST case was closed by the Sacramento County Environmental Management Department (SCEMD) in March 2014. Additional information about this LUST case is provided in Section 4.3.1.</p> <p>The FINDS, UST, CA FID UST, HIST CORTESE, ECHO, and Notify 65 databases provide no pertinent information.</p> <p>The HIST UST and SWEEPS UST database lists three USTs installed in 1982.</p> <p>The RCRA-SQG listing is for this gas station's generation of hazardous waste. Generated wastes include benzene and ignitable wastes. No violations are reported.</p> <p>The Sacramento Co. ML database indicates that three tanks are present.</p> <p>The HAZNET database reports discharge of various solid and liquid wastes, but provides no pertinent information.</p> <p>The EDR Hist Auto database lists gas stations from 1966 through 2003.</p>
Tooley Oil Co#13	1400 Sutterville Road	100 feet east of the northern portion (cross-gradient to downgradient)	LUST, UST, CA FID UST, HIST CORTESE, Sacramento Co. ML, HIST UST, SWEEPS UST, EDR Hist Auto	<p>This gas station is listed on the LUST database for a release that affected only soil with gasoline. The LUST case was closed by the SCEMD in May 1996. Based on the closure of the case and that only soil was affected, the release is unlikely to have caused an REC at the Site.</p> <p>The UST, CA FID UST, HIST CORTESE, and Sacramento Co. ML</p>

Business	Address	Approximate Distance from the Site	Database	Pertinent Information/Potential to Impact the Site
				<p>databases provide no pertinent information.</p> <p>The HIST UST and SWEEPS UST database lists four USTs installed in 1982.</p> <p>The EDR Hist Auto database lists gas stations from 1956 through 2014.</p>
Shell – John Small’s I-5	1315 Florin Road	480 feet west of the central portion (downgradient)	LUST, UST, CA FID UST, HIST CORTESE, HIST UST, SWEEPS UST, Sacramento Co. CS, Sacramento Co. ML, RCRA-SQG	<p>This gas station is listed on the LUST and Sacramento Co. CS databases for a release that affected groundwater with gasoline. The LUST case was closed by the SCEMD in December 2007. Based on the closure of the case and its downgradient position relative to the Site, the release is unlikely to have caused an REC at the Site.</p> <p>The UST, CA FID UST, HIST CORTESE, HIST UST, and Sacramento Co. ML databases provide no pertinent information.</p> <p>The SWEEPS UST database lists four USTs installed sometime prior 1988.</p> <p>The RCRA-SQG listing is for this gas station’s generation of hazardous waste. Generated wastes include benzene and ignitable wastes. No violations are reported.</p>
Jensen Field	Southwest of Blair Avenue & Belleau Wood Lane	500 feet east of central portion (upgradient)	SLIC	<p>This facility is listed on the SLIC database with an open inactive case. No other pertinent information is provided. Based on its distance from the Site, if a release occurred at this facility is unlikely to have caused an REC at the Site.</p>
Shell	8900 Pocket Road	550 feet west of the southern portion (upgradient)	LUST, UST, HIST CORTESE, Notify 65, FINDS, ECHO, Sacramento Co. CS, Sacramento Co. ML, RCRA-SQG, HAZNET	<p>This gas station is listed on the LUST and Sacramento Co. CS databases for a release that affected groundwater with gasoline. The LUST case is listed as open as of April 2002 with SCEMD oversight. Additional information about the release at this gas station is provided in Section 4.3.1.</p> <p>The UST, HIST CORTESE, Notify 65, FINDS, and ECHO databases provide no pertinent information.</p>

Business	Address	Approximate Distance from the Site	Database	Pertinent Information/Potential to Impact the Site
				<p>The Sacramento Co. ML indicates indicates that three tanks are present.</p> <p>The RCRA-SQG listing is for this facility's generation of hazardous waste. Generated wastes include ignitable wastes. No violations are reported.</p> <p>The HAZNET database reports discharge of various solid and liquid wastes, but provides no pertinent information.</p>
J & J Cleaners	1381-1385 Florin Road	650 feet east of central portion (upgradient)	SLIC, ENVIROSTOR, DRYCLEANERS, Sacramento Co. CS, Sacramento Co. ML, RCRA-LQG, HAZNET	<p>This facility is listed on the SLIC and ENVIROSTOR databases for a release that affected groundwater with PCE and TCE. The cleanup case is listed as open as of July 2015. Additional information about the release at this facility is provided in Section 4.3.1.</p> <p>The DRYCLEANERS database indicates that this facility is inactive.</p> <p>The Sacramento Co. CS and Sacramento Co. ML databases provide no pertinent information.</p> <p>The RCRA-LQG listing is for this facility's generation of hazardous waste. Generated wastes include halogenated solvent wastes. No violations are reported.</p> <p>The HAZNET database reports discharge of unspecified wastes, but provides no pertinent information.</p>

Orphan Summary

The Orphan Summary identifies facilities that have incomplete address information and could not be specifically plotted. The Orphan Summary lists 109 properties that are greater than ½ mile from the Project. Based on their distance from the Project, none of these properties are expected to have caused an REC at the site.

Historical Use

The ESA evaluated the historical use of the Project and adjacent properties through review of historical aerial photographs, historical topographic maps, and City directories provided by EDR. Railroad tracks are visible on the Project from as early as 1937. Heavy metals are sometimes associated with railroad ballast materials, embankment fill, and from metals in pesticides used for weed control. Therefore the railroad tracks represent a potential environmental concern for the Project. No other land uses that would

suggest the presence of RECs were visible on the Project or adjacent properties in the aerial photographs.

Site Reconnaissance

Matthew Tidwell, Senior Staff Geologist with Geocon, performed a site reconnaissance on August 18, 2017. Mr. Tidwell performed the site reconnaissance by walking throughout the Project site and along the site perimeter to observe site features and conditions. Mr. Tidwell did not observe any slag in the railroad ballast material. Slag is a by-product that remains after a desired metal has been smelted from its raw ore. It has been used historically as railroad ballast material. We observed various domestic (or household) waste throughout the central and southern portions of the Project including glass and plastic bottles, food containers, blankets, and clothes. No evidence of RECs was observed on the Site; however, The onsite railroad tracks suggest that heavy metals may be present in railroad ballast materials and in the embankment fill and that pesticides may have been used for weed control along the tracks. Therefore, the railroad tracks represent a potential environmental concern. A soil and ballast material investigation along the railroad tracks was recommended to evaluate whether or not pesticides and metals are present at concentrations that would be a threat to the health of future site users.

Additionally, the release at the former Shell gas station (currently Chevron) at 4000 South Land Park Drive, adjacent to the north of South Land Park Drive in the northern portion of the Project site, the release at the Freeport Farms Development Company property at 1301 Florin Road, adjacent to the west of the central portion of the Site, and the release at the operating Shell gas station at 8900 Pocket Road, approximately 550 feet west of the Project site, may have impacted groundwater with MTBE and TPHg beneath the Site (see Table 13).

Geocon recommended to gather a soil sample adjacent to the Freeport Farms Development property to confirm the absence of PCE and TCE or other volatile organic compounds in shallow soil at this portion of the Site.

Although SCEMD closed the LUST case associated with the former Shell gas station (4000 South Land Park Drive), TPHg and MTBE may still be present in groundwater beneath the Site. However, the excavation work (if any) for the proposed onsite trail is unlikely to encounter groundwater.

The PCE and TCE soil vapor and groundwater impacts from the Freeport Farms Development Company property are being investigated, monitored, and remediated by Freeport Farms Development Company, LLC with RWQCB oversight. The MTBE groundwater impacts from the Shell gas station (8900 Pocket Road) are being investigated, monitored, and remediated by Shell with SCEMD oversight. PCE and TCE from the Freeport Farms Development Company property and MTBE from the Shell gas station may be present in groundwater beneath the central and southern portions of the Site, respectively. However, the excavation work (if any) for the proposed onsite trail is unlikely to encounter groundwater. Geocon recommended continuing to monitor the efforts by Freeport Farms Development Company, LLC and Shell to investigate, monitor, and remediate these impacts.

Limited Soil and Railroad Ballast Investigation Results

A soil and ballast material investigation along the railroad tracks was conducted on November 10, 2017 by Rebecca Silva with Geocon to evaluate whether or not pesticides and metals were present at concentrations that would be a threat to the health of future site users. Testing was conducted at 10 locations throughout the Project site (see Figure 16). No specific evidence of contaminant impacts (i.e. chemical odors, staining, features/equipment) other than the railroad and ballast itself were observed during the Phase I ESA, as stated above; therefore, limited investigation borings were advanced at approximate 1/2 mile intervals along the trail alignment.

With the exception of arsenic, COCs were either not detected in the ballast and soil samples, or were detected at concentrations less than the most conservative Tier I residential ESLs and therefore do not represent a threat to human health for future site users.

The reported arsenic concentrations are within the range of naturally occurring concentrations with the exception of arsenic in the soil sample from location B2 which was slightly elevated at a concentration of 21 mg/kg. Outlier concentrations are not uncommon and do not necessarily suggest a contaminant impact. If stained soil or other evidence of contamination are encountered during construction of the trail, a qualified environmental consultant should observe and collect samples for analysis to determine if further action is warranted.

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to hazards and hazardous materials. When an impact is determined to be significant, mitigation measures were identified that would reduce or avoid that impact.

Methodology of Analysis

Using a desktop analysis and the CEQA Environmental Checklist for guidance, the following thresholds of significance for evaluating potential impacts were established. A potential impact would be significant if the proposed Project would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment;
- For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area? Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- For a Project within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; or
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact HAZ-1: Potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.

Temporary construction activities associated with the proposed Project would involve the transport and use of gasoline, diesel fuel, hydraulic fuel, solvents, and oils typically associated with operation of construction equipment and vehicles. These chemicals would be used and stored on the proposed Project site during construction, as well as transported along public roadways. Federal, state, and local laws governing the handling, storage, and transport of these and other hazardous materials and spill clean ups are discussed in the Regulatory Setting of this section and would be required for the storage and transport of hazardous material for the proposed Project. These regulations are established to

prevent the improper use of materials and to reduce the risk of exposure to the public. The Standard Specifications required by the City of Sacramento Public Works Department regarding construction include the development of a central hazardous material storage and delivery area within a construction site in order to prevent runoff and to ensure hazards and/or nonhazardous materials are not spilled into the environment. Chemicals present on site or used for the proposed Project would be handled by the contractor in accordance with these regulations and DOSH requirements ensuring the potential for these hazards to create a hazard to the public or the environment is not significant. Therefore, the potential for impacts related to hazardous materials transport, use, or disposal would be considered less than significant.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact HAZ-2: Potential to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

The use of heavy construction equipment requires the use of small amounts of hazardous materials such as oils, fuels, and other potentially flammable substances that have the potential to be released into the environment if not handled properly. The amount of these materials needed for on-site equipment maintenance would not be enough to cause a significant hazard to the public if released since the quantity of these hazardous materials on-site at any one given time would only amount to a refueling truck and the construction equipment. However, measure HAZ-1 would be implemented to require the contractor to prepare an Accidental-Spill Prevention and Response Plan that would include BMPs to control the accidental release of hazardous materials into the environment ensuring spills are appropriately cleaned up and would not result in a release of hazardous materials into the environment. The use of hazardous materials would be temporary and the Project would not include a permanent use or source of hazardous materials. Measure **HAZ-1** would reduce any potential impacts to a less than significant level from temporary construction equipment and activities.

Level of Significance: Less than Significant with Mitigation

Mitigation Required: HAZ-1

Impact HAZ-3: Potential to emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

The construction phase of the proposed Project has the potential to result in emissions of toxic air contaminants/HAPs in the form of diesel particulate matter emissions from the operation of diesel-fueled internal combustion engines. Since there are six schools located within one quarter mile of the proposed Project site there would be some emissions of diesel particulate matter within one quarter mile of schools. Under Measures AQ-1 and AQ-2 discussed in Section 2.2 above, the City would prepare an Emission and Dust Control Plan, to reduce any potential emissions to a less than significant level. Implementation of BMPs and specific instructions for handling of construction equipment such as limiting idle times to a maximum of five minutes along with frequent maintenance of the equipment which ultimately keeps the equipment running and operating like it should would limit the amount of emissions. Additionally, the construction activities would be temporary and intermittent which would further reduce any potential impact.

Hazardous materials used during construction would be typical of common construction activities and would be handled by the contractor in accordance with applicable federal, state, and local regulation for hazardous substances. Additionally, the amount of these materials needed for on-site equipment maintenance would not be enough to cause a significant hazard to the public, or any nearby schools, if

released since the quantity of these hazardous materials on-site at any one given time would only amount to a refueling truck and the construction equipment. Measure **HAZ-1**, **AQ-1**, and **AQ-2** would be implemented to require the contractor to prepare an accidental-spill prevention and response plan which would include BMPs to control for the accidental release of hazardous materials into the environment ensuring spills are appropriately cleaned up and would not result in a release of hazardous materials into the environment.

Operation of the proposed Project would not involve the use of any hazardous materials or have the potential to emit hazardous emissions and thus, would not impact the five schools within one-quarter mile of the Project site. Therefore, the potential for the proposed Project to emit hazardous emissions within one-quarter miles of a school during both construction and operation would be less than significant with mitigation incorporated.

Level of Significance: Less than Significant with Mitigation

Mitigation Required: HAZ-1, AQ-1 and AQ-2 in Section 2.2.

Impact HAZ-4: Potential to be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment.

The proposed Project is not located on the Cortese list database as a potentially hazardous site. Additionally, the hazardous materials that would be used during construction would include oils, fuels, and other potentially flammable substances which would be used in small amounts and for a temporary period of time during construction. Therefore, the proposed Project does not have the potential to create a significant hazard to the public as a result of the listing or use of substantial amounts of hazardous materials. As such, no impact would occur, and no mitigation measures would be required.

Level of Significance: No Impact

Mitigation Required: None Required

Impact HAZ-5: Potential to be located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the Project result in a safety hazard for people residing or working in the Project area?

The proposed Project site is located within 0.30 mile of Sacramento Executive Airport. Although this airport is located within two miles of the proposed Project site, the proposed Project would not have the potential to result in a safety hazard because the construction work would be temporary and once constructed, the proposed Project would be used for recreational purposes. No impact associated with a safety hazard from nearby airports is anticipated to occur and no mitigation measures would be required.

Level of Significance: No Impact

Mitigation Required: None Required

Impact HAZ-6: Potential to be within the vicinity of a private airstrip, would the Project result in a safety hazard for people residing or working in the Project area.

The UC Davis Medical Center Life Flight base heliport is located more than 2 miles north east of the Project site; therefore, the Project would not result in a safety hazard for people residing or working in the area. Additionally, the heliport located in this area is only used for emergencies which does not include consistent, daily uses, further limiting any potential impacts. Therefore, the proposed Project would have no impact on safety hazards associated with working in the vicinity of a private airstrip.

Level of Significance: No Impact.

Mitigation Required: None Required

Impact HAZ-7: Potential to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

The proposed Project includes multiple access points. Two parking lots would be constructed for access to the trail from San Mateo Way and Freeport Boulevard. The public can also access the trail from Sutterville Road, S. Land Park Drive, Normandy Lane, Fruitridge Road, 35th Avenue, 43rd Avenue, Florin Road, and Pocket Road. The trail will also be accessible from Z'Berg Park, Charlie Jensen Park, and Belle Cooledge Community Center Park.

The proposed Project is not anticipated to have any impact to the existing emergency evacuation plan. As discussed further in Section 3.13, a traffic control plan would be incorporated into the Project to limit any potential impacts from construction of the trail through any intersections under Measure **TRA-1**. The traffic control plan would also include a discussion of expected construction schedules and locations, traffic control measures, and coordination with emergency response agencies to ensure that emergency access remains possible at all times. Therefore, the Project would have a less than significant impact with mitigation incorporated on emergency response.

Level of Significance: Less than Significant with Mitigation

Mitigation Required: See TRA-1

Impact HAZ-8: Potential to expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

The proposed Project corridor is not designated as a wildland and the City of Sacramento is not considered to have a high wildland fire danger (City of Sacramento Fire Department 2016). Additionally, the trail would be used for recreational purposes which would limit the exposure of people to risks from wildfires. Therefore, the proposed Project would have a less than significant impact related to wildland fires.

Level of Significance: Less than Significant

Mitigation Required: None Required

Mitigation Measures

HAZ-1: The contractor shall prepare a Spill Prevention, Control, and Countermeasure Program (SPCCP) prior to the commencement of construction activities. The SPCP shall include information on the nature of all hazardous materials that shall be used on-site. The SPCP shall also include information regarding proper handling of hazardous materials, and clean-up procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic clean-up shall be provided in the SPCCP.

2.8 HYDROLOGY AND WATER QUALITY

This section describes the environmental and regulatory setting for hydrology and water quality. It also describes impacts on hydrology and water quality that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

Federal

Federal Clean Water Act

The Clean Water Act (CWA) (33 U.S.C. Section 1251 et seq.), formerly the Federal Water Pollution Control Act of 1972, was enacted with the intent of restoring and maintaining the chemical, physical, and biological integrity of the waters of the United States. The CWA requires states to set standards to protect, maintain, and restore water quality through the regulation of point source and certain non-point source discharges to surface water. Those discharges are regulated by the National Pollutant Discharge Elimination System (NPDES) permit process (CWA Section 402). Section 401 of the CWA regulates surface water quality and a Water Quality Certification is required for federal actions (including construction activities) that may entail impacts to surface water. In California, NPDES permitting authority is delegated to, and administered by, the nine Regional Water Quality Control Boards (RWQCB).

NPDES Construction Permit

The federal CWA prohibits certain discharges of stormwater containing pollutants except in compliance with a NPDES permit. The federal statutes and regulations require discharges to surface waters comprised of storm water associated with construction activity, including demolition, clearing, grading, and excavation, and other land disturbance activities (except operations that result in disturbance of less than one acre of total land area and/or discharges to municipalities with combined stormwater and sewer systems) to obtain coverage under an NPDES permit. The NPDES permit must require implementation of Best Available Technology Economically Achievable (BAT) and Best Conventional Pollutant Control Technology (BCT) to reduce or eliminate pollutants in storm water runoff.

National Flood Insurance Act

The Federal Emergency Management Agency (FEMA) is responsible for managing the National Flood Insurance Program (NFIP), which makes federally-backed flood insurance available for communities that agree to adopt and enforce floodplain management ordinances to reduce future flood damage.

The NFIP, established in 1968 under the National Flood Insurance Act, requires that participating communities adopt certain minimum floodplain management standards, including restrictions on new development in designated floodways, a requirement that new structures in the 100-year flood zone be elevated to or above the 100-year flood level known as base flood elevation. To facilitate identifying areas with flood potential, FEMA has developed Flood Insurance Rate Maps (FIRMs) that can be used for planning purposes, including floodplain management, flood insurance, and enforcement of mandatory flood insurance purchase requirements.

State

Porter Cologne Water Quality Control Act

The State of California established the State Water Resources Control Board (SWRCB), which oversees the nine RWQCBs, through the Porter-Cologne Water Quality Control Act (Porter-Cologne). Through the enforcement of the Porter Cologne Act, the SWRCB determines the beneficial uses of the waters (surface and groundwater) of the State, establishes narrative and/or numerical water quality standards, and initiates policies relating to water quality. The SWRCB and, more specifically, the RWQCB, is authorized to prescribe Waste Discharge Requirements (WDRs) for the discharge of waste, which may impact the waters of the State. Furthermore, the development of water quality control plans, or Basin Plans, are required by Porter-Cologne to protect water quality. The SWRCB issues both General Construction Permits and individual permits under the auspices of the federal NPDES program. Per the SWRCB

General Construction Permit, construction activity that discharges to Combined Sewer Systems is an activity not covered under the general permit and therefore the permit does not apply.

Local

The Sacramento Area Flood Control Agency

The Sacramento Area Flood Control Agency (SAFCA) was formed in 1989 by local agencies anxious to address the deficiencies in Sacramento's flood control system identified by the United States Army Corp of Engineers (USACE) following the flood of 1986. Through a joint exercise of powers agreement, the City of Sacramento, County of Sacramento, the Sacramento County Water Agency, Sutter County, the Sutter County Water Agency, the American River Flood Control District, and Reclamation District 1000 (RD 1000) pooled their common flood-control authorities, established a management structure, and identified a program for improving Sacramento's flood control system. This program has three elements:

1. Ensure the structural integrity of the existing levee system;
2. Provide at least a 100-year level of flood protection as quickly as possible to the areas within the FEMA 100-year floodplain by, among other actions, increasing the space available for flood control at Folsom Dam and Reservoir (Folsom); and
3. Work toward achieving at least a 200-year level of flood protection for the Sacramento area.

SAFCA finances the local share of the cost to improve Sacramento's flood control system by creating assessment districts and levying annual assessments on properties which benefit from the improvements. These assessments are billed on Sacramento County's and Sutter County's annual real property tax bill.

SAFCA has carried out its flood risk management program on a step-by-step basis. It has succeeded in moving flood zone properties in Natomas and North Sacramento from a high-risk status (less than 100-year protection) to a moderate-risk status (greater than 100-year but less than 200-year protection) by raising and strengthening levees around the Natomas basin and along lower Dry and Arcade creeks. When this work is completed, these properties will have greater than a 200-year level of protection and a relatively low risk of flooding. Outside the North Area, steps have been taken to ensure the integrity of the levee system along the Sacramento and American rivers and to secure additional flood storage space at Folsom Reservoir on an interim basis.

The American River Flood Control District

The American River Flood Control District (ARFCD) is the part of SAFCA that provides flood protection for the Project site and surrounding neighborhoods. Formed by an act of the State Legislature in 1927, its mission is to protect the citizenry by maintaining the 40 miles of levees along the American River and portions of Steelhead, Arcade, Dry, and Magpie creeks. The ARFCD's year-round maintenance activities are designed to prevent degradation of the levees' structural stability and to keep the surface of the levees accessible and clearly visible so problems can be detected, and flood emergency equipment can be moved in when needed. In addition to routine operation and maintenance activities, the ARFCD implements Projects along the levee to improve accessibility. For example, in 2008, the ARFCD began working with numerous landowners to remove abandoned encroachments in River Park (such as deteriorating retaining walls, debris, and mounds of dirt), which resulted in a clean levee slope free of obstructions that will no longer compromise levee safety.

City of Sacramento 2035 General Plan

The following City of Sacramento 2035 General Plan goals and policies are applicable to hydrology and water quality.

Environmental Constraints: Flooding Hazards

Goal EC 2.1 Flood Protection. Protect life and property from flooding.

Policy EC 2.1.2 Regional Flood Management Planning Efforts. The City shall participate in the California Department of Water Resources (DWR) Regional Flood Management Planning effort for the Lower Sacramento/Delta North region.

Policy EC 2.1.4 200-year Flood Protection. The City shall work with local, regional, State, and Federal agencies to achieve by 2025 at least 200-year flood protection for all areas of the City.

Policy EC 2.1.12 New Development Design. The City shall require new development located within a special (100-year) flood hazard area to be designed to minimize the risk of damage in the event of a flood.

Environmental Resources: Water Resources

Goal ER 1.1 Water Quality Protection. Protect local watersheds, water bodies and groundwater resources, including creeks, reservoirs, the Sacramento and American rivers, and their shorelines.

Policy ER 1.1.3 Stormwater Quality. The City shall control sources of pollutants and improve and maintain urban runoff water quality through stormwater protection measures consistent with the City's NPDES Permit.

Policy ER 1.1.4 New Development. The City shall require new development to protect the quality of water bodies and natural drainage systems through site design, source controls, stormwater treatment, runoff reduction measures, BMPs and Low Impact Development (LID), and hydromodification strategies consistent with the City's NPDES Permit.

Policy ER 1.1.5 Limit Stormwater Peak Flows. The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.

Policy ER 1.1.7 Construction Site Impacts. The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinance.

City of Sacramento Stormwater Management and Control Code

The City Stormwater Management and Control Code (Chapter 13.16 of the City Code) is intended to control non-stormwater discharges to the stormwater conveyance system; eliminate discharges to the stormwater conveyance system from spills, dumping, or disposal of materials other than stormwater; and reduce pollutants in urban stormwater discharges to the maximum extent practicable. Non-stormwater discharges are prohibited except where the discharge is regulated under a NPDES permit (See the descriptions of the NPDES in the discussions of federal and state water quality regulations above). Discharges to the stormwater conveyance system of pumped groundwater not subject to a NPDES permit may be permitted upon written approval from the City and in compliance with the City's conditions of approval.

City of Sacramento Grading, Erosion, and Sediment Control Ordinance

The City Grading, Erosion, and Sediment Control Ordinance (Title 15, Chapter 15.88 of the City Code) sets forth rules and regulations to control land disturbances, landfill, soil storage, pollution, and erosion and sedimentation resulting from construction activities. With limited exceptions, grading approval must be received from the City's Department of Utilities (DOU) before construction. All Project applicants, regardless of Project location, are required to prepare and submit separate erosion and sediment control plans applicable to the construction and post-construction periods. The ordinance also specifies other requirements, such as written approval from the City for grading work within the right of way (ROW) of a public road or street, or within a public easement.

City of Sacramento SQIP

The City of Sacramento Stormwater Quality Improvement Program (SQIP) provides a comprehensive plan to direct the Sacramento City Stormwater Management Program and its priorities and activities. Included in the City of Sacramento SQIP is information on the Sacramento City Stormwater Management Program's history and accomplishments as well as a description of specific activities. The City of Sacramento Stormwater Management Program is designed to reduce stormwater pollution to the

maximum extent practicable and eliminate prohibited non-stormwater discharges in accordance with federal and state laws and regulations.

The Construction Element in the SQIP was designed to reduce the discharge of stormwater pollutants to the maximum extent practicable by requiring construction sites to reduce sediment in site runoff and reduce other pollutants such as litter and concrete wastes through good housekeeping procedures and proper waste management. The New Development Element in the SQIP was designed to protect local creeks and rivers by reducing the discharge of stormwater pollutants that could result from new developments to the maximum extent practicable and by mitigating increased flows that could cause erosion and degrade habitat.

City of Sacramento Floodplain Management Ordinance

This Floodplain Management Ordinance is designed to promote the public health, safety, and general welfare, and to minimize public and private losses due to flood conditions in specific areas. The Ordinance regulates development which is or might be dangerous to health, safety, and property by requiring at the time of initial development, or substantial improvement, methods of protection against flood damage in areas vulnerable to flooding in order to minimize flood damage. The Ordinance regulates the following developmental impacts: filling, grading, or erosion, alteration of natural flood plains, stream channels or water courses, the imposition of barriers which increase flood hazards, or any other impacts that aggravate or cause flood hazards.

Resolution 93-164

Resolution 93-164, with regard to storm drainage, is intended to prevent street flooding during 10-year return storms and to prevent flooding of structures during 100-year return storms at complete buildout in each drainage basin.

City of Sacramento NPDES Permit

The City of Sacramento NPDES permit (Order No. R5-2016-0040, NPDES No. CAS0085324) requires implementation of programs that establish priorities based on addressing urban pollutants of concern, to reduce the level of pollutants in stormwater discharges from municipal separate storm sewer systems and requires that any change in water quality will not unreasonably affect the present and anticipated beneficial use of receiving waters and will not result in water quality less than that prescribed in SWRCB policies. The SQIP, described earlier, provides a comprehensive plan to direct the City's Stormwater Management Program priorities and activities, including program management, target pollutant reduction strategy, monitoring program, program element implementation (i.e., industrial, municipal, construction, and public education and outreach elements), and program evaluation.

Central Valley Regional Water Quality Control Board Order No. R5-2015-0045

On April 17, 2015, the Central Valley Regional Water Quality Control Board (CVRWQCB) adopted the Waste Discharge Requirements for the City of Sacramento Combined Wastewater Collection and Treatment System (Order No. R5-2015-0045, NPDES No. CA0079111) which describe discharge prohibitions to the Sacramento River unless certain specified conditions have been met or authorizations granted; effluent limitations and discharge specifications for total suspended solids, settleable solids, and chlorine; receiving water limitations to the Sacramento River, monitoring and reporting requirements; and other standard and special provisions.

General Order for Dewatering and Other Low-Threat Discharges to Surface Waters

The CVRWQCB has adopted a general NPDES permit for short-term discharges of small volumes of clean or relatively pollutant-free wastewater from certain construction-related activities that pose little or no threat to water quality. Permit conditions for the discharge of these types of wastewaters to surface water are specified in "General Order for Dewatering and Other Low-Threat Discharges to Surface Waters" (Order No. R5-2013-0074, NPDES Permit No. CAG995001). Discharges may be covered by the permit provided they are either (1) four months or less in duration or (2) the average dry weather discharge does not exceed 0.25 mgd. Construction dewatering, well development water, pump/well testing, and miscellaneous dewatering/low-threat discharges are among the types of discharges that may

be covered by the permit. The general permit also specifies standards for testing, monitoring, and reporting, receiving water limitations, and discharge prohibitions.

Environmental Setting

The Project area is located within the Sacramento River Hydrologic Region which encompasses an area of approximately 17.4 million acres (27,200 square miles) and contains all or large portions of Modoc, Siskiyou, Lassen, Shasta, Tehama, Glenn, Plumas, Butte, Colusa, Sutter, Yuba, Sierra, Nevada, Placer, Sacramento, El Dorado, Yolo, Solano, Lake, and Napa Counties (California Department of Water Resources, 2003). Most of northern California is located in the Sacramento River Hydrologic Region, which encompasses several watersheds of various sizes. Major watersheds in the Sacramento River Hydrologic Region and the Project area include the American River, Cosumnes River, and Sacramento River. Ultimately, these watersheds drain to the Sacramento–San Joaquin River Delta. Figure 17 shows the local watersheds surrounding the Project area.

Based on survey results, the USGS Sacramento West and Clarksburg 7½ minute quadrangle topographic maps, Federal Emergency Management Agency (FEMA) flood maps, and the USFWS National Wetlands Inventory (NWI 2017), a total of 4 aquatic features were found within the BSA. Of the four features identified, only two of the features identified within the limits of the BSA are considered waters of the U.S. and State (the Sacramento Drainage Canal and an above ground storm drainage feature). The remaining two aquatic features identified within the BSA are small, non-jurisdictional depressional wetland features (Wetland 1 and Wetland 2). Figure 14 in Section 2.3 shows the locations of surface waters in the Project area.

The first feature located within the BSA is an above ground storm drainage located approximately 300 feet south of the intersection of Belleau Wood Lane and Freeport Boulevard, and west of Freeport Boulevard. The second feature is the Sacramento Drainage canal located at the southern terminus of the Project. The remaining two freshwater wetland features were identified during the May 2017 jurisdictional delineations. Wetland feature 1 is located approximately 700 feet south of Pocket Road and approximately 150 feet west of Freeport Boulevard at a southwest orientation to the Pocket Road and Freeport Boulevard intersection. Wetland feature 2 is located approximately 350 feet northeast of the intersection of Farm Dale Way and Branwood Way.

Water quality is most affected by land development, agriculture, grazing, and urban runoff. Constituents found in urban runoff vary during a storm event, from event to event within a given area, and from area to area within a given watershed. Variances can be the result of differences in rainfall intensity and occurrence, geographic features, and the land use of the area, as well as vehicle traffic and the percentage of impervious surface. Furthermore, sediment runoff from construction sites without adequate erosion control measures can contribute sediments, pesticides, fertilizers, and other pollutants to receiving waters.

As required by the Porter-Cologne Act, the Central Valley RWQCB has developed water quality objectives for waters within their jurisdiction to protect the beneficial uses of those waters and published them in their Basin Plan. The Basin Plan also establishes implementation programs to achieve these water quality objectives and requires monitoring to evaluate the effectiveness of these programs. Water quality objectives must comply with the state antidegradation policy (State Water Board Resolution No. 68-16), which generally restricts the reduction of water quality of surface or ground waters even though such a reduction in water quality might still allow the protection of the beneficial uses associated with the water prior to the quality reduction. The Central Valley Regional Water Quality Control Board intends to maintain this quality with enforcement of the water quality objectives summarized in Table 14 (CRWQCB, 2011).

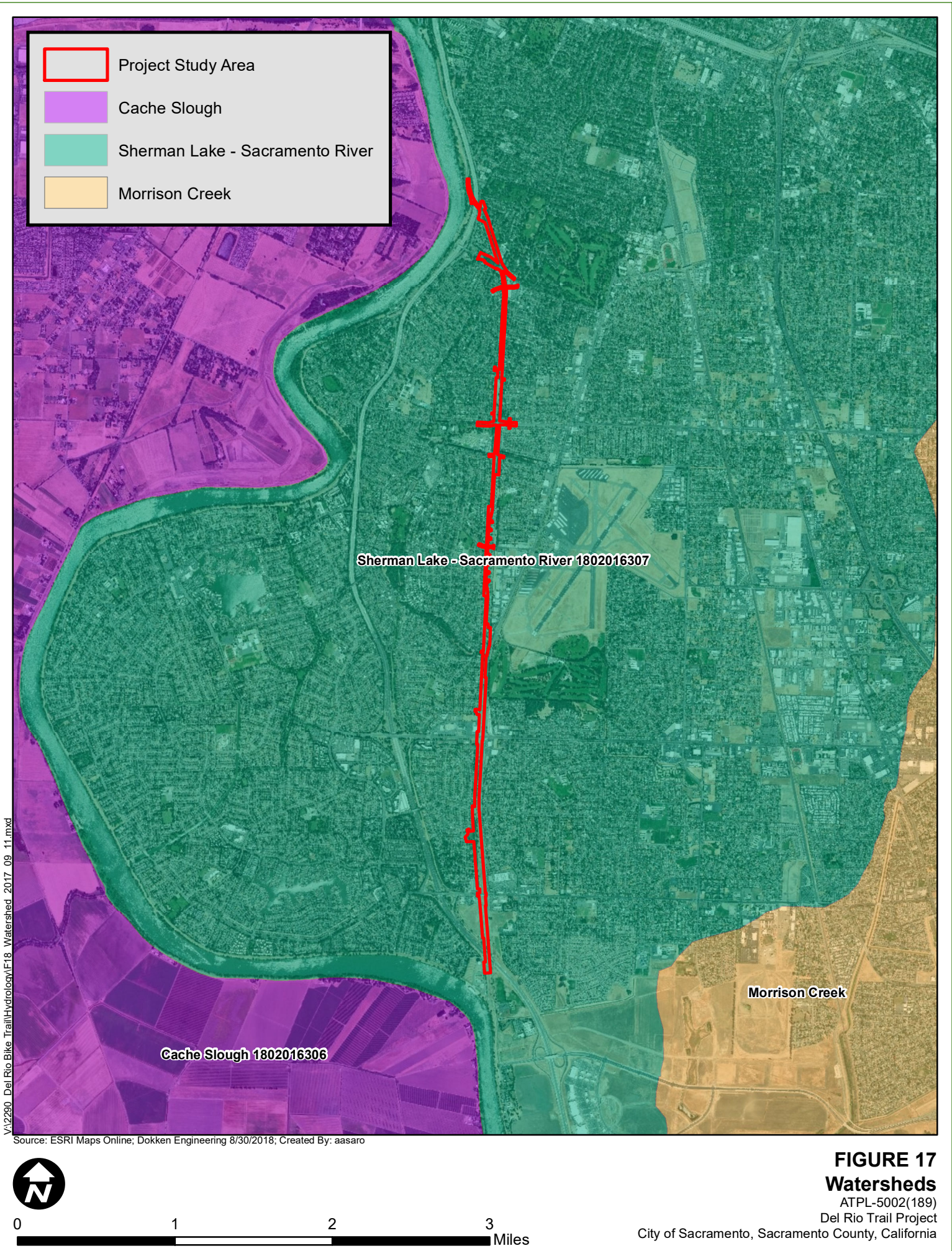


FIGURE 17
Watersheds
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Table 14. Central Valley RWQCB Water Quality Objectives for Inland Surface Waters

Constituent	Water Quality Objective
Bacteria	In waters designated REC-1, the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period shall not exceed a geometric mean of 200/100 mL, nor shall more than 10 percent of the total number of samples taken during any 30-day period exceed 400/100 mL.
Biostimulatory Substances	Water shall not contain biostimulatory substances in concentrations that promote aquatic growths to the extent that such growths cause nuisance or adversely affect beneficial uses.
Chemical Constituents	<p>Waters shall not contain chemical constituents in concentrations that adversely affect beneficial uses.</p> <p>At a minimum, water designated MUN shall not contain concentrations of chemical constituents in excess of the maximum contaminant levels specified in the following provisions of Title 22 of the California Code of Regulations, which are incorporated by reference into this plan: Tables 64431-A (Inorganic Chemicals) and 64431-B (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section (Fluoride) of Section 64431, Table 64444-A (Organic Chemicals) of Section Consumer Acceptance Limits) and 64449-B (Secondary Maximum Contaminant Levels-Ranges) of Section 64449. At a minimum, water designated for use as domestic or municipal supply (MUN) shall not contain lead in excess of 0.015 mg/l. (See below for specific chemical constituent objectives for specific water bodies.</p>
Color	Water shall be free of discoloration that causes nuisance or adversely affects beneficial uses.
Dissolved Oxygen	<p>For surface water bodies outside the legal boundaries of the Delta, the monthly median of the mean daily dissolved oxygen (DO) concentration shall not fall below 85 percent of saturation in the main water mass, and the 95 percentile concentration shall not fall below 75 percent of saturation. The dissolved oxygen concentrations shall not be reduced below the following minimum levels at any time:</p> <ul style="list-style-type: none"> • Waters designated WARM 5.0 mg/l • Waters designated COLD 7.0 mg/l • Waters designated SPWN 7.0 mg/l
Floating Material	Water shall not contain floating material in amounts that cause nuisance or adversely affect beneficial uses.
Oil and Greases	Waters shall not contain oils, greases, waxes, or other materials in concentrations that cause nuisance, result in a visible film or coating on the surface of the water or on objects in the water, or otherwise adversely affect beneficial uses.
pH	The pH shall not be depressed below 6.5 nor raised above 8.5.

Constituent	Water Quality Objective
Pesticides	<ul style="list-style-type: none"> • No individual pesticide or combination of pesticides shall be present in concentrations that adversely affect beneficial uses. • Discharges shall not result in pesticide concentrations in bottom sediments or aquatic life that adversely affect beneficial uses. • Total identifiable persistent chlorinated hydrocarbon pesticides shall not be present in the water column at concentrations detectable within the accuracy of analytical methods approved by the Environmental Protection Agency or the Executive Officer. • Pesticide concentrations shall not exceed those allowable by applicable antidegradation policies (see State Water Resources Control Board Resolution No. 68-16 and 40 C.F.R. Section 131.12.). • Pesticide concentrations shall not exceed the lowest levels technically and economically achievable. • Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of pesticides in excess of the Maximum Contaminant Levels set forth in California Code of Regulations, Title 22, Division 4, Chapter 15. • Waters designated for use as domestic or municipal supply (MUN) shall not contain concentrations of thiobencarb in excess of 1.0 µg/l. <p>For the purposes of this objective, the term pesticide shall include: (1) any substance, or mixture of substances which is intended to be used for defoliating plants, regulating plant growth, or for preventing, destroying, repelling, or mitigating any pest, which may infest or be detrimental to vegetation, man, animals, or households, or be present in any agricultural or nonagricultural environment whatsoever, or (2) any spray adjuvant, or (3) any breakdown products of these materials that threaten beneficial uses. Note that discharges of "inert" ingredients included in pesticide formulations must comply with all applicable water quality objectives.</p>
Radioactivity	Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life, nor which result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life. At a minimum, waters designated MUN shall not contain concentrations of radionuclides in excess of the maximum contaminant levels specified in Table 4 (MCL Radioactivity) of Section 64443 of Title 22, California Code of Regulations.
Salinity	Electrical Conductivity (at 25°C) shall not exceed 150 micromhos/cm (90 percentile) in well-mixed waters of the Feather River.
Sediment	The suspended sediment load and suspended sediment discharge rate of waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.
Settleable Material	Waters shall not contain substances in concentrations that result in the deposition of material that causes nuisance or adversely

Constituent	Water Quality Objective
	affects beneficial uses.
Suspended Material	Waters shall not contain suspended material in concentrations that cause nuisance or adversely affect beneficial uses.
Tastes and Odors	Waters shall not contain taste- or odor-producing substances in concentrations that cause nuisance, adversely affect beneficial uses, or impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin or to domestic or municipal water supplies.
Temperature	Elevated temperature wastes shall not cause the temperature of waters designated COLD or WARM to increase by more than 5 degrees Fahrenheit above natural receiving water temperature. In determining compliance with the above limits, the Central Valley Regional Water Quality Control Board may prescribe appropriate averaging periods provided that beneficial uses will be fully protected.
Toxicity	All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life. This objective applies regardless of whether the toxicity is caused by a single substance or the interactive effect of multiple substances. Compliance with this objective will be determined by analyses of indicator organisms, species diversity, population density, growth anomalies, biotoxicity tests of appropriate duration, or other methods as specified by the Central Valley Regional Water Quality Control Board.
Turbidity	<p>Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. Increases in turbidity attributable to controllable water quality factors shall not exceed the following limits:</p> <p>Where natural turbidity is less than 1 Nephelometric Turbidity Unit (NTU), controllable factors shall not cause downstream turbidity to exceed 2</p> <p>Where natural turbidity is between 1 and 5 NTUs, increases shall not exceed 1 NTU.</p> <ul style="list-style-type: none"> • Where natural turbidity is between 5 and 50 NTUs, increases shall not exceed 20 percent. • Where natural turbidity is equal to or between 50 and 100 NTUs, increases shall not exceed 10 NTUs. • Where natural turbidity is greater than 100 NTUs, increases shall not exceed 10 percent. <p>In determining compliance with the above limits, appropriate averaging periods may be applied provided that beneficial uses will be fully protected.</p>
Source: CRWQCB 2011	

Under the Porter-Cologne Water Quality Control Act, the Regional board is required to consider beneficial uses when instituting water quality objectives and described these beneficial uses as follows:

"Beneficial uses of the waters of the State that may be protected against quality degradation include, but are not necessarily limited to, domestic, municipal, agricultural, and industrial supply; power generation; recreation; aesthetic enjoyment; navigation; and preservation and enhancement of fish, wildlife, and other aquatic resources or preserves."

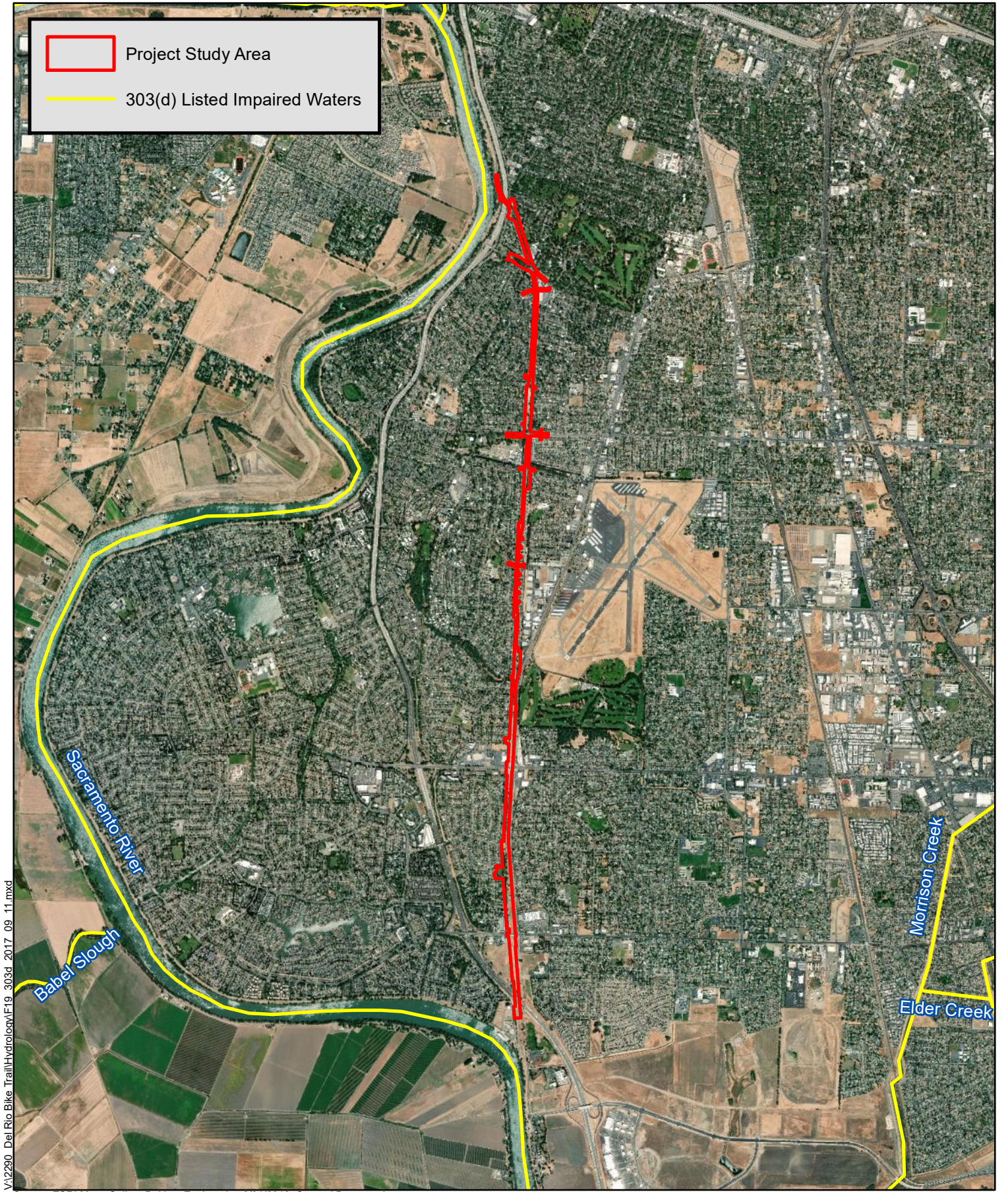
The Regional Board assigns beneficial uses for tributary streams based on the uses assigned to the named waterbody that the tributary connects with. Table 15 below defines these beneficial uses for the Sacramento River, a waterway near the vicinity of the Project. In addition, Table 15 also includes the ground water beneficial uses for the Sacramento River. Existing beneficial uses of surface waters within the Sacramento River (Hydro Unit Number 526) include municipal and domestic supply (MUN), agricultural supply (AGR), hydropower generation (POW), contact water recreation (REC-1), non-contact water recreation (REC-2), cold freshwater habitat (COLD), warm and cold spawning (SPWN), and wildlife habitat (WILD) (CRWQCB 2014).

Table 15. Beneficial Uses

Category		Definition
MUN	Municipal and Domestic Supply	Uses of water for community, military, or individual water supply systems including, but not limited to, drinking water supply.
AGR	Agriculture Supply	Uses of water for farming, horticulture, or ranching including irrigation or support of vegetation for range grazing.
IND	Service Supply	Uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well repressurization.
POW	Hydropower Generation	Uses of water for hydropower generation.
REC I	Water Contact Recreation	Uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and scuba diving, surfing, white water activities, fishing, and use of natural hot springs.
REC II	Non-Contact Water Recreation	Uses of water for recreational activities involving proximity to water, but not normally involving contact with water where ingestion of water is reasonably possible. These uses include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide-pool and marine life study, hunting, sightseeing, or aesthetic enjoyment in conjunction with the above activities.
WARM	Warm Freshwater Habitat	Uses of water that support warm water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
COLD	Cold Freshwater Habitat	Uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish, or wildlife, including invertebrates.
MIGR	Migration of Aquatic Organisms	Uses of water that support habitats necessary for migration or other temporary activities by aquatic organisms, such as anadromous fish.
SPWN	Spawning, Reproduction, and/or Early Development (Warm & Cold)	Uses of water that support high quality aquatic habitats suitable for reproduction and early development of fish.
WILD	Wildlife Habitat	Uses of water that support terrestrial ecosystems including, but not limited to, the preservation and enhancement of terrestrial habitats, vegetation, wildlife (e.g., mammals, birds, reptiles, amphibians,

Category		Definition
		invertebrates), or wildlife water and food sources.

303(d) listed waters are a State's list of impaired and threatened waters (e.g. stream/river segments, lakes). States are required to submit their list for Environmental Protection Agency (EPA) approval every two years. For each water on the list, the State identifies the pollutant causing the impairment, when known. In addition, the state assigns a priority for development of Total Maximum Daily Loads (TMDL) based on the severity of the pollution and the sensitivity of the uses to be made of the waters. There are no 303(d) listed water bodies within the immediate Project study area. However, 303(d) listed waterways near the Project area have been identified. The closest of these is the Sacramento River (northern portion of the Delta Waterway), which the State has determined to primarily be impaired for pesticides and heavy metals. Figure 18 shows 303(d) listed impaired water bodies within the vicinity of the Project area. Table 16 (below) lists pollutants that have contributed to water quality exceedances, their sources, and the TMDL status (both required and approved) for the 303(d) listed water bodies identified.



VA\2290_Del Rio Bike Trail\Hydrology\F19_303d_2017_09_11.mxd

Source: ESRI Maps Online; Dokken Engineering 8/31/2018; Created By: astorck



FIGURE 18
303(d) Listed Waters

ATPL-5002(189)
Del Rio Trail Project

City of Sacramento, Sacramento County, California

Table 16. TMDLs Within the Project Vicinity

	Pollutant	Source	Size	Status
Delta Waterways (Northern Portion)	Chlordane	Source Unknown	6795 Acres	TMDL required
Delta Waterways (Northern Portion)	Chlorpyrifos	Source Unknown	6795 Acres	Being addressed with USEPA approved TMDL
Delta Waterways (Northern Portion)	DDT (dichlorodiphenyltrichloroethane)	Source Unknown	6795 Acres	TMDL required
Delta Waterways (Northern Portion)	Diazinon	Source Unknown	6795 Acres	Being addressed with USEPA approved TMDL
Delta Waterways (Northern Portion)	Dieldrin	Source Unknown	6795 Acres	TMDL required
Delta Waterways (Northern Portion)	Group A Pesticides	Source Unknown	6795 Acres	TMDL required
Delta Waterways (Northern Portion)	Invasive Species	Source Unknown	6795 Acres	TMDL required
Delta Waterways (Northern Portion)	Mercury	Source Unknown	6795 Acres	TMDL required
Delta Waterways (Northern Portion)	PCBs (Polychlorinated biphenyls)	Source Unknown	6795 Acres	TMDL required
Delta Waterways (Northern Portion)	Unknown Toxicity	Source Unknown	6795 Acres	TMDL required
Morrison Creek	Diazinon	Agriculture	26 Miles	Being addressed with USEPA approved TMDL
Morrison Creek	Pentachlorophenol (PCP)	Source Unknown	26 Miles	TMDL required
Morrison Creek	Pyrethroids	Source Unknown	26 Miles	TMDL required
Morrison Creek	Sediment Toxicity	Source Unknown	26 Miles	TMDL required
Elder Creek	Chlorpyrifos	Storm sewers	11.07 miles	Being addressed with USEPA approved TMDL
Elder Creek	Diazinon	Source Unknown	11.07 miles	Being addressed with USEPA approved TMDL
Elder Creek	Pyrethroids	Source Unknown	11.07 miles	TMDL required
Elder Creek	Sediment Toxicity	Source Unknown	11.07 miles	TMDL required

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to hydrology and water quality. When an impact is determined to be significant, mitigation measures have been identified that would reduce or avoid that impact.

Methodology of Analysis

Using data published by the CVRWQCB, the DWR, and agencies releasing or diverting flow from the City's Combined Sewer System in conjuncture with CEQA Environmental Checklist for guidance, the following thresholds of significance were established and were analyzed and evaluated to determine whether impacts to hydrology and water quality would be significant. Specifically, the analysis considered that there could be a potentially significant adverse effect if the proposed Project would:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on- or off-site;
- Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;
- Place within a 100-year flood hazard area structures which would impede or redirect flood flows; or,
- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam;
- Cause inundation by seiche, tsunami, or mudflow.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact HYD-1: Potential to violate any water quality standards or waste discharge requirements.

Project activities such as construction of the multi-use trail would create new impervious surfaces. This would result in an incremental reduction in the amount of natural soil surfaces available for infiltration of rainfall and runoff, potentially generating additional sediment runoff during storm events which could degrade the quality of receiving waters. During storm events, sediment is transported via runoff to stormwater drainage systems. Absent controls, contaminated runoff waters could flow into the stormwater drainage systems that discharge into rivers, agricultural ditches, sloughs, and channels and ultimately could degrade the water quality of any of these water bodies.

The Project would result in an increase of approximately 9.5 acres of paved surface area, which would contribute to an increase in the volume of storm water runoff from the multi-use trail surface that could enter the drainage system and eventually the waterways within the Project area. Impacts to water quality may result from sediment-laden storm water discharged into these waterways. Although the Project would potentially increase storm water runoff, the proposed Project would adhere to all applicable Phase I MS4 NPDES requirements. With the inclusion of permanent treatment control BMPs, as specified by Avoidance and Minimization Measure WQ-1, long-term Project impacts to water quality are anticipated to be minimal.

Although none of the waterways within the Project study area are included in the RWQCB's list of impaired waters, there is the potential for a negligible increase in drainage discharge into the Sacramento River, which is 303(d) listed for pesticides and heavy metals, due to increased impervious surfaces from the multi-use trail. Avoidance and Minimization Measures WQ-1 through WQ-5 would be implemented to minimize potential impacts to water quality.

Lastly, construction of the Project would necessitate temporary impacts of 0.01 acres of jurisdictional waters of the State to facilitate the installation of the multi-use trail bridge over an unnamed waterway. No permanent impacts to aquatic habitats are anticipated. The Project anticipates acquiring a non-notifying USACE Nationwide 14 permit and a RWQCB Section 401 Water Quality Certification prior to the start of construction. During final design, should temporary impacts to the open channel storm drainage feature be determined to "substantially adversely affect existing fish or wildlife resources" pursuant to the CFG Code 1602, a Section 1602 Streambed Alteration Agreement would also be acquired from the CDFW.

Short-Term Impacts During Construction

Construction-related earth-disturbing activities of the proposed Project would introduce the potential for increased erosion and sedimentation, with subsequent effects on water quality. During site grading, trenching, and other construction activities, areas of bare soil would be exposed to erosive forces during rainfall events. Bare soils are much more likely to erode than vegetated areas because bare areas lack dispersion, infiltration, and retention properties covering vegetation provides. Absent actions to minimize erosion, the extent of the impacts would be dependent on soil erosion potential, type of construction practice, extent of disturbed area, timing of precipitation events, and topography and proximity to drainage channels. In addition, construction equipment and activities would have the potential to leak hazardous materials, such as oil and gasoline, and potentially affect surface water or groundwater quality. Improper use or accidental spills of fuels, oils, and other construction-related hazardous materials, such as pipe sealant, solvents, and paints, could also pose a threat to the water quality of local water bodies. These potential leaks or spills, if not contained, would be considered a potentially significant impact on ground and surface water quality. Without precautions to contain or capture sediments or accidental hazardous spills, construction activities could produce substantial pollutants in stormwater runoff and result in a significant impact on the existing surface water quality. The proposed Project would implement **WQ-1** through **WQ-3** to minimize construction-related impacts.

Level of Significance: Less than Significant with Mitigation

Mitigation Required: WQ-1 through WQ-3

Impact HYD-2: Potential to substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).

Due to the shallow depth of Project-related excavation, the proposed Project is not expected to encounter groundwater; therefore, dewatering is not anticipated. No groundwater wells would be used for operation of the proposed Project. Therefore, impacts related to groundwater supply would be less than significant.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact HYD-3: Potential to substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation or substantially increase the rate or amount of surface runoff in a manner that would result in flooding on-or off-site.

Implementation of the proposed Project will involve grading that has the potential to alter the existing topography of the Project site. However, the proposed grading and associated drainage facilities will be designed such that the existing drainage patterns are maintained and storm water runoff will continue to drain where it does now. The project will not alter the course of a stream or a river.

The Project would result in an increase of approximately 9.5 acres of paved surface area, which would contribute to an increase in the volume of storm water runoff from the multi-use trail surface. Storm water runoff from the project will be directed to infiltration and/or detention facilities as well as the City's storm drain system via new drainage facilities such as ditches and culverts. The proposed drainage facilities throughout the trail that would direct the water in such a way as to prevent flooding during storm events. Additionally, **WQ-1** through **WQ-3** would also be implemented to further control construction impacts due to additional runoff by incorporating and implementing the City's standards related to erosion control and grading activities.

Although the construction activities may have the potential to temporarily alter existing site drainage patterns within and immediately around the proposed trail corridor, these construction activities would be temporary, and the site would be regraded to appropriately drain stormwater. Mitigation measures **WQ-1** through **WQ-3** would also be implemented to further control construction impacts to erosion and runoff by incorporating and implementing the City's standards related to erosion control and grading activities. Therefore, the potential for the proposed Project to substantially alter the existing drainage pattern or cause flooding of the site during construction is considered less than significant with mitigation.

Therefore, the overall potential for the proposed Project to substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation or flooding on- or off-site during construction or operation would be considered less than significant with mitigation incorporated.

Level of Significance: Less than Significant with Mitigation

Mitigation Required: WQ-1 through WQ-3

Impact HYD-4: Potential to create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.

The proposed multi-use trail would advance and complete the planned connection between the Sacramento River Parkway and the Freeport Shores Bikeway in accordance with the City of Sacramento Bikeway Master Plan. The City Bikeway Master Plan shows a continuous non-motorized trail system along the abandoned railway corridor. The proposed Project would be not create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff other than what was planned for in the General Plan and the City Bikeway Master Plan.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact HYD-5: Potential to otherwise substantially degrade water quality.

Improper storage of hazardous materials on-site during construction could pose a risk of release of hazardous materials, thus contributing to the degradation of water quality. Section 2.7, Hazards and Hazardous Materials, provides further discussion on the hazardous materials that could be used during construction of the proposed Project. In order to reduce the potential of hazardous materials release, standard BMPs would be implemented which includes the development of a Spill Prevention and Contingency Plan. This Plan involves specific actions and procedures the contractor must implement in the event of a spill. This measure would reduce the potential for contamination of water supplies through runoff or ground water infiltration.

Additionally, inadvertent erosion that results in increased sediment in streams, or discharge of other materials into waterbodies, as a result of Project construction activities could result in adverse impacts to water quality. Mitigation measure **WQ-1** through **WQ-3** would be implemented during the construction phase to avoid and minimize potential adverse impacts to water quality from erosion and sedimentation.

Operation of the proposed Project would not involve actions that could degrade water quality.

Level of Significance: Less than Significant with Mitigation

Mitigation Required: WQ-1 through WQ-3

Impact HYD-6: Potential to place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

The proposed Project would not entail construction of housing, and thus would not involve the placement of housing within the mapped 100-year flood hazard area. The proposed Project would have a less than significant impact to the existing 100-year floodplain.

Level of Significance: Less Than Significant

Mitigation Required: None Required

Impact HYD-7: Potential to place within a 100-year flood hazard area structures which would impede or redirect flood flows.

The Federal Emergency Management Agency (FEMA) Flood Insurance Rate Maps (FIRM) show that the Project area is located primarily in Zone X, which is defined as an area of 0.2 percent chance of annual flood, areas of 1 percent annual chance flood with average depths of less than 1 foot or with drainage areas less than 1 square mile, and areas protected by levees from 1 percent annual chance flood. The FIRMs for the Project area are shown in Appendix H. A CVFPB floodplain encroachment permit will be obtained prior to construction for activities that occur within the designated floodway. Consultation with SAFCA and Department of Water Resources will also occur throughout final design to coordinate the timing of construction of the multi-use trail to occur after the planned levee improvements. The proposed Project would replace an existing bridge over the open channel drainage feature south of Charlie Jensen Park; however, this bridge would be located in Zone X of the FEMA Flood Insurance Rate Maps and would not impede or redirect flood flows.

Level of Significance: Less Than Significant

Mitigation Required: None Required

Impact HYD-8: Potential to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

Although the Project would replace an existing bridge over the open channel drainage feature south of Charlie Jensen Park, the bridge is located within Zone X of the FEMA Flood Insurance Rate Maps and thus would not expose people or structures to a significant risk of loss, injury, or death involving flooding. The proposed Project area is located within an area that is protected from 100-year flows by levees, which means that if one of the levees or dams within the area were to fail, the proposed Project could potentially be affected. However, the risk for the proposed Project to expose people to risk involving flooding would be minimal, because the proposed Project is a multi-use trail and would not be intended for permanent human habitation. Therefore, the potential for the proposed Project to expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam is considered less than significant.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact HYD-9: Potential to cause inundation by seiche, tsunami, or mudflow.

The proposed Project's inland location negates the risk of a tsunami. According to the National Oceanic and Atmospheric Administration (NOAA), seiche's "occur in semi- or fully-enclosed bod(ies) of water [and] are typically caused when strong winds and rapid changes in atmospheric pressure push water from one end of a body of water to the other" (NOAA 2017). There are no large bodies of water capable of tsunamis or seiches located near the proposed Project site. The Project site is approximately 80 miles from a coastal region. Additionally, due to the relatively flat nature of the proposed Project area, the likelihood of mudflow accruing in the area is unlikely. Therefore, there would be no potential for the proposed Project to cause an inundation by seiche, tsunami, or mudflow.

Level of Significance: No Impact

Mitigation Required: None Required

Mitigation Measures

WQ-1: The proposed Project will implement all feasible Low Impact Development (LID) BMPs and follow the Central Valley Region Phase I MS4 NPDES Permit (R5-2016-0040) for long-term, post-construction stormwater runoff.

WQ-2: The proposed Project will require a National Pollution Discharge Elimination System (NPDES) General Construction Permit for discharges of storm water associated with construction activities (Construction General Permit 2012-0006-DWQ). As part of this permit requirement, a SWPPP shall be prepared prior to construction consistent with the requirements of the RWQCB. This SWPPP will incorporate all applicable BMPs to ensure that adequate measures are taken during construction to minimize impacts to water quality.

WQ-3: The SWPPP must include the following:

- Vehicle maintenance, staging and storing equipment, materials, fuels, lubricants, solvents, and other possible contaminants must be a minimum of 50 feet from surface waters. Any necessary equipment washing must occur where the water cannot flow into surface waters.
- The Project specifications will require the contractor to operate under an approved spill prevention and clean-up plan;
- Construction equipment will not be operated in flowing water;
- Construction work must be conducted according to site-specific construction plans that minimize the potential for sediment input to surface waters;

- Raw cement, concrete or concrete washings, asphalt, paint or other coating material, oil or other petroleum products, or any other substances that could be hazardous to aquatic life must be prevented from contaminating the soil or entering surface waters;
- Equipment used in and around surface waters must be in good working order and free of dripping or leaking contaminants; and,
- Any concrete rubble, asphalt, or other debris from construction must be taken to an approved disposal site.

2.9 LAND USE AND PLANNING

This section describes the regulatory and environmental setting for land use and planning. It also describes impacts to land use and planning that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

Federal and State

There are no Federal or State requirements related to land use and planning that are applicable to the proposed Project.

Local

City of Sacramento 2035 General Plan

The City of Sacramento 2035 General Plan updated in 2015 includes goals and policies that seek to promote sustainable growth and development practices, including pursuing opportunities to promote walking and biking in existing suburban neighborhoods through improvements such as introducing new pedestrian and bicycle connections. Other goals and policies focus on the creation of diverse neighborhoods that promote alternative modes of transportation and create a sense of place while integrating mixed uses and housing types for all socioeconomic levels. The 2035 General Plan seeks to create visually stimulating neighborhoods and corridors that center around pedestrian activity and promote socioeconomic growth identified in the 2035 General Plan.

The following goals and policies from the Land Use and Urban Design Element of the 2035 General Plan are applicable to the Project.

Goal LU 1.1 Growth and Change. Support sustainable growth and change through orderly and well-planned development that provides for the needs of existing and future residents and businesses, ensures the effective and equitable provision of public services, and makes efficient use of land and infrastructure.

Policy LU 1.1.5 Infill Development. The City shall promote and provide incentives (e.g., focused infill planning, zoning/rezoning, revised regulations, provision of infrastructure) for infill development, redevelopment, mining reuse, and growth in existing urbanized areas to enhance community character, optimize City investments in infrastructure and community facilities, support increased transit use, promote pedestrian- and bicycle-friendly neighborhoods, increase housing diversity, ensure integrity of historic districts, and enhance retail viability.

Goal LU 2.3 City of Trees and Open Spaces. Maintain multi-functional “green infrastructure” consisting of natural areas, open space, urban forest, and parkland, which serves as a defining physical feature of Sacramento, provides visitors and residents with access to open space and recreation, and is designed for environmental sustainability.

Policy LU 2.6.1 Sustainable Development Patterns. The City shall promote compact development patterns, mixed use, and higher-development intensities that use land efficiently; reduce pollution and automobile dependence and the expenditure of energy and other resources; and facilitate walking, bicycling, and transit use. (RDR)

Goal LU 4.2 Suburban Neighborhoods. Encourage the creation of more complete and well-designed suburban neighborhoods that provide a variety of housing choices and mix of uses that encourage walking and biking.

Policy LU 4.2.1 Enhanced Walking and Biking. The City shall pursue opportunities to promote walking and biking in existing suburban neighborhoods through improvements such as:

- Introducing new pedestrian and bicycle connections.
- Adding bike lanes and designating and signing bike routes.
- Narrowing streets where they are overly wide.
- Introducing planting strips and street trees between the curb and sidewalk.
- Introducing traffic circles, speed humps, traffic tables, and other appropriate traffic-calming improvements.

Goal LU 5.3 Traditional Centers. Promote traditional centers where people can shop and socialize within walking distance of surrounding neighborhoods.

Policy LU 5.4.3 Connectivity to Regional Centers. The City shall require greater pedestrian and bicycle connections between mixed-use regional commercial centers and surrounding neighborhoods.

Goal LU 6.1 Corridors. Support the development of major circulation corridors that balance their vehicular function with a vibrant mix of uses that contribute to meeting local and citywide needs for retail, services, and housing and provide pedestrian-friendly environments that serve as gathering places for adjacent neighborhoods

Policy LU 6.1.8 Corridor Transit. The City shall require design and development along mixed-use corridors that promotes the use of public transit and pedestrian and bicycle travel and maximizes personal safety through development features such as: ■ Safe and convenient access for pedestrians between buildings and transit stops, parking areas, and other buildings and facilities ■ Roads designed for automobile use, efficient transit service as well as pedestrian and bicycle travel.

Goal LU 9.1 Open Space, Parks, and Recreation. Protect open space for its recreational, agricultural, safety, and environmental value and provide adequate parks and open space areas throughout the city.

Policy LU 9.1.1 Open Space Preservation. The City shall place a high priority on acquiring and preserving open space lands for recreation, habitat protection and enhancement, flood hazard management, public safety, water and agricultural resources protection, and overall community benefit.

Environmental Setting

The following provides existing land uses on the proposed Project site as well as the surrounding land use designations and zoning.

The Project site has been designated as Parks and Recreation, Public/Quasi Public, Suburban Center, Suburban Corridor, Suburban Neighborhood High Density, Suburban Neighborhood Low Density, Suburban Neighborhood Medium Density, and Traditional Neighborhood Low Density in the 2035 General Plan. The Project site is zoned A for Agricultural, C-1 Limited Commercial, C-2 General Commercial, F Flood, M-1 Industrial, OB Office Building, R-1 Standard Single Family, R-2 Two-Family, R-3 Multi-Family, SC Shopping Center, and TC Transportation Corridor (see Figures 4 and 5).

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to land use. When an impact is determined to be significant, mitigation measures have been identified that would reduce or avoid that impact

Methodology for Analysis

According to the CEQA Environmental Checklist, the following thresholds of significance were established and were analyzed and evaluated to determine whether impacts to land use would be significant. Would the proposed Project:

- Physically divide an established community;

- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project; however, the nature of the proposed Project is a public infrastructure Project and once completed would not result in a change in the land use or zoning of the site.

Impact LAND-1: Potential to physically divide an established community.

The proposed Project consists of constructing 4.8 miles of Class 1 multi-use trail along the abandoned railway corridor west of Freeport Boulevard from south of Meadowview Road/Pocket Road to the Sacramento River Parkway north of Sutterville Road. The existing adjacent communities would remain intact and as such, would not be divided. No acquisition of private property would occur as a result of the proposed Project. Acquisition and temporary easements for construction of the trail would be obtained by the City prior to Project implementation.

Level of Significance: No Impact

Mitigation Required: None Required

Impact LAND-2: Potential to conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the Project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.

The Project site is located in an urbanized portion of the community. The proposed Project area for the multi-use trail is classified as Parks and Recreation in the City of Sacramento 2035 General Plan and zoning code. The proposed Project is consistent with the City of Sacramento General Plan as the proposed Project will be zoned for Parks and Recreation, and the Project would not change the zoning designation of adjacent areas. Because the Project does not create new connections to undeveloped land, no impacts to growth, economics, or affordable housing would occur. Development of the site as proposed would alter the existing landscape, but the Project site has been designated for recreation in the 2035 General Plan and the proposed development is consistent with these planning designations.

The intent of this trail is to provide north-south multi-modal connectivity for local and regional users. The new trail will also advance and complete the planned connection between the Sacramento River Parkway and the Freeport Shores Bikeway in accordance with the City of Sacramento Bikeway Master Plan. The City of Sacramento General Plan describes a transportation goal that states: "Create and maintain a safe, comprehensive, and integrated bicycle system and support facilities throughout the City that encourage bicycling that is accessible to all." Further the 2035 General Plan calls to "convert underused rights-of-way along travel lanes, drainage canals, and railroad corridors to bikeways wherever possible and desirable." The proposed Project would meet the goals of the City of Sacramento General Plan and the City Bikeway Master Plan. Since the proposed Project does not have the potential to conflict with land use plans as described above there would be no impact.

Level of Significance: No Impact

Mitigation Required: None Required

Impact LAND-3: Potential to conflict with any applicable habitat conservation plan or natural community conservation plan.

The proposed Project does not fall within the boundaries of any Habitat Conservation Plan as discussed in the Biological Resources Section 2.3. Additionally, there are no special status species or other species covered under a habitat conservation plan present within the Project area and the proposed Project would not have a significant impact to biological resources (as discussed within Section 2.3). Therefore, the proposed Project would not conflict with any habitat conservation plans in the region.

Level of Significance: No Impact

Mitigation Required: None Required

Mitigation Measures

No mitigation required.

2.10 NOISE AND VIBRATION

This section describes the environmental and regulatory setting for noise. It also describes impacts on noise that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

This section discusses the local regulations, policies and objectives for noise and vibration. Particularly, the City of Sacramento 2035 General Plan policies that govern noise and vibrations are discussed below and are applicable to the proposed Project.

Local

City of Sacramento 2035 General Plan

Construction noise is regulated by the City of Sacramento. Chapter 8.68 of the City of Sacramento Municipal Code contains application noise regulations within City limits:

Section 8.68.060 – Exterior Noise Standards

- a. *The noise standards that apply to all agricultural and residential properties are:*
 1. *From seven a.m. to ten p.m. the exterior noise standard shall be fifty-five (55) dBA.*
 2. *From ten p.m. to seven a.m. the exterior noise standard shall be fifty (50) dBA.*

Construction noise for the proposed Project is exempt under City Code Section 8.68.080 as long as there is compliance with the noise code requirements. Construction activity that occurs outside the exempt hours of the day (7am to 6pm from Monday through Saturday, and 9am to 6pm on Sundays) could result in noise that exceeds the 55-dBA daytime standard or 50-dBA nighttime standard. The contractor would be required to comply with the noise ordinance during construction activities. However, if construction activities generate noise in violation of the timeframes described above, the contractor will be required to obtain the proper variances as outlined in Sections 8.68.250 and 8.68.260.

Goal EC 3.1 Noise Reduction. Minimize noise impacts on human activity to ensure the health and safety of the community.

Policy EC 3.1.1 Exterior Noise Standards. The City shall require noise mitigation for all development where the Projected exterior noise levels exceed those shown in Table 17 below, to the extent feasible.

Table 17. Exterior Noise Compatibility Standards for Various Land Uses

Land Use Type	Highest Level of Noise Exposure That is Regarded as “Normally Acceptable”
Residential- Low Density Single Family, Duplex, Mobile Homes	60 dBA
Residential- Multi-family	65 dBA
Transient Lodging- Motels, Hotels	65 dBA
Schools, Libraries, Churches, Hospitals, Nursing Homes	70 dBA
Auditoriums, Concert Halls, Amphitheaters	Mitigation Based on site-specific study
Sports Arena, Outdoor Spectator Sports	Mitigation based on site-specific study
Playgrounds, Neighborhood Parks	70 dBA

Table 17. Exterior Noise Compatibility Standards for Various Land Uses (Continued)

Land Use Type	Highest Level of Noise Exposure That is Regarded as “Normally Acceptable”
Golf Courses, Riding stables, Water Recreation, Cemeteries	75 dBA
Office Buildings- Businesses, Commercial and Professional	70 dBA
Industrial, Manufacturing, Utilities, Agriculture	75 dBA

Source: (City of Sacramento 2009b)

Policy EC 3.1.2 Exterior Incremental Noise Standards. The City shall require noise mitigation for all development that increases existing noise levels by more than the allowable increment shown in Table 18, to the extent feasible.

Table 18. Exterior Incremental Noise Impact Standards for Noise-Sensitive Uses (dBA)

Residences and Buildings where people normally sleep		Institutional land uses with primarily daytime and evening uses	
Existing (Ldn)	Allowable Noise Increment	Existing Peak hour (Leq)	Allowable Noise Increment
45	8	45	12
50	5	50	9
55	3	55	6
60	2	60	5
65	1	65	3
70	1	70	3
75	0	75	1
80	0	80	0

Source: (City of Sacramento 2009b)

Policy EC 3.1.3 Interior Noise Standards. The City shall require new development to include noise mitigation to assure acceptable interior noise levels appropriate to the land use type: 45 dBA Ldn (Ldn = Day/Night Average Sound Level) for residential, transient lodgings, hospitals, nursing homes, and other uses where people normally sleep; and 45 dBA Leq (peak hour) for office buildings and similar uses.

Policy EC 3.1.4 Interior Noise Review for Multiple, Loud Short-Term Events. In cases where new development is proposed in areas subject to frequent, high-noise events, (such as aircraft overflights, or train and truck pass-bys), the City shall evaluate noise impacts on any sensitive receptors from such events when considering whether to approve the development proposal, taking into account potential for sleep disturbance, undue annoyance, and interruption in conversation, to ensure that the proposed development is compatible within the context of its surroundings.

Policy EC 3.1.5 Interior Vibration Standards. The City shall require construction Projects anticipated to generate a significant amount of vibration to ensure acceptable interior vibration levels at nearby residential and commercial uses based on the current City or Federal Transit Administration (FTA) criteria.

Policy EC 3.1.7 Vibration. The City shall require an assessment of the damage potential of vibration-induced construction activities, highways, and rail lines in close proximity to historic buildings and archaeological sites and require all feasible mitigation measures be implemented to ensure no damage would occur.

Policy EC 3.1.9 Compatibility with Park and Recreation Uses. The City shall limit the hours of operation of parks and active recreation areas in residential areas to minimize disturbance to residences.

Policy EC 3.1.10 Construction Noise. The City shall require development Projects subject to discretionary approval to assess potential construction noise impacts on nearby sensitive uses and to minimize impacts on these uses, to the extent feasible.

Environmental Setting

Noise is defined as unwanted sound. Sound levels usually are measured and expressed in decibels (dB), with 0 dB being the lowest threshold of hearing. Decibel levels range from 0 to 140: 50 dB for light traffic is considered a low decibel level, whereas 120 dB for a jet takeoff at 200 feet is considered a high decibel level.

Noise sources that contribute to ambient noise levels in and adjacent to the Project site include traffic from intersecting roadways and low amounts of noise from adjacent residential and recreational activities. Table 19 summarizes typical ambient noise levels based on population density.

Table 19. Population Density and Associated Ambient Noise Levels

Population Density	dBA, Ldn
Rural Suburban	40–50
Quiet suburban residential or small town	45–50
Normal suburban residential urban	50–55
Normal urban residential	60
Noisy urban residential	65
Very noisy urban residential	70
Downtown, major metropolis	75–80
Under flight path at major airport, 0.5 to 1 mile from runway	78–85
Adjoining freeway or near a major airport	80–90
Sources: Cowan 1984, Hoover and Keith 1996	

The vicinity of the Project area is most similar to that of “Normal suburban residential urban”. Normal suburban residential urban areas have a typical noise level of 50-55 dBA. The Technical Noise Supplement (Caltrans, 2009) defines a noise receiver or receptor as “any natural or artificial sensor that can perceive, register or be affected by sound, such as a human ear, or a microphone.”

Code of Federal Regulations (CFR) 23 CFR 772.5(h) defines a Type 1 Project as; “construction on new location or the physical alteration of an existing highway, which significantly changes either the horizontal or vertical alignment or increases the number of through-traffic lanes.” The proposed Project is a segment of 4.8-mile multiple-use trail that would provide connectivity between existing trails. As a result, the Project is not a Type 1 Project. Under the Caltrans Traffic Noise Analysis Protocol (CaTNAP), published in August 2006, Projects that are not Type 1 only require an evaluation of predicted construction noise. Therefore, only construction noise impacts are discussed.

The Project would take place within areas designated by the City of Sacramento General Plan for Parks and Recreation, Suburban Low and Medium Density, and Public land use. In general, noise sensitive land-uses include residences, schools, hospitals, churches, and parks. The Project would take place primarily near residences in suburbs, and construction activities would potentially occur within 50 feet from these residences.

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to noise. When an impact is determined to be significant, mitigation measures were identified that would reduce or avoid that impact.

Methodology for Analysis

Available documentation related to the existing noise environment and sensitive receptors applicable in the proposed Project area, including previous environmental documents prepared for projects in the area, were reviewed to evaluate potential noise impacts. Further, regulatory information, including general plans of local agencies, was reviewed to address site-specific concerns about these impacts from the proposed Project.

Using the CEQA Environmental Checklist for guidance the following thresholds of significance for evaluating potential impacts were established. These thresholds are evaluated in the following sections to determine whether potential public service impacts from the proposed Project on the baseline setting would be significant.

A potential impact would be significant if the proposed Project would:

- Expose persons to or generation of sustained noise levels above ambient noise conditions that could result in interference with speech or sleep;
- Expose persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project;
- A substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project;
- For a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip, a Project that would expose people residing or working in the Project area to excessive noise levels.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact NOS-1: Potential to expose persons to or generation of sustained noise levels above ambient noise conditions that could result in interference with speech or sleep.

To measure construction noise it is necessary to consider both the context of construction activities and the kinds of construction equipment anticipated to be used. A wide variety of activities would occur during construction of the Project, including the following:

- 1) Grading/Earthwork Preparation (Dump Truck, Excavator, Compactor, Front End Loader, Grader)
- 2) Paving (Dump Truck, Paver, Roller, Tractor)

Table 20 summarizes noise levels typically produced by construction equipment commonly used on roadway construction Projects.

Table 20. Construction Equipment Noise Emissions and Acoustical Usage Factors Database

Equipment Description	Impact Device ?	Acoustical Use Factor (%)	Spec 721.560 (dBA, slow)	Actual Measured (dBA, slow)	No. of Actual Data (Count)
				(samples averaged)	
All Other Equipment > 5 HP	No	50	85	-- N/A --	0
Auger Drill Rig	No	20	85	84	36
Backhoe	No	40	80	78	372
Bar Bender	No	20	80	-- N/A --	0
Blasting	Yes	-- N/A --	94	-- N/A --	0
Boring Jack Power Unit	No	50	80	83	1
Chain Saw	No	20	85	84	46
Clam Shovel (dropping)	Yes	20	93	87	4
Compactor (ground)	No	20	80	83	57
Compressor (air)	No	40	80	78	18
Concrete Batch Plant	No	15	83	-- N/A --	0
Concrete Mixer Truck	No	40	85	79	40
Concrete Pump Truck	No	20	82	81	30
Concrete Saw	No	20	90	90	55
Crane	No	16	85	81	405
Dozer	No	40	85	82	55
Drill Rig Truck	No	20	84	79	22
Drum Mixer	No	50	80	80	1
Dump Truck	No	40	84	76	31
Excavator	No	40	85	81	170
Flat Bed Truck	No	40	84	74	4
Front End Loader	No	40	80	79	96
Generator	No	50	82	81	19
Generator (<25KVA, VMS	No	50	70	73	74
Gradall	No	40	85	83	70
Grader	No	40	85	-- N/A --	0
Grapple (on backhoe)	No	40	85	87	1
Horizontal Boring Hvdr. Jack	No	25	80	82	6
Hydra Break Ram	Yes	10	90	-- N/A --	0
Impact Pile Driver	Yes	20	95	101	11
Jackhammer	Yes	20	85	89	133
Man Lift	No	20	85	75	23
Mounted Impact Hammer (hoe	Yes	20	90	90	212
Pavement Scarafier	No	20	85	90	2
Paver	No	50	85	77	9
Pickup Truck	No	40	55	75	1
Pneumatic Tools	No	50	85	85	90
Pumps	No	50	77	81	17
Refrigerator Unit	No	100	82	73	3
Rivit Buster/chipping gun	Yes	20	85	79	19
Rock Drill	No	20	85	81	3
Roller	No	20	85	80	16
Sand Blasting (Single Nozzle)	No	20	85	96	9
Scraper	No	40	85	84	12
Shears (on backhoe)	No	40	85	96	5
Slurry Plant	No	100	78	78	1
Slurry Trenching Machine	No	50	82	80	75
Soil Mix Drill Rig	No	50	80	-- N/A --	0
Tractor	No	40	84	-- N/A --	0
Vacuum Excavator (Vac-truck)	No	40	85	85	149
Vacuum Street Sweeper	No	10	80	82	19
Ventilation Fan	No	100	85	79	13
Vibrating Hopper	No	50	85	87	1
Vibratory Concrete Mixer	No	20	80	80	1

Taken from Roadway Construction Noise Model User's Guide (FHWA 2006b)

Construction equipment is expected to generate noise levels ranging from 50 to 85 dB at a distance of 50 feet and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance. Construction noise would be intermittent, and noise levels would vary depending on the type of construction activity. The loudest construction activities would include engine noise from construction vehicles, and excavation. For this Project, the lowest construction equipment-related noise levels would be 50 dBA at a distance of 50 feet for sound from a pick-up truck. The highest noise levels would be up to 85 dBA (at a distance of 50 feet) from operation of the excavator or dozer.

The nearest sensitive receptors that would be most affected by construction noise impacts are single-family residences located within 50 feet of the Project footprint; however, construction noise impacts to sensitive receptors would be minimal, short term, intermittent, and would occur during daytime construction hours pursuant to the City of Sacramento Noise Ordinance. No pile driving or other more intensive noise generation is expected to occur. It is not anticipated that construction work would need to occur outside of established daytime hours; however, should the City determine that night work is necessary, a variance would be obtained and adjacent property owners would be notified. These impacts would be reduced with the inclusion of best management practices and measure NOI-1.

Level of Significance: Less than Significant With Mitigation Incorporated

Mitigation Required: NOI-1

Impact NOS-2: Potential to expose persons to or generate excessive groundborne vibration or groundborne noise levels.

Construction activities associated with the proposed Project may also result in ground vibration. Table 21 shows examples of the amount of vibration generated from the types of construction equipment close to a sensitive receptor in terms of Peak Particle Velocity (PPV) at a range of 25 feet.

Table 21. Vibration Source Amplitudes for Construction Equipment

Equipment	PPV at 50 ft (in/sec)
Pile Driver (impact)	0.537
Pile Drive (sonic)	0.620
Vibratory Roller	0.08
Hoe Ram	0.031
Large Bulldozer	0.031
Caisson drilling	0.031
Loaded trucks	0.027
Jackhammer	0.012
Small bulldozer	0.003

Source: Federal Transit Administration, 2006. See also:

http://www.fhwa.dot.gov/environment/noise/construction_noise/handbook/handbook09.cfm

Vibration can impact sensitive receptors by causing damage to a structure or by causing annoyance based on human perception. The threshold at which there is a risk of damage to older buildings is 0.3 PPV (in/sec) (Caltrans, 2013). As shown in Table 21 above, none of the activities that would take place during construction have the potential to reach 0.3 PPV (in/sec) to the nearest residence 50 feet away; therefore, no potential for damage would occur.

Construction activities that would take place at least 50 feet from the sensitive receptor would range from Barely Perceptible to Distinctly Perceptible, depending on the distance and intensity of vibration generation. Table 22 outlines the amount of PPV that would potentially cause annoyance to human perception. Vibration from construction activity is typically below the threshold of perception when the activity is more than about 50 feet from the receiver. Considering the low intensity of vibration and the short-term nature of the construction activities near affected sensitive receptors, this impact is not

considered substantial and would not require additional minimization measures beyond those outlined below.

Table 22. Guideline Vibration Annoyance Potential Criteria

Human Response	Maximum PPV (in/sec)	
	Transient Sources	Continuous/Frequent intermittent Sources
Barely Perceptible	0.04	0.01
Distinctly Perceptible	0.25	0.04
Strongly Perceptible	0.9	0.10
Severe	2.0	0.40

Note: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack-and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

Source: Caltrans Transportation- and Construction-Induced Vibration Guidance Manual (Caltrans 2004)

Significance: Less than Significant With Mitigation

Mitigation Required: NOI-1

Impact NOS-3: Potential to cause a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project.

Operation of the proposed Project may introduce noise associated with the multi-use trail generated from recreational activities and pedestrians. The closest sensitive receptors that would be potentially exposed to operational noise from the proposed Project are residential uses approximately 50 feet away. Trail-related noise impacts experienced by adjacent residences would not be considered a substantial increase in noise levels. Therefore, the Project would not generate a significant increase in long-term operational noise within the Project area.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact NOS-4: Potential to cause a substantial temporary or periodic increase in ambient noise levels in the Project vicinity above levels existing without the Project.

To measure construction noise it is necessary to consider both the context of construction activities and the kinds of construction equipment forecast to be used. A wide variety of construction activities would occur during the Project improvement process and would include the following:

- 3) Grading/Earthwork Preparation (Dump Truck, Excavator, Compactor, Front End Loader, Grader)
- 4) Paving (Dump Truck, Paver, Roller, Tractor)

Table 20 shown in Impact NOS-1 summarizes noise levels typically produced by construction equipment commonly used on roadway construction Projects. Construction equipment is expected to generate noise levels ranging from 50 to 85 dB at a distance of 50 feet, and noise produced by construction equipment would be reduced over distance at a rate of about 6 dB per doubling of distance. Construction noise would be intermittent, and noise levels would vary depending on the type of construction activity. The loudest construction activities would include engine noise from construction vehicles, and excavation. For this Project, the lowest construction equipment-related noise levels would be 50 dBA at a distance of 50 feet for sound from a pick-up truck. The highest noise levels would be up to 85 dBA (at a distance of 50 feet) from operation of the excavator or dozer.

The nearest sensitive receptors that would be most affected by construction noise impacts are single-family residences located within 50 feet of the Project footprint. Activities would be generally less

intensive noise generating activities. No pile driving or other more intensive noise generation is expected to occur.

Construction noise impacts to sensitive receptors would be minimal, short term, intermittent, and would occur during daytime construction hours pursuant to the City of Sacramento Noise Ordinance. It is not anticipated that construction work would need to occur outside of established daytime hours; however, should the City determine that night work is necessary, a variance would be obtained. These impacts would be reduced with the inclusion of best management practices and the minimization measure **NOI-1**.

Level of Significance: Less than Significant With Mitigation

Mitigation Required: NOI-1

Impact NOS-5: Potential for a Project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, or within the vicinity of a private airstrip would the Project expose people residing or working in the Project area to excessive noise levels.

The proposed trail is located approximately 0.30 mile west of Sacramento Executive Airport; however, the proposed Project is a multi-use trail and would not be intended for permanent human habitation. Therefore, the potential for the proposed Project to expose people to a new source of permanent noise is considered less than significant.

Level of Significance: Less Than Significant

Mitigation Required: None Required

Mitigation Measures

NOI-1: The following noise control measures will be incorporated into the contract documents for construction of the Project:

- Construction activity that occurs outside the exempt hours of the day (7am to 6pm from Monday through Saturday, and 9am to 6pm on Sundays) that exceeds the 50-dBA daytime standard or 45-dBA nighttime standard must obtain the proper variances as outlined in Sections 8.68.250 and 8.68.260 of the City of Sacramento Noise Ordinance.
- Construction equipment and vehicles should be equipped with properly operating mufflers according to the manufacturers' recommendations. Air compressors and pneumatic equipment should be equipped with the manufacturer-recommended muffler, and tools should be equipped with shrouds or shields. An internal combustion engine will not be operated on the job site without the appropriate muffler.
- The use of loud sound signals shall be avoided in favor of light warnings except those required by safety laws for the protection of personnel.

2.11 POPULATION AND HOUSING

This section describes the regulatory and environmental setting for population and housing. It also describes impacts that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

CEQA requires the analysis of a Project's potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents "...discuss the ways in which the Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment..."

Additionally, Federal and state laws (the URA, also known as the Uniform Relocation Act or just Uniform Act, and California Government Code, Chapter 16, Section 7260, et seq.) require that relocation assistance be provided to any person, business, farm, or nonprofit operation relocated because of the acquisition of real property by a public entity for public use.

City of Sacramento 2035 General Plan

The following goals and policies from the City of Sacramento 2035 General Plan Land Use and Economic Development element are applicable to the proposed Project.

Goal ED 1.1 Maintain a supportive business climate that increases the City's ability to retain and expand existing businesses and attract businesses

Policy ED 1.1.1 Economic Development Strategy. The City shall maintain and implement the Economic Development Strategy to identify priorities, support prosperity, and improve long-term fiscal competitiveness.

Policy ED 1.1.2 City Image. The City shall continue to promote Sacramento among its citizens and the wider business community as a livable community and an excellent place to do business.

Goal LU 1.1 Growth and Change. Support sustainable growth and change through orderly and well-planned development that provides for the needs of existing and future residents and businesses, ensures the effective and equitable provision of public services, and makes efficient use of land and infrastructure.

Policy LU 1.1.9 New Growth. The City shall continue to plan for future expansion and new growth in Special Study Areas to ensure that regional growth is adequately accommodated and served by the City, particularly when it cannot be absorbed in infill areas.

Goal ERC 2.1 Integrated Parks and Recreation System. Provide an integrated system of parks, open space areas, and recreational facilities that are safe and connect the diverse communities of Sacramento.

Policy ERC 2.1.1 Complete System. The City shall develop and maintain a complete system of parks and open space areas throughout Sacramento that provide opportunities for both passive and active recreation.

Policy ERC 2.1.2 Connected Network. The City shall connect all parts of Sacramento through integration of recreation and community facilities with other public spaces and rights-of-way (e.g., buffers, medians, bikeways, sidewalks, trails, bridges, and transit routes) that are easily accessible by alternative modes of transportation.

Goal ERC 2.2 Parks, Community and Recreation Facilities and Services. Plan and develop parks, community and recreation facilities, and services that enhance community livability; improve public health

and safety; are equitably distributed throughout the city; and are responsive to the needs and interests of residents, employees, and visitors.

Policy ERC 2.2.2 Timing of Services. The City shall ensure that the development of parks and community and recreation facilities and services keeps pace with development and growth within the city.

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to population and housing. When an impact is determined to be significant, mitigation measures were identified that would reduce or avoid that impact.

Methodology for Analysis

Using the CEQA Environmental Checklist for guidance the following thresholds of significance for evaluating potential impacts were established. These thresholds are evaluated in the following sections to determine whether potential population and housing impacts from the proposed Project on the baseline setting would be significant. A potential impact would be significant if the proposed Project would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact POP-1: Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure).

The Project would not create new connections to undeveloped land; therefore, no impacts to growth, economics, or affordable housing are anticipated to occur. The proposed Project aims to improve pedestrian and bicycle access throughout the South Land Park and Pocket communities and provide multi-modal connectivity to adjacent communities throughout the Sacramento area. The Project would result in improved accessibility for surrounding communities. Development of the site as proposed would alter the existing landscape, but the Project site would continue to be consistent with the planning designations in the 2035 General Plan.

Level of Significance: No impact.

Mitigation Required: None Required.

Impact POP-2: Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

The proposed Project would not require acquisition of private property. The proposed Project aims to improve pedestrian and bicycle access throughout the South Land Park and Pocket communities, and provide multi-modal connectivity to adjacent communities throughout the Sacramento area. No impacts would occur to the surrounding communities. The Project would result in improved accessibility for

surrounding communities. The Project will not displace any number of existing housing or necessitate the construction of replacement housing. The Project area is owned by public entities including the City of Sacramento, Sacramento Regional Transit, Caltrans, and California State Parks. Table 23 summarizes the APN parcel numbers and owners that may require full or partial acquisitions, or temporary construction easements for the proposed Project at this preliminary review stage. Figure 19 depicts all APN parcels that are located in the Direct Impact Area and the potential ROW for the proposed Project.

Table 23. Potential Project Right of Way

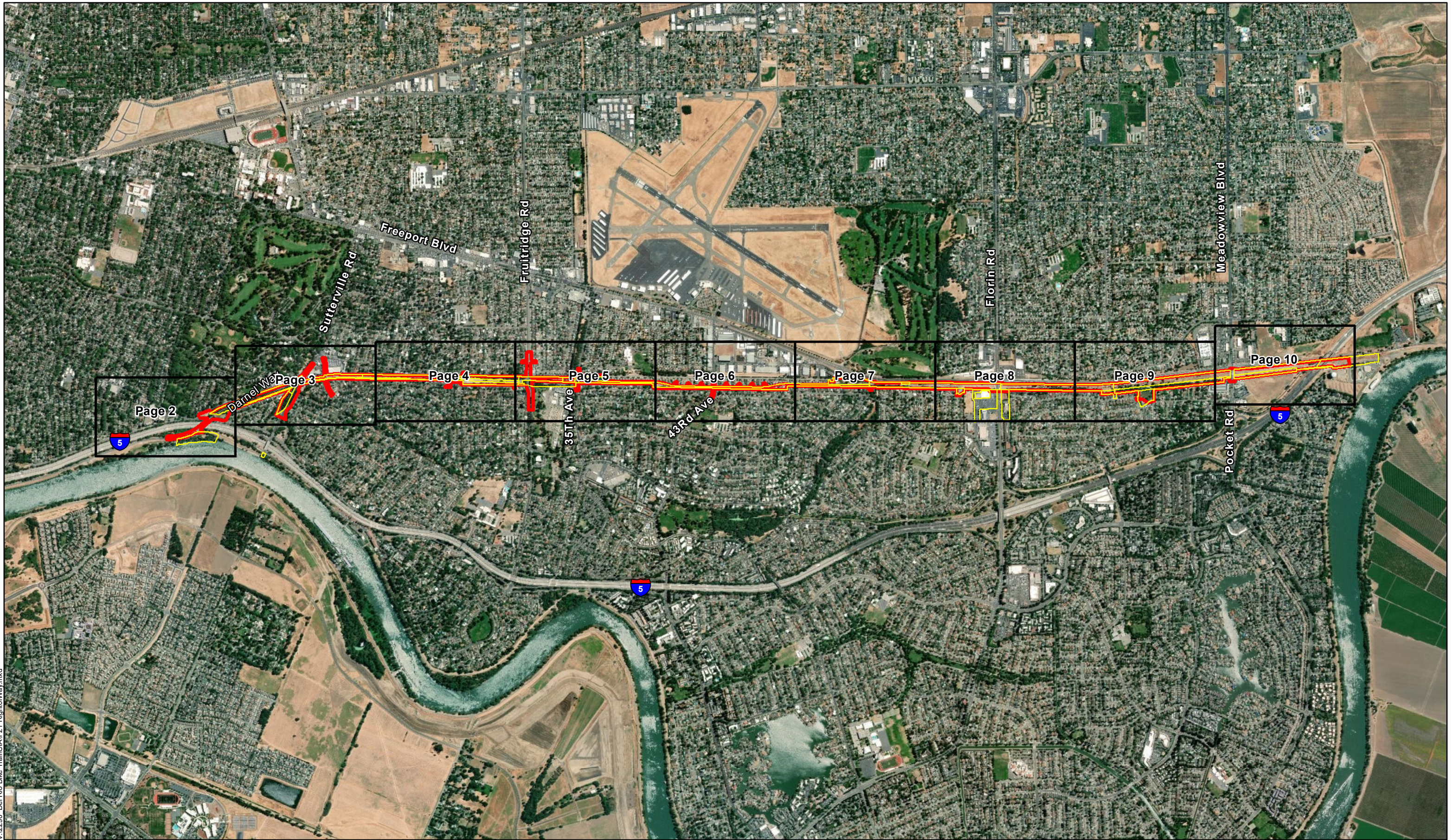
APN	OWNER
017-0010-051-0000	CITY OF SACRAMENTO
017-0020-006-0000	CITY OF SACRAMENTO
017-0020-012-0000	SACRAMENTO REGIONAL TRANSIT DISTRICT
031-0200-010-0000	STATE OF CALIFORNIA
017-0010-019-0000	CITY OF SACRAMENTO
017-0020-005-0000	CITY OF SACRAMENTO
035-0010-010-0000	SACRAMENTO REGIONAL TRANSIT DISTRICT
035-0010-045-0000	SACRAMENTO REGIONAL TRANSIT DISTRICT
031-0010-006-0000	SACRAMENTO REGIONAL TRANSIT DISTRICT
031-0010-009-0000	SACRAMENTO REGIONAL TRANSIT DISTRICT
017-0010-034-0000	CITY OF SACRAMENTO
017-0010-049-0000	CITY OF SACRAMENTO
017-0020-018-0000	SOUTHERN PACIFIC TRANSPORTATION
017-0010-025-0000	CITY OF SACRAMENTO
017-0010-028-0000	CITY OF SACRAMENTO
017-0020-007-0000	CITY OF SACRAMENTO
017-0020-010-0000	SACRAMENTO REGIONAL TRANSIT DISTRICT
017-0020-016-0000	CITY OF SACRAMENTO
017-0020-015-0000	SACRAMENTO REGIONAL TRANSIT DISTRICT
017-0020-013-0000	SACRAMENTO REGIONAL TRANSIT DISTRICT
017-0020-014-0000	CITY OF SACRAMENTO
035-0380-015-0000	CITY OF SACRAMENTO
035-0010-053-0000	SACRAMENTO REGIONAL TRANSIT DISTRICT
035-0010-055-0000	CITY OF SACRAMENTO
031-0010-007-0000	SACRAMENTO REGIONAL TRANSIT DISTRICT
031-0010-004-0000	CITY OF SACRAMENTO
031-0010-010-0000	STATE OF CALIFORNIA
031-0010-003-0000	CITY OF SACRAMENTO
035-0010-054-0000	CITY OF SACRAMENTO
017-0010-031-0000	CITY OF SACRAMENTO

*Source: ParcelQuest. *Data in this table is based on preliminary review of the ROW impacts for the proposed Project. This information will be updated upon final design.*

No acquisition of private property would occur as a result of the proposed Project. Acquisition and temporary easements for construction of the trail would be obtained by the City prior to Project implementation.

Level of Significance: No Impact.

Mitigation Required: None Required.



VA2290_Del Rio Bike Trail\CA\F21_RightsWay.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

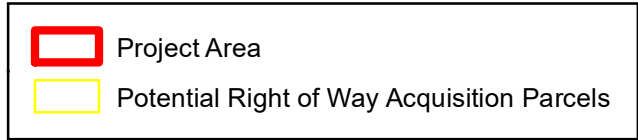
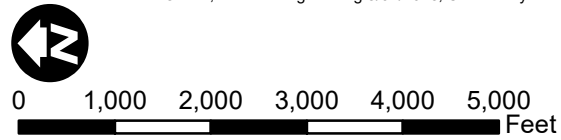
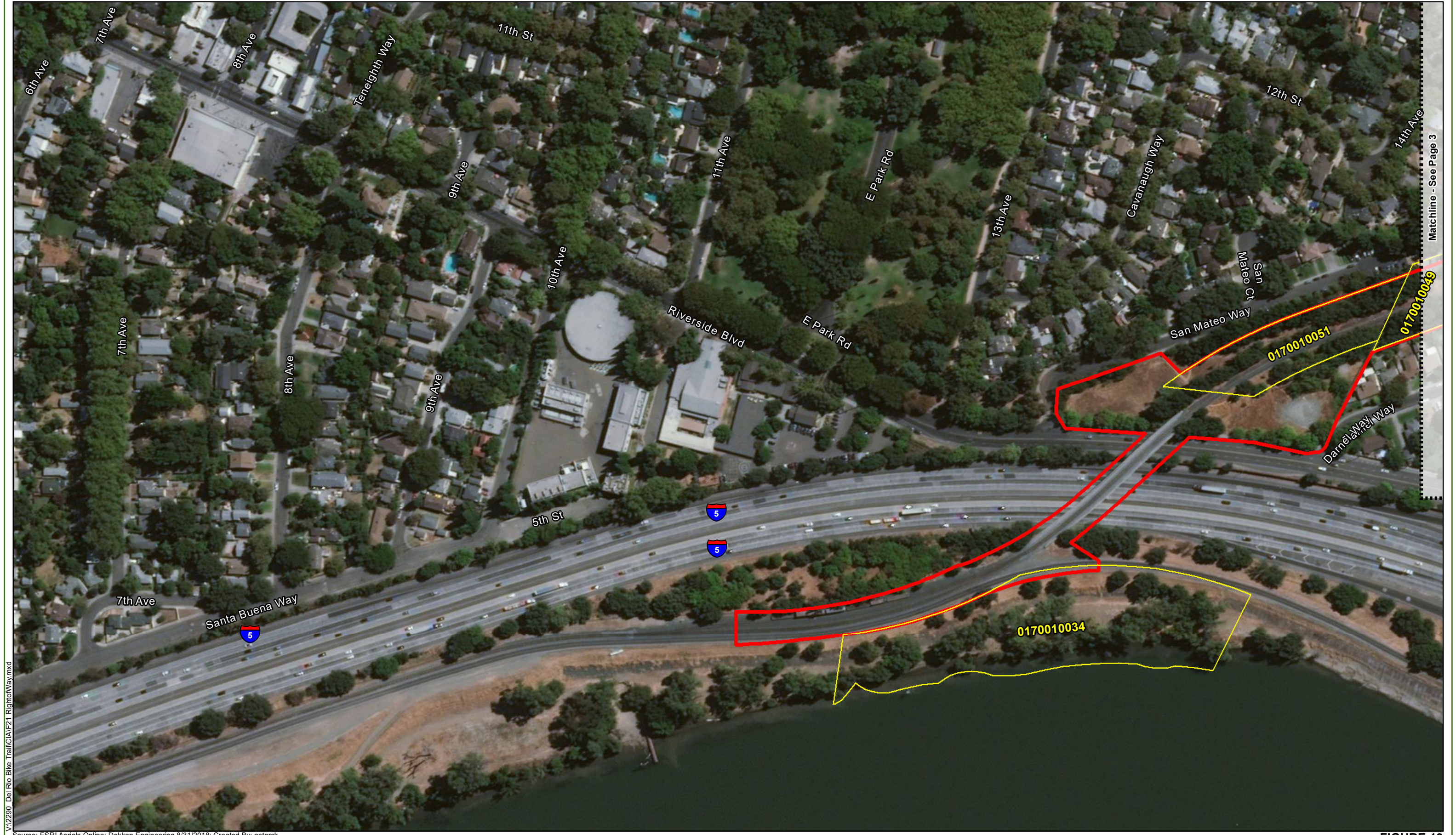
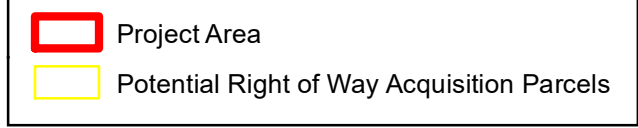
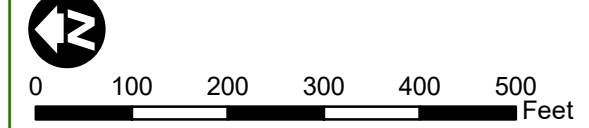


FIGURE 19
Potential Right-of-Way
Page 1 of 10
 ATP02-03-121M
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



VA2290_Del Rio Bike Trail\CIATF21 RightofWay.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck



Matchline - See Page 3

FIGURE 19
Potential Right-of-Way
 Page 2 of 10
 ATP02-03-121M
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

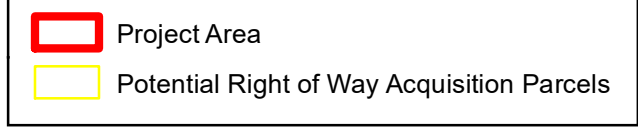
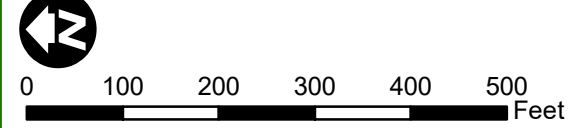
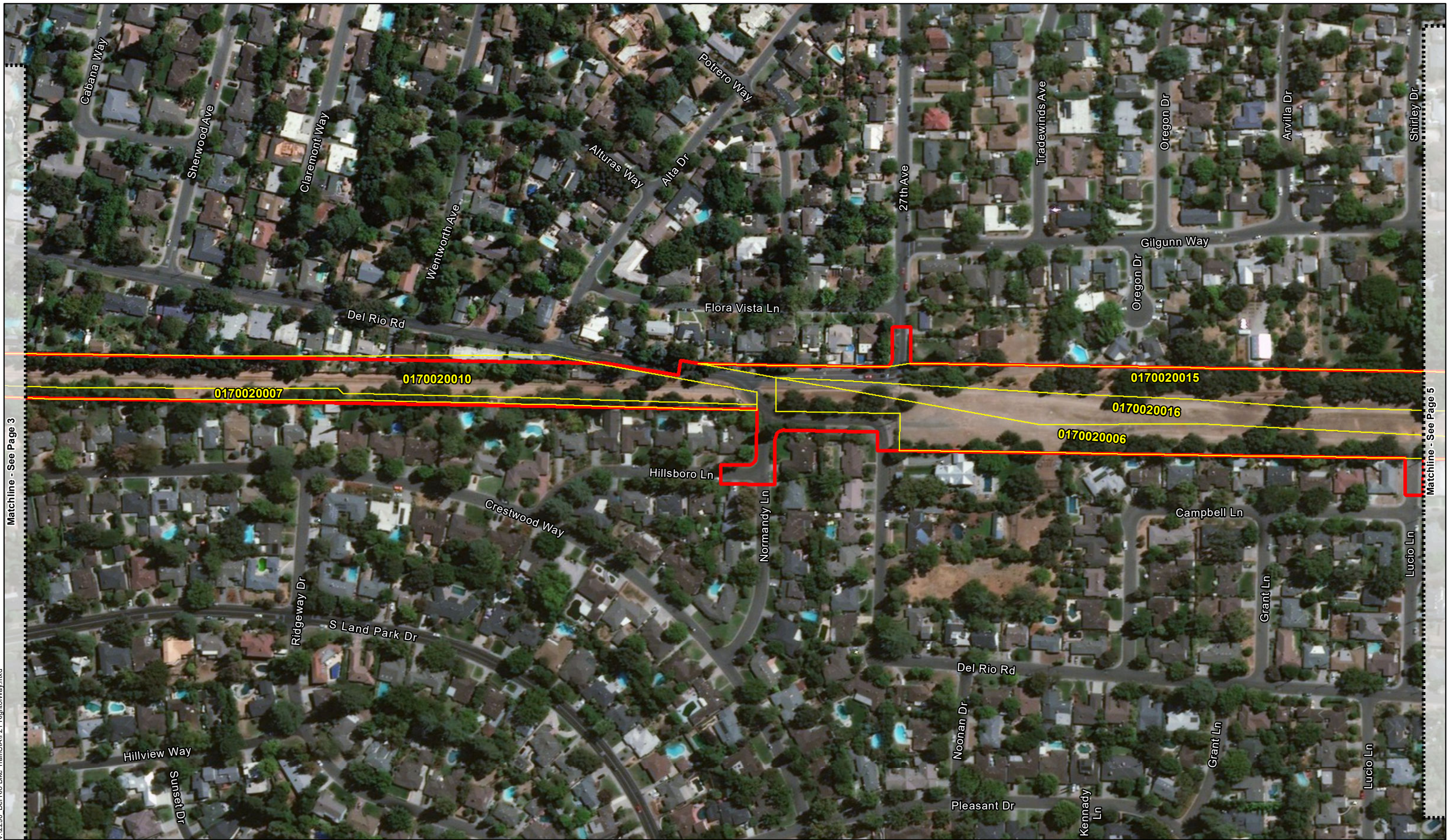


FIGURE 19
Potential Right-of-Way
 Page 3 of 10
 ATP02-03-121M
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

V:\2290_Del Rio Bike Trail\CA\F21 RightofWay.mxd

Matchline - See Page 2

Matchline - See Page 4



Matchline - See Page 3

Matchline - See Page 5

VA2290_Del Rio Bike Trail\CA\F21_Ridgeway.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

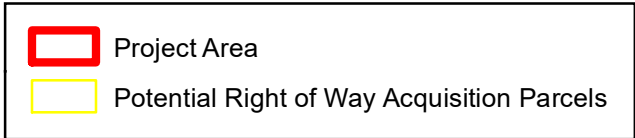
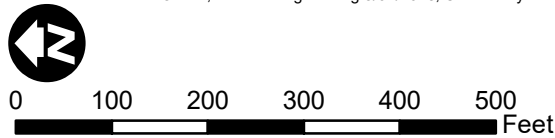
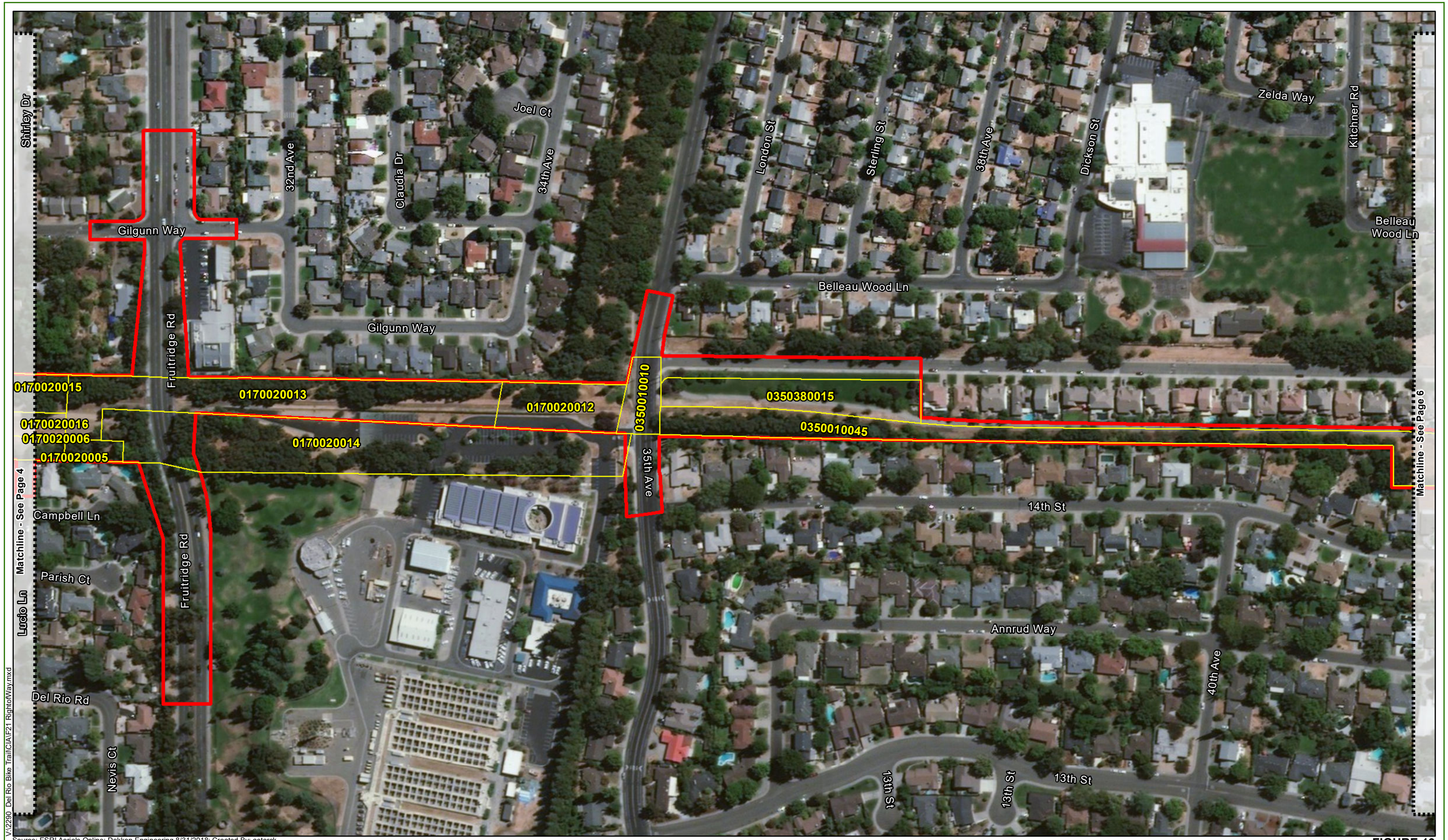
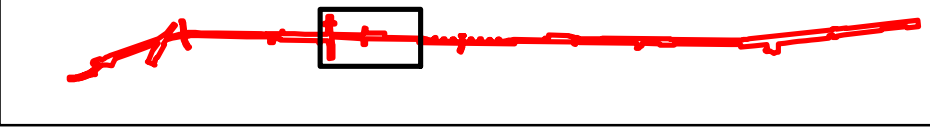
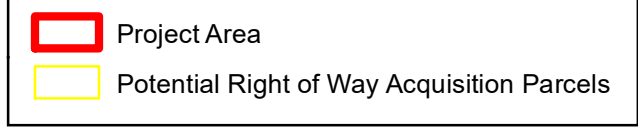
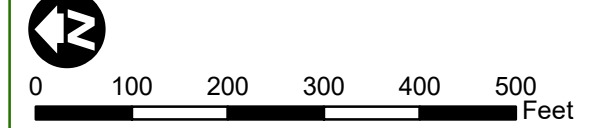


FIGURE 19
Potential Right-of-Way
 Page 4 of 10
 ATP02-03-121M
 Del Rio Trail Project



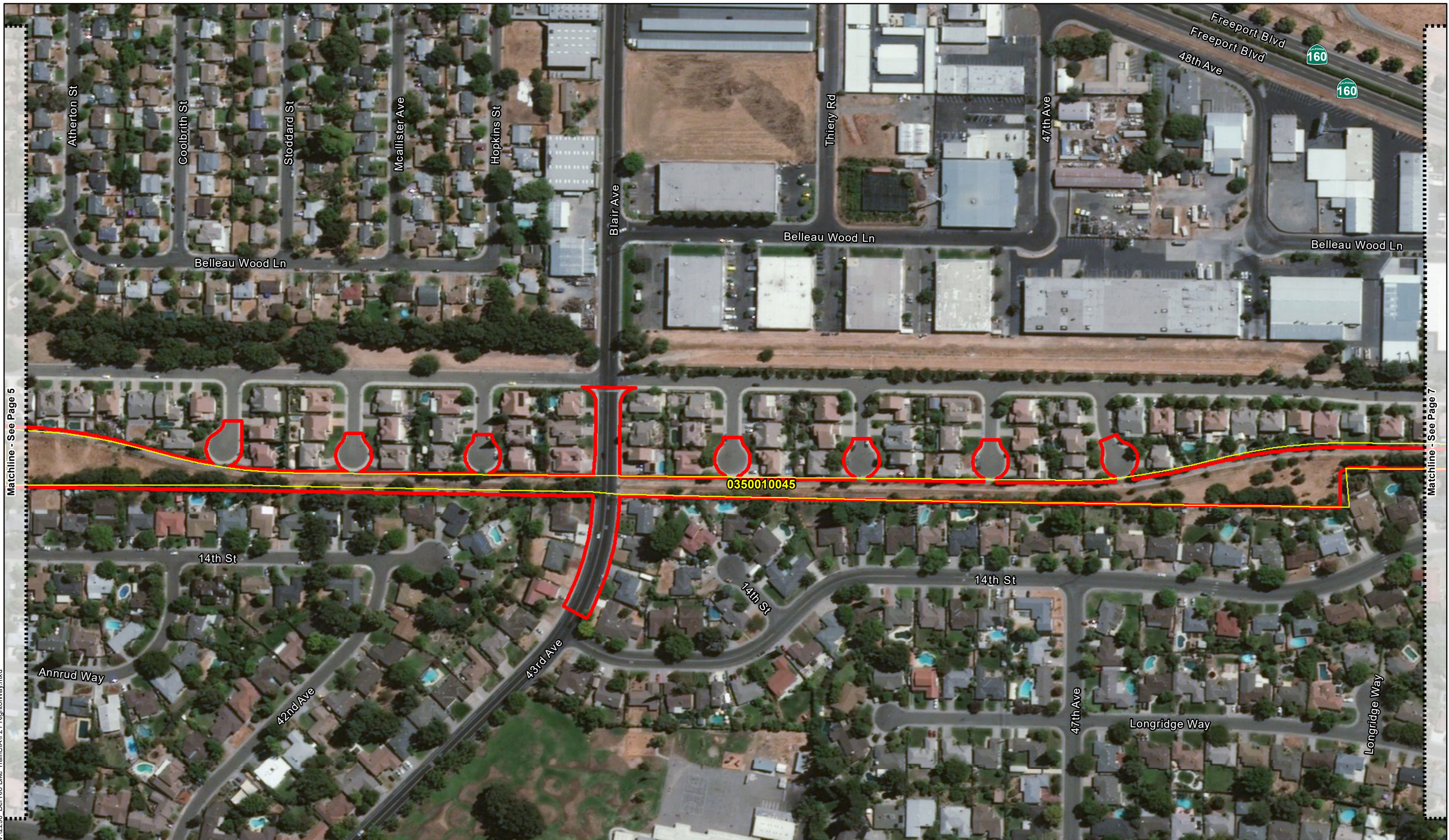
Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck



VA2290_Del Rio Bike Trail(CIA)F21 RightofWay.mxd

Matchline - See Page 4

Matchline - See Page 6



Matchline - See Page 5

Matchline - See Page 7

VA2290_Del Rio Bike Trail\CA\F21 RightofWay.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

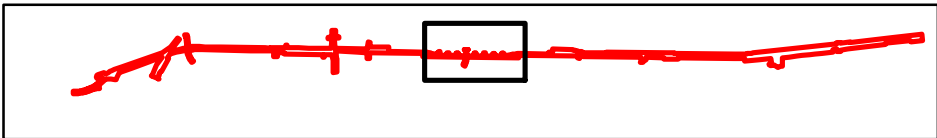
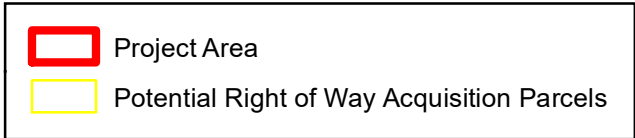
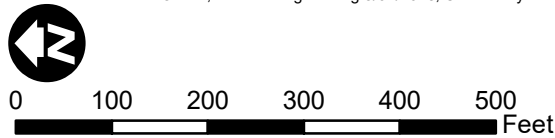


FIGURE 19
Potential Right-of-Way
 Page 6 of 10
 ATP02-03-121M
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

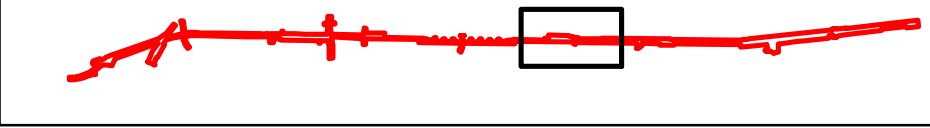
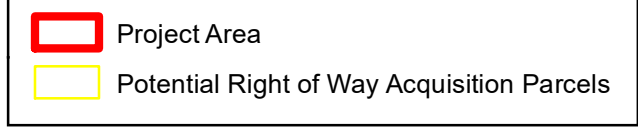
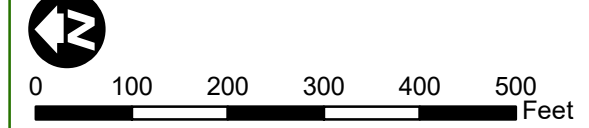
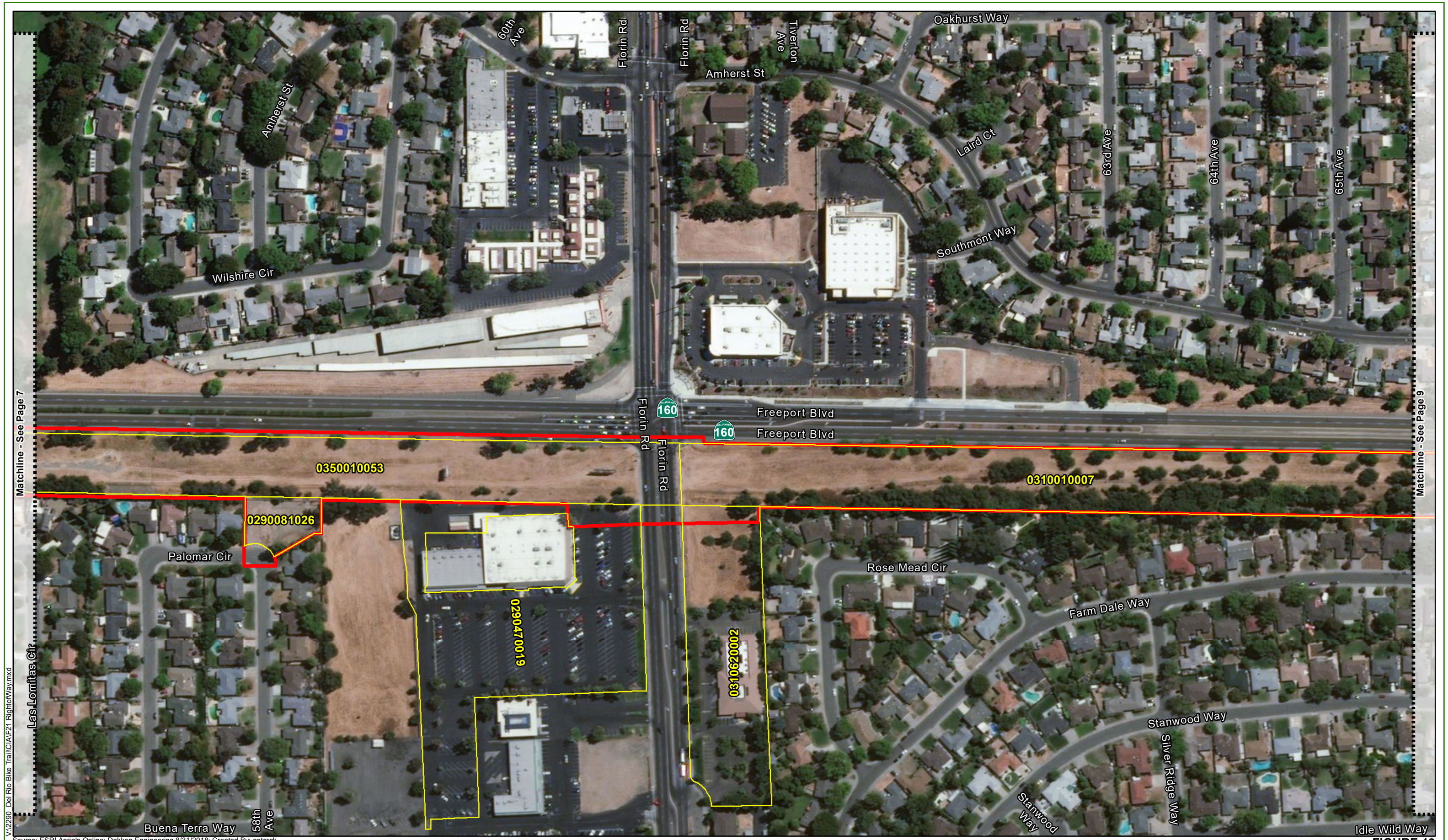


FIGURE 19
Potential Right-of-Way
Page 7 of 10
 ATP02-03-121M
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



Matchline - See Page 7

Matchline - See Page 9

VA2290_Del Rio Bike Trail\CI\F21 RightofWay.mxd

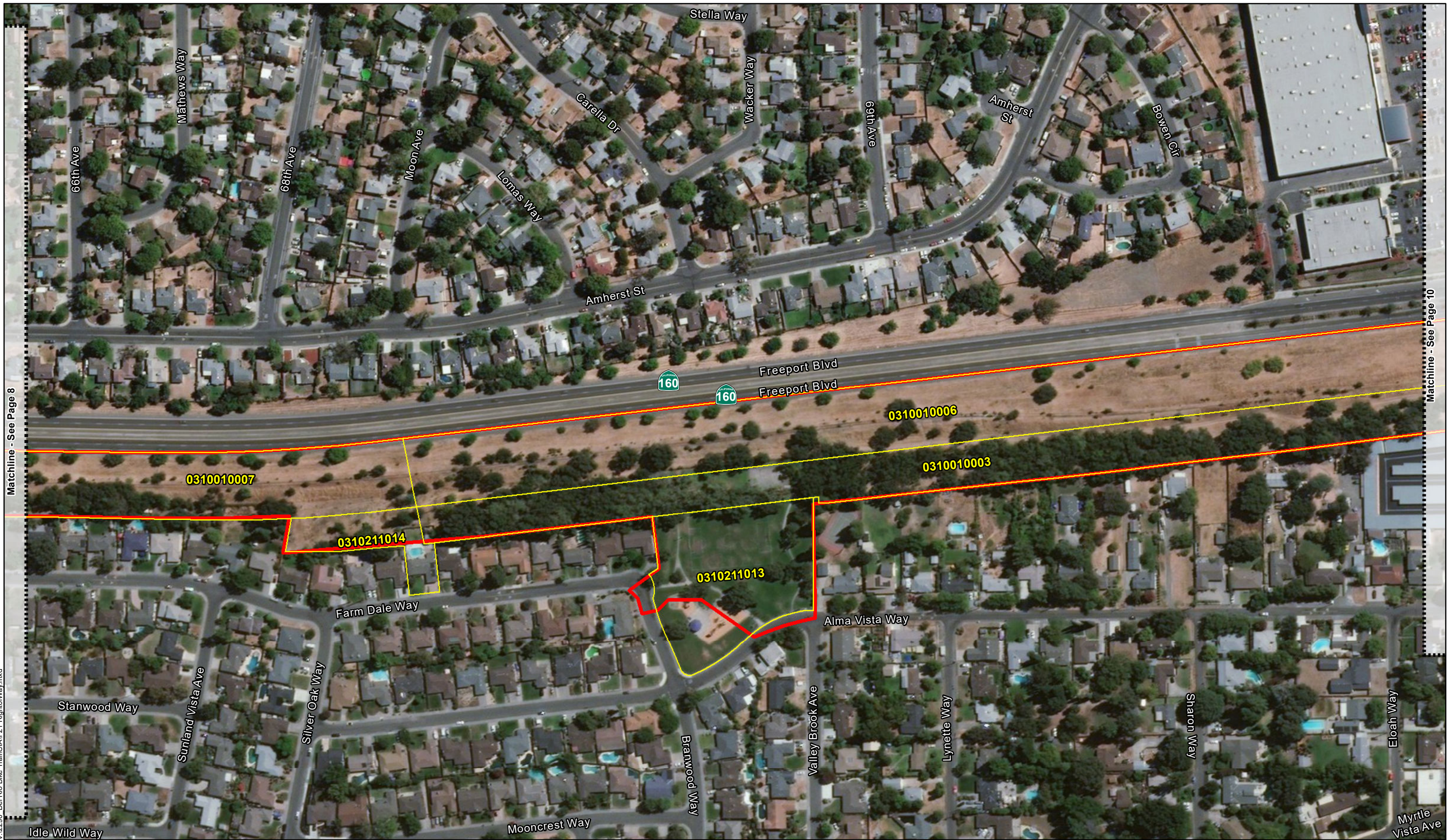
Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck



0 100 200 300 400 500 Feet

	Project Area
	Potential Right of Way Acquisition Parcels





Matchline - See Page 8

Matchline - See Page 10

VA2290_Del Rio Bike Trail\CI\F21 RightofWay.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

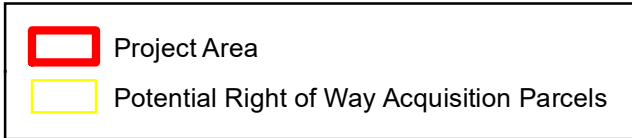
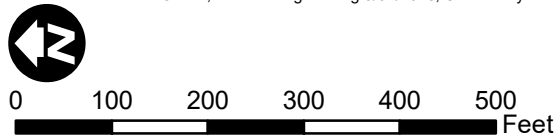


FIGURE 19
Potential Right-of-Way
Page 9 of 10
 ATP02-03-121M
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California



Matchline - See Page 9

VA2290_Del Rio Bike Trail\CIATF21_RightsWay.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/31/2018; Created By: astorck

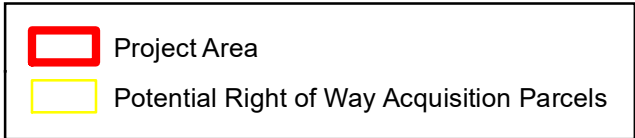
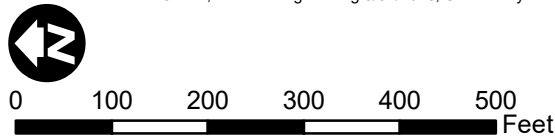


FIGURE 19
Potential Right-of-Way
 Page 10 of 10
 ATP02-03-121M
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Impact POP-3: Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

As discussed above, no acquisition of private property would occur as a result of the proposed Project. Acquisition and temporary easements for construction of the trail are anticipated to be needed from Regional Transit and the State. These would be obtained by the City prior to Project implementation.

Level of Significance: No Impact.

Mitigation Required: None Required.

Mitigation Measures

None Required.

2.12 PUBLIC SERVICES

This section describes the regulatory and environmental setting for public services. It also describes impacts on public services that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

City of Sacramento 2035 General Plan

The following goals and policies from the City of Sacramento 2035 General Plan, Public Health and Safety (PHS), and Education, Recreation, and Culture (ERC), are applicable to the proposed Project.

Goal PHS 1.1 Crime and Law Enforcement. Work cooperatively with the community, regional law enforcement agencies, local government and other entities to provide quality police service that protects the long-term health, safety and well-being of our city, reduce current and future criminal activity, and incorporate design strategies into new development.

Policy PHS 1.1.2: Response Time Standards. The City shall strive to achieve and maintain optimal response times for all call priority levels to provide adequate police services for the safety of all city residents and visitors.

Policy PHS 2.1.2 Response Time Standards. The City shall strive to maintain appropriate emergency response times to provide optimum fire protection and emergency medical services to the community.

Policy PHS 2.2.4 Water Supplied for Fire Suppression. The City shall ensure that adequate water supplies are available for fire suppression throughout the city and shall require development to construct all necessary fire suppression infrastructure and equipment.

Goal ERC 2.1 Integrated Parks and Recreation System. Provide an integrated system of parks, open space areas, and recreational facilities that are safe and connect the diverse communities of Sacramento.

Policy ERC 2.1.1 Complete System. The City shall develop and maintain a complete system of parks and open space areas throughout Sacramento that provide opportunities for both passive and active recreation.

Policy ERC 2.1.2 Connected Network. The City shall connect all parts of Sacramento through integration of recreation and community facilities with other public spaces and rights-of-way (e.g., buffers, medians, bikeways, sidewalks, trails, bridges, and transit routes) that are easily accessible by alternative modes of transportation.

Goal ERC 2.2 Parks, Community and Recreation Facilities and Services. Plan and develop parks, community and recreation facilities, and services that enhance community livability; improve public health and safety; are equitably distributed throughout the city; and are responsive to the needs and interests of residents, employees, and visitors.

Policy ERC 2.2.2 Timing of Services. The City shall ensure that the development of parks and community and recreation facilities and services keeps pace with development and growth within the city.

Environmental Setting

Fire

The City of Sacramento provides fire protection services to the Project area. The Project would be served by the Fire Department Headquarters located at 5770 Freeport Boulevard and Sacramento Fire Station #11 located at 785 Florin Road. Fire stations are located so as to provide a maximum effective service radius of two miles (SGPU DEIR, M-1). This service radius virtually assures blanket coverage of the City. Typical response time to fire calls is four minutes (SGPU DEIR, M-1).

Police

The Sacramento Police Department provides police protection service for the Project area. It is located approximately 0.30 mile from the center of the Project area at 5770 Freeport Boulevard.

School District

The proposed Project site is within the Sacramento City Unified School District. Five schools (Learning Tree Preschool, Alice Birney Elementary, Pony Express Elementary, New Technology High School, and Sutterville Preschool) are located adjacent to the study area.

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to public services. When an impact is determined to be significant, mitigation measures were identified that would reduce or avoid that impact.

Methodology for Analysis

Using the CEQA Environmental Checklist for guidance the following thresholds of significance for evaluating potential impacts were established. These thresholds are evaluated in the following sections to determine whether potential public service impacts from the proposed Project on the baseline setting would be significant. A potential impact would be significant if the proposed Project would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:
 - Fire protection;
 - Police protection;
 - Schools;
 - Parks; or
 - Other public facilities

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact PUB-1: Potential to result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

- **Fire protection;**
- **Police protection;**
- **Schools;**
- **Parks; or**
- **Other public facilities**

The Project would not result in the need for new public services beyond what was anticipated in the 2035 General Plan. The Project does not propose new housing or commercial development requiring additional school facilities, police, and/or fire services. No short-term or long-term impacts to fire protection, police protection, school facilities, or other governmental services would occur as a result of proposed Project.

Additionally, the multi-modal trail would create a more efficient access route to public services throughout the community.

The existing police and fire stations have a capacity to serve any Project-related needs that may arise. Paving the abandoned railroad corridor to create a formalized trail would not subject the proposed Project area to increased fire hazards. Short-term traffic operations at intersections would be temporarily affected during construction of the trail crossing; however, one lane in each direction would be kept open for through traffic throughout construction. Short-term construction impacts to traffic operations are anticipated to be minimal. Temporary impacts to traffic flow as a result of construction activities would be minimized through construction phasing and signage and a traffic control plan (**TRA-1**).

Level of Significance: Less than Significant with Mitigation Incorporated

Mitigation Required: TRA-1

Mitigation Measures

See TRA-1 in Section 2.13.

2.13 RECREATION

This section describes the regulatory and environmental setting for recreation. It also describes impacts to recreation that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

Federal

Section 4(f) of the U.S. Department of Transportation (USDOT) Act of 1966 prohibits the Federal Transit Association and other USDOT agencies from using land from publicly owned parks, recreation areas (including recreational trails), wildlife and water fowl refuges, or public and private historic properties, unless there is no feasible and prudent alternative to that use and the action includes all possible planning to minimize harm to the property resulting from such a use. The proposed Project is partially funded using Caltrans Active Transportation Program funds; therefore, responsibility for compliance with Section 4(f) has been assigned to Caltrans pursuant to 23 USC 326 and 327, including determinations and approval of Section 4(f) evaluations, as well as coordination with those agencies that have jurisdiction over a Section 4(f) resource that may be affected by a Project action. The proposed Project was determined to be consistent with Section 4(f). The full technical study is available for review at the City of Sacramento Community Development Center and on the Project website at:

<http://www.cityofsacramento.org/Public-Works/Engineering-Services/Projects/Current-Projects/Del-Rio-Trail>

State

California Government Code Section 65560(b)

California Government Code section 65560(b) defines “open space land” as any parcel or area of land or water that is unimproved and devoted to an open space use. State law requires that the local general plans include an Open Space element to promote the retention of open space for recreational purposes.

California's Recreation Policy

The 2005 California Recreation Policy provides a comprehensive set of policies for many types of recreation activities ranging from active to passive, indoors to outdoors, on land and water, in facilities, and in programs and support functions (California State Parks 2005). This policy addresses five separate areas of recreation including adequacy of recreation, leadership, health, preservation, and accessibility. The following policy objectives are relevant to the proposed Project:

1. Adequacy of recreation opportunities: The supply of parklands, water, open space, recreation facilities, and services must be adequate to meet future and current demands, particularly in the state's most populated areas.
2. Preservation of natural and cultural resources: Educating Californians about their state's invaluable resources is a critical part of ensuring these resources continue to be available for the enjoyment of current and future generations.
3. Accessibility to all Californians: All citizens have the right to enjoy California's park and recreation legacy.

Local

City of Sacramento 2035 General Plan

The following goals and policies from the Parks and Recreation Element (ERC) related to recreation and are relevant to the proposed Project (City of Sacramento 2015a).

Goal ERC 2.2 Parks, Community, and Recreation Facilities and Services. Plan and develop parks, community and recreation facilities, and services that enhance community livability; improve public health

and safety; are equitably distributed throughout the City; and are responsive to the needs and interests of residents, employees, and visitors.

Policy ERC 2.2.4 Park Acreage Service Level Goal. The City shall strive to develop and maintain five acres of neighborhood and community parks and other recreational facilities and/or sites per 1,000 people of population.

City of Sacramento Municipal Code

Chapter 16.64 (Parks and Recreational Facilities). This chapter provides standards and formulas for the dedication of parkland and in-lieu fees. These policies help the City acquire new parkland. This chapter sets forth the standard that five acres of property for each 1,000 persons residing within the City be devoted to local recreation and park purposes.

The City of Sacramento Parks and Recreation Master Plan (2005-2010)

The City of Sacramento Parks and Recreation Master Plan (PRMP) includes various implementation strategies to help fulfill the vision and goals of the PRMP. The strategies that are relevant to the proposed Project include:

4.0 Facility Use and Management

4.2 Protect and invest in the parks and recreation system's infrastructure (including all turf, landscaping, buildings, and other physical elements/improvements).

8.0 Maintenance (Parks)

8.2 Assess the physical condition of all key City park and recreation system infrastructure elements.

12.0 Planning, Design, and Development

12.7 Develop parks and recreation facilities according to the City of Sacramento's Park Design and Development Standards.

Environmental Setting

The Sacramento area is served by a variety of recreational resources. Recreational resources include rivers, ponds, bike trails, and parks maintained by the City of Sacramento. Recreational resources within or adjacent to the Project area include Edwin J. Z'berg Park, Charlie Jensen Park, Belle Coolidge Community Center, Sacramento River Parkway, William Land Park, and Bing Maloney Golf Course (see Figure 20).

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to recreation. When an impact is determined to be significant, mitigation measures have been identified that would reduce or avoid that impact.

Methodology of Analysis

In response to comments received and using the CEQA Environmental Checklist for guidance the following thresholds of significance for evaluating potential impacts were established. These thresholds are evaluated in the following section to determine whether potential recreation impacts from the proposed Project on the baseline setting would be significant. A potential impact would be significant if the proposed Project would:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated;
- Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment;
- Result in substantial interference with park recreation;

- Result in permanent displacement of existing recreational facilities or substantial permanent decrease in access to existing recreational facilities or opportunities.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact REC-1: Potential to increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated.

As shown in Figure 20, two parks and recreation areas are located adjacent to the eastern extent of the study area, two are located in the study area but will not be impacted by the proposed Project, and two are within the direct impact area for the trail. These locations are publicly owned and/or accessible. The proposed Project would include an access route into Edwin J. Z-berg Park and a walking path through Charlie Jensen Park. No other parks within or adjacent to the study area would be affected by the proposed Project. Although the multi-use trail would encourage the use of existing parks by providing alternate means of access, the trail would not increase the overall number of users who could have accessed it before by vehicle or an alternate walking route. Therefore, the proposed Project would not cause or accelerate substantial physical deterioration of existing area parks or recreational facilities.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact REC-2: Potential to include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

The proposed multi-use trail would provide a new recreational facility for local and regional users; however, the trail would not have any adverse physical effects on the environment that could not be mitigated to a less than significant level. Additionally, the Project does not create a need for construction or expansion of recreational facilities beyond what was anticipated in the 2035 General Plan or the City of Sacramento Bikeway Master Plan.

Level of Significance: No Impact.

Mitigation Required: None Required

Impact REC-3: Potential to result in substantial interference to park recreation.

The proposed trail would advance and complete the planned connection between the Sacramento River Parkway and the Freeport Shores Bikeway in accordance with the City of Sacramento Bikeway Master Plan utilizing public right of way and public agency parcels, providing public access to parks throughout the Sacramento area. No impact would occur.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact REC-4: Potential to result in permanent displacement of existing recreational facilities or substantial permanent decrease in access to existing recreational facilities or opportunities.

The proposed Project would include an access route into Edwin J. Z-berg Park and a walking path through Charlie Jensen Park. No other parks within or adjacent to the study area would be affected by the

THIS PAGE IS LEFT INTENTIONALLY BLANK



Project Study Area

Parks

- Community
- Golf Course
- Neighborhood
- Parkway
- Regional

William Land Park

Sacramento Zoo

Bing Maloney Golf Course

Charlie Jensen Park

Edwin L. Z'berg Park

Belle Coolege Community Center Park

Sacramento River Parkway (Land Park Area)

VA2290_Del Rio Bike Trail(CIA)Figure 22_Parks and Recs 20170919.mxd

Source: ESRI Aerials Online; Dokken Engineering 8/30/2018; Created By: aasaro



FIGURE 20
Parks and Recreation Areas in and Adjacent to the Project Study Area
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

proposed Project. The proposed Project would not result in permanent displacement of existing recreational facilities or decrease access to existing facilities; therefore, no impact would occur.

Level of Significance: No Impact

Mitigation Required: None Required

Mitigation Measures

None Required.

2.14 TRANSPORTATION AND TRAFFIC

This section describes the regulatory and environmental setting for transportation and traffic. It also describes impacts on transportation and traffic that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

Federal

No federal plans, policies, regulations, or laws related to transportation/traffic apply to the Project.

State

California Department of Transportation

The California Department of Transportation (Caltrans) manages interregional transportation, including the management and construction of the California highway system. In addition, Caltrans is responsible for the permitting and regulation of state roadways. State facilities likely to be used as regional access routes by construction traffic include I-5. Caltrans requires that permits be obtained for transportation of oversized loads and transportation of certain materials, and for construction-related traffic disturbance.

Local

City of Sacramento 2035 General Plan

The City of Sacramento 2035 General Plan requires that all Projects that include construction activities must complete a Traffic Management Plan (also required by the Sections 12.20.020 and 12.20.030 of the Sacramento City Code). These Traffic Management Plans require review and approval by the City's Public Works Department (City of Sacramento 2015a).

The Mobility Element of the City of Sacramento's 2035 General Plan outlines goals and policies that coordinate the transportation and circulation system with planned land uses and the relevant goal and policies are as follows:

Goal M 1.2 Multimodal System. Increase multimodal accessibility (i.e., the ability to complete desired personal or economic transactions via a range of transportation modes and routes) throughout the city and region with an emphasis on walking, bicycling, and riding transit.

Policy M 1.2.2 Level of Service (LOS) Standard. 2 Level of Service (LOS) Standard. The City shall implement a flexible context- sensitive Level of Service (LOS) standard and will measure traffic operations against the vehicle LOS thresholds established in this policy. The City will measure Vehicle LOS based on the methodology contained in the latest version of the *Highway Capacity Manual (HCM)* published by the Transportation Research Board. The City's specific vehicle LOS thresholds have been defined based on community values with respect to modal priorities, land use context, economic development, and environmental resources and constraints. As such, the City has established variable LOS thresholds appropriate for the unique characteristics of the City's diverse neighborhoods and communities. The City will strive to operate the roadway network at LOS D or better for vehicles during typical weekday conditions, including AM and PM peak hour conditions with the following exceptions described below:

- A. Core Area (Central City Community Plan Area) - LOS F allowed
- B. Priority Investment Areas – LOS F allowed
- C. LOS E Roadways - LOS E is allowed for the following roadways because expansion of the roadways would cause undesirable impacts or conflict with other community values.

- 65th Street: Elvas Avenue to 14th Avenue
- Arden Way: Royal Oaks Drive to I-80 Business
- Broadway: Stockton Boulevard to 65th Street

- College Town Drive: Hornet Drive to La Rivera Drive
- El Camino Avenue: I-80 Business to Howe Avenue
- Elder Creek Road: Stockton Boulevard to Florin Perkins Road
- Elder Creek Road: South Watt Avenue to Hedge Avenue
- Fruitridge Road: Franklin Boulevard to SR 99
- Fruitridge Road: SR 99 to 44th Street
- Howe Avenue: El Camino Avenue to Auburn Boulevard
- Sutterville Road: Riverside Boulevard to Freeport Boulevard

LOS E is also allowed on all roadway segments and associated intersections located within ½ mile walking distance of light rail stations.

D. Other LOS F Roadways - LOS F is allowed for the following roadways because expansion of the roadways would cause undesirable impacts or conflict with other community values.

- 47th Avenue: State Route 99 to Stockton Boulevard
- Arcade Boulevard: Marysville Boulevard to Roseville Road
- Carlson Drive: Moddison Avenue to H Street
- El Camino Avenue: Grove Avenue to Del Paso Boulevard
- Elvas Avenue: J Street to Folsom Boulevard
- Elvas Avenue/56th Street: 52nd Street to H Street
- Florin Road: Havenside Drive to Interstate 5
- Florin Road: Freeport Boulevard to Franklin Boulevard
- Florin Road: Interstate 5 to Freeport Boulevard
- Folsom Boulevard: 47th Street to 65th Street
- Folsom Boulevard: Howe Avenue to Jackson Highway
- Folsom Boulevard: US 50 to Howe Avenue
- Freeport Boulevard: Sutterville Road (North) to Sutterville Road (South)
- Freeport Boulevard: 21st Street to Sutterville Road (North)
- Freeport Boulevard: Broadway to 21st Street
- Garden Highway: Truxel Road to Northgate Boulevard
- H Street: Alhambra Boulevard to 45th Street
- H Street 45th: Street to Carlson Drive
- Hornet Drive: US 50 Westbound On-ramp to Folsom Boulevard
- Howe Avenue: US 50 to Fair Oaks Boulevard
- Howe Avenue: US 50 to 14th Avenue
- Raley Boulevard: Bell Avenue to Interstate 80
- South Watt Avenue: US 50 to Kiefer Boulevard (V/C: 1.19)
- West El Camino Avenue: Northgate Boulevard to Grove Avenue

E. If maintaining the above LOS standards would, in the City's judgment be infeasible and/or conflict with the achievement of other goals, LOS E or F conditions may be accepted provided that provisions are made to improve the overall system, promote non-vehicular transportation, and/or implement vehicle trip reduction measures as part of a development Project or a city-initiated Project. Additionally the City shall not expand the physical capacity of the planned roadway network to accommodate a Project beyond that identified in Figure M4 and M4a (2035 General Plan Roadway Classification and Lanes).

Goal M 4.1 Street and Roadway System. Create a context-sensitive street and roadway system that provides access to all users and recognizes the importance that roads and streets play as public space. As such, the City shall strive to balance the needs for personal travel, goods movement, parking, social activities, business activities, and revenue generation, when planning, operating, maintaining, and expanding the roadway network.

Policy M 4.1.1 Emergency Access. The City shall develop a roadway system that is redundant (i.e., includes multiple alternative routes) to the extent feasible to ensure mobility in the event of emergencies.

Goal M 4.3 Neighborhood Traffic. Enhance the quality of life within existing neighborhoods through the use of neighborhood traffic management and traffic calming techniques, while recognizing the City's desire to provide a grid system that creates a high level of connectivity.

Policy M 4.3.1 Neighborhood Traffic Management. The City shall continue wherever possible to design streets and approve development applications in a manner as to reduce high traffic flows and parking problems within residential neighborhoods.

Goal M 5.1 Integrated Bicycle System. Create and maintain a safe, comprehensive, and integrated bicycle system and set of support facilities throughout the city that encourage bicycling that is accessible to all. Provide bicycle facilities, programs and services and implement other transportation and land use policies as necessary to achieve the City's bicycle mode share goal as documented in the Bicycle Master Plan.

Goal M 6.1 Managed Parking. Provide and manage parking such that it balances the citywide goals of economic development, livable neighborhoods, sustainability, and public safety with the compact multi-modal urban environment prescribed by the General Plan.

Policy M 6.1.1 Appropriate Parking. The City shall manage public parking and regulate the provision and management of private parking to support parking availability and auto access to neighborhoods across the city, with consideration for access to existing and funded transit service, mixed use development, and shared parking opportunities.

Sacramento City Code

Section 12.20.020 of the Sacramento City Code has the following provisions related to construction traffic within the City limits:

- A. Except when performing emergency repairs, no person shall perform any work that will obstruct vehicular traffic on a city street unless a traffic control plan has been approved by the director.
- B. All work requiring a traffic control plan shall conform to the conditions and requirements of the approved plan.
- C. Where a traffic control plan is required, the approved plan must be available at the site for inspection by the director during all work
- D. If the director determines that actual traffic conditions under the approved plan are hazardous to public safety, the director may require the plan to be immediately modified. If the hazardous conditions cannot be eliminated by plan modification the director may require work under the plan to be stopped, and the plan suspended, until the safety hazard is remedied.

The specific requirements for a traffic control plan are described in Section 12.20.030 of the Sacramento City Code and should include the appropriate diagrams, proposed time periods that traffic control would be in effect, and any proposed phases of the Project that would affect the traffic control plan.

City of Sacramento Bicycle Master Plan (2015)

The purpose of the Sacramento City Bicycle Master Plan is to establish bicycle-related investments, policies, programs and strategies to establish a complete bicycle system. This will encourage more bicycling by the citizens of Sacramento for both transportation and recreation, thereby allowing the City of Sacramento to meet General Plan emission targets. The Bicycle Master Plan was updated in 2015 to further engage under-represented neighborhoods, evaluate the equity related to bicycle infrastructure, and identify best practice bikeway designs to better connect the City's Low-stress bikeway network. The proposed Project is included within the 2015 Master Plan (see Figure 21).

City of Sacramento Pedestrian Master Plan (2006)

The purpose of the Pedestrian Master Plan is to make Sacramento a model pedestrian-friendly city, also known as the “Walking Capital” (Pedestrian Master Plan 2006). The current overarching objectives of the Plan are to institutionalize pedestrian considerations and to improve the current pedestrian deficiencies. The goals of the Plan include improving awareness through education, creating a walkable pedestrian environment, and increasing pedestrian safety.

Environmental Setting

The Project begins approximately 0.4 mile south of Pocket Road near the Freeport Water Tower adjacent to the I-5 bridge over Freeport Boulevard, and extends 4.8 miles north along the abandoned railway corridor within the City of Sacramento. At the southern entry, the bike trail would connect directly to the newly constructed Freeport Shores Trail and the South Sacramento Parkway West. The route would then cross at Meadowview-Pocket Road and continue north through the South Land Park neighborhood towards William Land Park and the Sacramento River Parkway. North of Sutterville Road, the trail connects to the Sacramento River Parkway via two alignments: west along Sutterville Road with Class 2 bike lanes, and northwest along the existing railway corridor.

City of Sacramento Bicycle Master Plan (2015)

The City of Sacramento Bicycle Master Plan (2015) wants to achieve a “safe, comfortable and continuous network of bikeway attracting and serving bicyclists of all ages and abilities from all neighborhoods” to integrate bicycling as a fundamental part of the everyday transportation for Sacramento’s inhabitants. An efficient, integrated pedestrian- and bicycle-friendly system is essential to maintaining the quality of life and facilitating the economic and cultural growth of the City.

Bicycle and Pedestrian Corridors

A brief description of bicycle facility types is presented below.

- Class I Bikeway (Bicycle Path) – Provides a separate ROW and is designated for the exclusive use of bicycles and pedestrians with vehicle and pedestrian cross-flow minimized.
- Class II Bikeway (Bicycle Lane) – Provides a restricted ROW and is designated for the use of bicycles with a striped lane on a street or highway. Vehicle parking and vehicle/pedestrian cross-flow are permitted.
- Class III (Bicycle Route) – Provides for a ROW designated by signs and/or pavement markings for shared use with pedestrians or motor vehicles.

Currently there are no Class I bicycle facilities or pedestrian pathways within the study area. Figure 21 displays the currently planned bicycle facilities (multi-modal trail) in the area.

Parking

The majority of parking in the study area is associated with residential and commercial developments. The proposed Project is not anticipated to reduce any available parking within the study area. A new trail-head parking lot will be constructed in the northern portion of the Project on the corner of Darnel Way and Riverside Boulevard.

Figure 21. Existing and Planned Bicycle Facilities in the Study Area



Source: City of Sacramento Master Bicycle Plan (2015), page 42.

Public Transportation

Public transit services provided in the Project study area include multiple bus stops and intermittent Class II and III bike routes throughout the study area. The proposed Project would help meet the goal of the City's General Plan to develop and maintain an integrated, multi-modal district of efficient transit, walking, and biking.

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to transportation and traffic. When an impact is determined to be significant, mitigation measures were identified that would reduce or avoid that impact.

Methodology of Analysis

Using the CEQA Environmental Checklist for guidance the following thresholds of significance for evaluating potential impacts were established. These thresholds are evaluated in the following section to determine whether potential utility and service systems impacts from the proposed Project on the baseline setting would be significant. A potential impact would be significant if the proposed Project would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit;
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways;
- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks;
- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- Result in inadequate emergency access; or
- Conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Project Impact Analysis

This section discusses potential impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact TRANS-1: Potential to conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.

The proposed Project involves the construction of a pedestrian and bicycle facility. The proposed Project is consistent with the General Plan Master EIR and the City Bikeway Master Plan. The City Bikeway Master Plan shows a continuous non-motorized trail system along the abandoned railway corridor (see Figure 21). The proposed Class I trail would not be constructed within existing roadways thereby reducing effectiveness of the performance of the circulation system. The proposed Project would provide an additional transportation method for the community and would not impact existing public transportation systems within the study area. The proposed Project is not anticipated to reduce any available parking within the study area. Two new trail-head parking lots will be constructed as a part of the proposed Project. One is located in the northern portion of the Project on the corner of Darnel Way and Riverside Boulevard, and the other is located in the southern portion of the Project along Freeport Boulevard. No impact to existing parking lots within the study area would occur.

Short-term traffic operations at intersections would be temporarily affected during construction of the trail crossing; however, one lane in each direction would be kept open for through traffic throughout construction. Short-term construction impacts to traffic operations are anticipated to be minimal.

Temporary impacts to traffic flow as a result of construction activities would be minimized through construction phasing and signage and a traffic control plan.

Level of Significance: Less than Significant with Mitigation Incorporated

Mitigation Required: TRA-1

Impact TRANS-2: Potential to conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.

Long-term traffic operations and access to public transit would not be adversely affected by the proposed Project. The Project will not create additional vehicle trips. Therefore, no additional volume would be generated and would not result in any new traffic impacts. Short-term traffic operations at intersections would be temporarily affected during construction of the trail crossing; however, one lane in each direction would be kept open for through traffic throughout construction. Short-term construction impacts to traffic operations are anticipated to be minimal. Temporary impacts to traffic flow as a result of construction activities would be minimized through construction phasing, signage and a traffic control plan.

Level of Significance: Less than Significant with Mitigation

Mitigation Required: TRA-1

Impact TRANS-3: Potential to result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.

The proposed Project would construct a multi-use trail and would not result in a change in, or conflict with, air traffic patterns. The nearest public airport to the Project site is the Sacramento Executive Airport, which is located approximately 0.30 mile east of the Project site. The nearest private airport is the UC Davis Medical Center Life Flight base heliport located 2.8 miles north east of the Project site.

Level of Significance: No Impact

Mitigation Required: None Required

Impact TRANS-4: Potential to substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).

Design features for the multi-use trail would comply with City safety standards. The trail would not include any sharp curves. Lighting and pedestrian crossing signalization would be constructed where the trail crosses intersections. The Project is compatible with the existing land use designations in the City General Plan.

Level of Significance: Less than Significant.

Mitigation Required: None Required.

Impact TRANS-5: Potential to result in inadequate emergency access.

No short-term or long-term impacts to emergency access would occur as a result of the proposed Project. The existing police and fire stations have a capacity to serve any Project-related needs that may arise. Short-term traffic operations at intersections would be temporarily affected during construction of the trail crossing; however, one lane in each direction would be kept open for through traffic and emergency access throughout construction. Short-term construction impacts to traffic operations are

anticipated to be minimal. Temporary impacts to traffic flow as a result of construction activities would be minimized through construction phasing, signage and a traffic control plan. The trail will be designed to allow for emergency access as needed.

Level of Significance: Less than Significant with Mitigation

Mitigation Required: TRA-1 and TRA-2

Impact TRANS-6: Potential to conflict with adopted policies, plans or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The proposed Project would not adversely affect bicycle or pedestrian travel, bicycle paths or fail to adequately provide for access by pedestrian or bicycle. Once built, citizens in the area will have greater connectivity using non-motorized means. Commuter and recreational bicyclists in South Sacramento will have also have greater through access to the Sacramento River Trail and communities throughout Sacramento.

Level of Significance: Less than Significant.

Mitigation Required: None Required.

Mitigation Measures

TRA-1: Temporary impacts to traffic flow as a result of construction activities would be minimized through construction phasing, signage and a traffic control plan.

TRA-2: Emergency public services, local law enforcement agencies, and local businesses will be notified of the proposed Project and any planned partial intersection closures. This notice shall occur at least one month before construction begins.

2.15 UTILITIES AND SERVICE SYSTEMS

This section describes the environmental and regulatory setting for utilities and services systems. It also describes impacts on utilities and services systems that would result from implementation of the proposed Project and mitigation for significant impacts, where feasible.

Regulatory Framework

Federal

Clean Water Act

The Federal Water Pollution Control Act (33 U.S.C. 1251 et seq.), otherwise known as the Clean Water Act (CWA), sets forth national goals that waters shall be “fishable, swimmable” waters (CWA Section 101 (a)(2)). To enforce the goals of the CWA, the United States Environmental Protection Agency (USEPA) established the National Pollutant Discharge Elimination System (NPDES) program. NPDES is a national program for regulating and administering permits for discharges to receiving waters, including non-point sources. Under Section 1251 (b) of the CWA, Congress and the USEPA must recognize and preserve the primary responsibilities and rights of states concerning the reduction of pollution in water resources.

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was established to protect the quality of drinking water in the U.S. This law focuses on all waters actually or potentially designed for drinking use, whether from above ground or underground sources.

The SDWA authorizes the USEPA to establish minimum standards to protect tap water and requires all owners or operators of public water systems to comply with these primary standards. The 1996 amendments to SDWA require that USEPA consider a detailed risk and cost assessment, and best available peer-reviewed science, when developing these standards. State governments, which can be approved to implement these rules for USEPA, also encourage attainment of secondary standards (nuisance-related).

National Pollution Discharge Elimination System Permit

Discharge of treated wastewater to surface water(s) of the United States, including wetlands, require a NPDES permit. In California, the Regional Water Quality Control Board (RWQCB) administer the issuance of these federal permits. Obtaining an NPDES permit requires preparation of detailed information, including characterization of wastewater sources, treatment processes, and effluent quality. Whether or not a permit may be issued, the conditions of a permit are subject to many factors such as basin plan water quality objectives, impaired water body status of the receiving water, historical flow rates of the receiving water, effluent quality and flow, the air quality State Implementation Plan (SIP), the California Toxics Rule, and established total maximum daily loading rates for various pollutants. These factors are highly specific to the potential discharge point. Obtaining an NPDES permit is generally considered difficult in inland areas and may not be possible in sensitive areas.

U.S. Environmental Protection Agency’s National Combined Sewer Overflow Control Policy

The Combined Sewer Overflow Control Policy establishes a consistent national approach for controlling discharges from the Combined Sewer Overflow to the nation’s waters through the NPDES permit program. The Combined Sewer Overflow Control Policy mandates that permittees with Combined Sewer Overflow should submit appropriate documentation demonstrating implementation of the nine minimum controls, which consist of:

1. Proper operation and regular maintenance programs for the sewer system and the Combined Sewer Overflows;
2. Maximum use of the collection system for storage;
3. Review and modification of pretreatment requirements to assure Combined Sewer Overflow impacts are minimized;
4. Maximization of flow to the publicly owned treatment works for treatment;

5. Prohibition of Combined Sewer Overflows during dry weather;
6. Control of solid and floatable materials in Combined Sewer Overflows;
7. Pollution prevention;
8. Public notification to ensure that the public receives adequate notification of Combined Sewer Overflow occurrences and Combined Sewer Overflow impacts; and
9. Monitoring to effectively characterize Combined Sewer Overflow impacts and the efficacy of Combined Sewer Overflow controls.

State

Porter-Cologne Water Quality Act

The State of California established the State Water Resources Control Board (SWRCB), which oversees the nine RWQCBs, through the Porter-Cologne Water Quality Control Act. Through the enforcement of the Porter-Cologne Act, the SWRCB determines the beneficial uses of the waters (surface and groundwater) of the State, establishes narrative and/or numerical water quality standards, and initiates policies relating to water quality. The SWRCB and, more specifically, the RWQCB, is authorized to prescribe Waste Discharge Requirements (WDR) for the discharge of waste, which may impact the waters of the State. Furthermore, the development of water quality control plans, or Basin Plans, are required by Porter-Cologne to protect water quality.

The SWRCB issues both General Construction Permits and individual permits under the auspices of the federal NPDES program. Projects disturbing more than one acre of land during construction are required to file a Notice of Intent (NOI) with the SWRCB to be covered under the State NPDES General Construction Permit (State General Permit) (Adopted Order 2009-0009-DWQ (As amended by 2010-0014-DWQ and 2012-0006-DWQ)) for discharges of stormwater associated with construction activity. Construction activities that are subject to this General Permit includes clearing, grading, disturbances to the ground such as stockpiling, or excavation that results in soil disturbances of at least one acre of total land area. The Project proponent must implement control measures that are consistent with the State General Permit. A Stormwater Pollution Prevention Plan (SWPPP) must be developed and implemented for each site covered by the General Permit. A SWPPP describes Best Management Practices (BMP) the discharger would use to protect stormwater runoff and reduce potential impacts to surface water quality through the construction period. The SWPPP must contain the following: a visual monitoring program; a chemical monitoring program for “non-visible” pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment.

Urban Water Management Planning Act

In 1983, the California Legislature enacted the Urban Water Management Planning Act (UWMPA) (Water Code Sections 10610–10656). The UWMPA requires that every urban water supplier that provides water to 3,000 or more customers, or that provides over 3,000-acre foot per year (AFY) shall prepare and adopt a UWMPA. The UWMPA states that urban water suppliers should make every effort to ensure the appropriate level of reliability in its water service sufficient to meet the needs of its various categories of customers during normal, dry, and multiple-dry years. The UWMPA also states that the management of urban water demands and the efficient use of water shall be actively pursued to protect both the people of the state and their water resources.

General Waste Discharge Requirements for Sanitary Sewer Systems

The General WDRs for Sanitary Sewer Systems were adopted by the SWRCB in May 2006. These WDRs require local jurisdictions to develop a sewer system management plan (SSMP) that addresses the necessary operation and emergency response plans to reduce sanitary sewer overflows. The WDRs require that the local jurisdiction approve the SSMP. The local jurisdiction for the City of Sacramento falls under the Central Valley Regional Water Quality Control Board (CVRWQCB) and the Sacramento City Council approved the City's SSMP on January 2014.

California Integrated Waste Management Act

To minimize the amount of solid waste that must be disposed of by transformation (i.e., recycling) and land disposal, the State Legislature passed the California Integrated Waste Management Act of 1989 (AB 939), effective January 1990. According to AB 939, all cities and counties are required to divert 25-percent of all solid waste from landfill facilities by January 1, 1995, and 50-percent by January 1, 2000. Solid waste plans are required to explain how each city's AB 939 plan will be integrated within the respective county plan. They must promote (in order of priority) source reduction, recycling and composting, and environmentally safe transformation and land disposal. Cities and counties that do not meet this mandate are subject to \$10,000–per-day fines.

Local

City of Sacramento Department of Utilities

The City of Sacramento regulates the discharge of groundwater dewatering effluent to the City's sewer system. The City's Department of Utilities (DOU) Engineering Services Policy No. 0001 (Resolution No. 92-439) requires approval of a Memorandum of Understanding (MOU) for long term (greater than one week) groundwater dewatering discharges to the sewer. The MOU must cover proposed dewatering details such as flow rate, system design, and contaminant monitoring plan. Discharges to the sewer must meet the Regional San and RWQCB-approved levels. Dischargers to the sewer must obtain a Regional San discharge permit.

Sacramento City Code

Chapter 13.08 of the Sacramento City Code sets requirements for permitted discharges to the sewer service system. There are provisions for charges and fees for customers, pretreatment, private sewer or storm drain lines, structures overlying public utilities, swimming pools and fish ponds, air conditioning and refrigeration devices, interruptions and discontinuation of service, inspections, and construction of sewer and storm drain facilities.

Sacramento Regional County Sanitation District

In 2004, the Sacramento Regional County Sanitation District (Regional San) passed the Sewer Impact Fee Ordinance requiring fees to be paid to the Regional San for any users connecting to or expanding sewer collection systems, to mitigate the impact on the Regional San Wastewater Treatment Plant (Regional San WWTP) and conveyance systems.

Sacramento Regional Solid Waste Authority

The Sacramento Regional Solid Waste Authority (SWA) is a joint powers authority of the County and the cities of Sacramento and Citrus Heights. The SWA Board of Directors consists of elected officials from the County and the member cities. The SWA regulates commercial solid waste collection by franchised haulers through SWA ordinances. Among other things, SWA ordinances require franchised haulers to achieve 30 percent recycling and to offer recycling programs to multifamily complexes.

Sacramento Municipal Code

Chapter 17.616, Recycling and Solid Waste Disposal Regulations, of the Sacramento City Code provides regulations concerning recycling and solid waste disposal. Policies within the Code include guidelines regarding the location, size, and design features of recycling and trash enclosures, which are necessary to lengthen the lifespan of landfills and meet state mandated goals for waste reduction.

Sacramento 2035 General Plan

The following goals and policies from the Sacramento 2035 General Plan Utilities (U) Elements and Environmental Resources (ER) Elements are applicable to utilities and service systems.

Goal U 1.1 High-Quality Infrastructure and Services. Provide and maintain efficient, high quality public infrastructure facilities and services throughout the city.

Policy U 1.1.1 Provision of Adequate Utilities. The City shall continue to provide and maintain adequate water, wastewater, and stormwater drainage utility services to areas in the city, and shall

provide and maintain adequate water, wastewater, and stormwater drainage utility services to areas in the city that do not currently receive these City services upon funding and construction of necessary infrastructure.

Policy U 1.1.2 Citywide Level of Service Standards. The City shall establish and maintain service standards [Levels of Service (LOS)] for water, wastewater, stormwater drainage, and solid waste services.

Policy U 1.1.3 Sustainable Facilities and Services. The City shall continue to provide sustainable utility services and infrastructure in a cost-efficient manner.

Policy U 1.1.5 Growth and Level of Service. The City shall require new development to provide adequate facilities or pay its fair share of the cost for facilities needed to provide services to accommodate growth without adversely impacting current service levels.

Policy U 1.1.6 Infrastructure Finance. The City shall develop and implement a financing strategy and assess fees to construct needed water, wastewater, stormwater drainage, and solid waste facilities to maintain established service levels and to mitigate development impacts to these systems (e.g., pay capital costs associated with existing infrastructure that has inadequate capacity to serve new development). The City shall also assist developers in identifying funding mechanisms to cover the cost of providing utility services in infill areas.

Policy U 1.1.9 Utilities Location. The City shall limit, to the extent financially and technically feasible, the construction of major infrastructure facilities in areas better suited for infill and urban development.

Policy U 1.1.10 Safe, Attractive, and Compatible Utility Design. The City shall ensure that public utility facilities are designed to be safe, aesthetically pleasing, and compatible with adjacent uses.

Policy U 1.1.11 Underground Utilities. The City shall require undergrounding of all new publicly-owned utility lines, encourage undergrounding of all privately-owned utility lines in new developments, and work with electricity and telecommunications providers to underground existing overhead lines.

Goal U 3.1 Adequate and Reliable Sewer and Wastewater Facilities. Provide adequate and reliable sewer and wastewater facilities that collect, treat, and safely dispose of wastewater.

Policy U 3.1.1 Sufficient Service. The City shall provide sufficient wastewater conveyance, storage, and pumping capacity for peak sanitary sewer flows and infiltration.

Policy U 3.1.2 New Developing Areas. The City shall ensure that public facilities and infrastructure are designed and constructed to meet ultimate capacity needs to avoid the need for future upsizing. For facilities subject to incremental upsizing, initial design shall include adequate land area and any other elements not easily expanded in the future.

Policy U 3.1.3 Stormwater Infiltration Reduction. The City shall develop design standards that reduce infiltration into new City-maintained sewer pipes.

Policy U 3.1.4 Combined Sewer System Rehabilitation and Improvements. In keeping with its Combined Sewer System (CSS) Long Term Control Plan (LTCP), the City shall continue to rehabilitate the CSS to decrease flooding, CSS outflows and Combined System Overflow (CSO). Through these improvements and new development requirements the City shall also insure that development in the CSS does not result in increased flooding, CSS outflows or CSOs.

Policy U 3.1.5 Methane Recovery. The City shall support the efforts of the Sacramento Regional County Sanitation District (SRCSD) to develop and maintain methane recovery facilities and coordinate efforts to evaluate methane emissions and potential capture at primary and secondary clarifiers and force system mains; maintain methane recovery systems and digester gas combustion systems at wastewater

treatment plants; develop waste-to-energy Projects at 50 percent of wastewater treatment plants; and evaluate potential for biofuel production at the Sacramento Regional Wastewater Treatment Plant.

Goal U 4.1 Adequate Stormwater Drainage. Provide adequate stormwater drainage facilities and services that are environmentally sensitive, accommodate growth, and protect residents and property.

Policy 4.1.1 Adequate Drainage Facilities. The City shall ensure that all new drainage facilities are adequately sized and constructed to accommodate stormwater runoff in urbanized areas.

Policy 4.1.2 Master Planning. The City shall implement a master plan program to:

- Identify facilities needed to prevent 10-year event street flooding and 100-year event structure flooding
- Ensure that public facilities and infrastructure are designed pursuant to approved basin master plans
- Ensure that adequate land area and any other elements are provided for facilities subject to incremental sizing (e.g., detention basins and pump stations)
- Consider the use of “green infrastructure” and Low Impact Development (LID).

Policy U 4.1.3 Regional Stormwater Facilities. The City shall coordinate efforts with Sacramento County and other agencies in the development of regional stormwater facilities.

Policy U 1.1.4 Watershed Drainage Plans. The City shall require developers to prepare watershed drainage plans for proposed developments that define needed drainage improvements per City standards, estimate construction costs for these improvements, and comply with the City’s National Pollutant Discharge Elimination System (NPDES) permit.

Policy U 4.1.5 Green Stormwater Infrastructure. The City shall encourage “green infrastructure” design and Low Impact Development (LID) techniques for stormwater facilities (i.e., using vegetation and soil to manage stormwater) to achieve multiple benefits (e.g., preserving and creating open space, improving runoff water quality).

Goal U 5.1 Solid Waste Facilities. Provide adequate solid waste facilities, meet or exceed State law requirements, and utilize innovative strategies for economic and efficient collection, transfer, recycling, storage, and disposal of refuse.

Policy U 5.1.8 Diversion of Waste. The City shall encourage recycling, composting, and waste separation to reduce the volume and toxicity of solid wastes sent to landfill facilities.

Policy U 5.1.15 Recycling and Reuse of Construction Wastes. The City shall require recycling and reuse of construction wastes, including recycling materials generated by the demolition and remodeling of buildings, with the objective of diverting 85 percent to a certified recycling processor.

Goal ER 1.1 Water Quality Protection. Protect local watersheds, water bodies and groundwater resources, including creeks, reservoirs, the Sacramento and American Rivers and their shorelines.

Policy ER 1.1.1 Conservation of Open Space Areas. The City shall conserve and where feasible create or restore areas that provide important water quality benefits such as riparian corridors, buffer zones, wetlands, undeveloped open space areas, levees, and drainage canals for the purpose of protecting water resources in the city’s watershed, creeks, and the Sacramento and American rivers.

Policy ER 1.1.2 Regional Planning. The City shall continue to work with local, State, and Federal agencies and private watershed organizations to improve water quality.

Policy ER 1.1.3 Stormwater Quality. The City shall control sources of pollutants and improve and maintain urban runoff water quality through stormwater protection measures consistent with the City's NPDES Permit.

Policy ER 1.1.4 New Development. The City shall require new development to protect the quality of water bodies and natural drainage systems through site design (e.g., cluster development), source controls, stormwater treatment, runoff reduction measures, best management practices (BMPs) and Low Impact Development (LID), and hydromodification strategies consistent with the City's NPDES Permit.

Policy ER 1.1.5 Limit Stormwater Peak Flows. The City shall require all new development to contribute no net increase in stormwater runoff peak flows over existing conditions associated with a 100-year storm event.

Policy ER 1.1.6 Post-Development Runoff. The City shall impose requirements to control the volume, frequency, duration, and peak flow rates and velocities of runoff from development Projects to prevent or reduce downstream erosion and protect stream habitat.

Policy ER 1.1.7 Construction Site Impacts. The City shall minimize disturbances of natural water bodies and natural drainage systems caused by development, implement measures to protect areas from erosion and sediment loss, and continue to require construction contractors to comply with the City's erosion and sediment control ordinance and stormwater management and discharge control ordinance.

Policy ER 1.1.8 Clean Watershed. The City shall continue ongoing Sacramento and American River source water protection efforts (e.g., Keep Our Waters Clean), based on watershed sanitary survey recommendations.

Environmental Setting

Various utilities exist within the Project area including sewer, water, gas, overhead and underground electrical, overhead and underground telephone and communications, storm drains, irrigation canals, street lighting and signal equipment.

The following existing utilities have been identified within the Project area:

- Cable Maintenance (overhead and underground) – AT&T;
- Communications (overhead and underground) – Various;
- Water – Various;
- Electric (overhead and underground) – SMUD;
- Gas – PG&E;
- Telephone (overhead and underground) – AT&T; and
- Sanitary Sewer – Sacramento Area Sewer District; Sacramento Regional County Sanitation District.

Relocations are anticipated to occur where the trail conflicts with existing utilities, including electric, gas, telephone, communications, and drainage. Relocation of existing utilities would follow state and federal regulations and statutes. Coordination with utilities that would be need to be relocated would occur during the design phase. All utilities, including irrigation systems, would continue to be fully functional before, during, and after construction of the Project.

Environmental Impacts

This section analyzes the proposed Project's potential to result in significant impacts to utility and service systems. When an impact is determined to be significant, mitigation measures have been identified that would reduce or avoid that impact.

Methodology for Analysis

Using the CEQA Environmental Checklist for guidance the following thresholds of significance for evaluating potential impacts were established. These thresholds are evaluated in the following section to determine whether potential utility and service systems impacts from the proposed Project on the baseline setting would be significant. A potential impact would be significant if the proposed Project would:

- Exceed wastewater treatment requirements of the applicable RWQCB;
- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Have insufficient water supplies available to serve the Project from existing entitlements and resources, or identify if new or expanded entitlements would be needed;
- Result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments;
- Be served by a landfill with insufficient permitted capacity to accommodate the Project's solid waste disposal needs;
- Comply with federal, state, and local statutes and regulations related to solid waste.

Project Impact Analysis

This section discusses potential utility impacts associated with the proposed Project and provides mitigation measures where necessary.

Impact UTL-1: Potential to exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board.

The Project would result in the construction of a multi-use trail and walking path. The Project would not include the construction of any wastewater-generating uses. The Project would not increase population in the Project vicinity, and there would be no additional wastewater flows as a result of Project development; therefore, the Project would not have an adverse effect on wastewater treatment requirements.

Level of Significance: No Impact

Mitigation Required: None Required

Impact UTL-2: Potential to require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

The Project would result in the construction of a multi-use trail and walking path. The Project would not include the construction of any wastewater-generating uses. The Project would not increase population in the Project vicinity, and there would be no additional wastewater flows as a result of Project development; therefore, the Project would not result in the need for new or expanded wastewater facilities.

Level of Significance: No Impact

Mitigation Required: None Required

Impact UTL-3: Potential to require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

The Project would result in an increase of approximately 9.5 acres of paved surface area, which would contribute to an increase in the volume of storm water runoff from the multi-use trail surface. The proposed Project design would include drainage facilities throughout the trail to prevent flooding during storm events. Additionally, the Project site has some areas of localized flooding. The Project would construct new storm drain pipes and inlets to minimize incidents of localized flooding. Measures WQ-1 through WQ-5 would be implemented to further control construction impacts due to additional runoff by incorporating and implementing the City's standards related to erosion control, grading activities, and stormwater drainage facilities; therefore, impacts would be considered less than significant with mitigation incorporated.

Level of Significance: Less than Significant With Mitigation.

Mitigation Required: WQ-1 and WQ-5

Impact UTL-4: Potential to have insufficient water supplies available to serve the Project from existing entitlements and resources, or are new or expanded entitlements needed.

Construction of the multi-use trail and walking path would require some water supply for dust control, clean-up, soil compaction, and long-term irrigation for new landscaping and trees; however, these activities would be temporary, short-term in duration, and would not require a substantial amount of water. Water supplies that may be used for these activities could include a combination of sources from the City's municipal water supply. Currently these sources would have adequate water supplies needed for the construction of the proposed Project. Therefore, the impact from construction and testing of the proposed Project would be considered less than significant.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact UTL-5: Potential to result in a determination by the wastewater treatment provider which serves or may serve the Project that it has inadequate capacity to serve the Project's Projected demand in addition to the provider's existing commitments.

The Project would result in the construction of a multi-use trail and walking path. The Project would not include the construction of any wastewater-generating uses. The Project would not increase population in the Project vicinity, and there would be no additional wastewater flows as a result of Project development; therefore, the Project would not result in the need for new or expanded wastewater facilities.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact UTL-6: Potential to be served by a landfill with sufficient permitted capacity to accommodate the Project's solid waste disposal needs.

The Project would not generate substantial solid waste during operation. Solid waste may be generated during construction; however, the amounts would not be substantial and would occur only during the construction period.

Level of Significance: Less than Significant

Mitigation Required: None Required

Impact UTL-7: Potential to comply with federal, state, and local statutes and regulations related to solid waste.

The City of Sacramento is currently in compliance with the State of California 50 percent waste diversion goal. The additional goals of the City of Sacramento regarding waste reduction include 75 percent waste diversion by 2020 and zero waste communitywide by 2040. Specific guidelines, such as requiring the recycling of construction and demolition debris, are being implemented in the City of Sacramento to help reach these goals. The proposed Project would be in compliance with both the state and local regulations regarding waste from construction. Construction waste is expected to be limited and temporary in nature and would not conflict with any of the applicable goals and regulations. Therefore, the impact would be considered less than significant.

Level of Significance: Less than Significant

Mitigation Required: None Required

Mitigation Measures

See WQ-1 and WQ-5 in Section 2.8.

3.0 ALTERNATIVES

This chapter describes alternatives to the proposed Project that were considered but rejected for further consideration. This chapter also compares the environmental impacts of those alternatives.

The principles used to guide selection of the alternatives analyzed in this Environmental Impact Report (EIR) are provided by section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines, which specifies that an EIR must do all of the following:

- Describe a reasonable range of potentially feasible alternatives to the Project that could attain most of the basic objectives of the Project
- Consider alternatives that could reduce or eliminate any significant environmental impacts of the proposed Project, including alternatives that may be costlier or could otherwise impede the Project's objectives
- Evaluate the comparative merits of the alternatives

The focus and definition of the alternatives are governed by the "rule of reason," in accordance with section 15126.6(f) of the CEQA Guidelines. That is, the range of alternatives presented in this Draft EIR must permit a reasoned choice by the City of Sacramento (City). The CEQA Guidelines require that an EIR evaluate at least one "No-Project Alternative," evaluate a reasonable range of alternatives to the Project, identify alternatives that were considered during the scoping process but were eliminated from detailed consideration, and identify the "environmentally superior alternative."

The evaluation of alternatives is conducted in less detail than for the proposed Project. Consistent with section 15126.6(d) of the CEQA Guidelines, the information provided in this Draft EIR about each alternative is sufficient to allow for a meaningful evaluation, analysis, and comparison of the alternatives with the proposed Project.

3.1 ALTERNATIVES CONSIDERED AND SCREENING CRITERIA

This section describes the development of a reasonable range of alternatives to the proposed Project, the method used to screen the alternatives, and the alternatives considered but eliminated from detailed consideration in this document.

3.1.1 Development of Reasonable Range of Alternatives

CEQA requires that an EIR describe and evaluate a range of reasonable alternatives to a Project or to the location of a Project that would feasibly attain most of the basic Project objectives and avoid or substantially lessen significant Project impacts (CEQA Guidelines section 15126.6). The alternatives to the proposed Project considered in this Draft EIR were developed based on information gathered during the development of the proposed Project and during the EIR scoping process.

In developing the proposed Project, the City has considered a range of potential actions that could meet the Project objectives. Comments received during initial public outreach were considered (see Appendix C).

Comments relating to alternatives to the proposed Project included the following:

- Encourage complete analysis of alternatives;
- Consider a No-Walking Trail Alternative; and
- Consider reducing the amount of track removal.

3.1.2 Methods Used to Screen Alternatives

Potential alternatives were screened based on their ability to feasibly attain most of the basic Project objectives and reduce or eliminate any significant environmental impacts of the proposed Project.

- **Meeting Project Objectives** – The Project objectives are listed in the Project Description. The CEQA Guidelines state that alternatives must feasibly attain most of the basic objectives of the Project (CEQA Guidelines section 15126.6). Alternatives that did not meet the majority of the objectives were screened out and not carried forward for further evaluation in the EIR.
- **Feasibility** – Alternatives that are not “capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, social, and technological factors,” (per Public Resource Code Section 21061.1), were not carried forward for further evaluation in the EIR.
- **Avoiding or lessening any potentially adverse environmental effect of the Proposed Project** – Consistent with the CEQA Guidelines (section 15126.6), alternatives should avoid or substantially lessen one or more of the significant environmental effects of the proposed Project. Alternatives that would not lessen or avoid a potentially significant environmental impact, were not carried forward for detailed evaluation in the EIR.

Section 3.1.3 describes the alternatives considered but eliminated from further evaluation. Section 3.2 describes the alternatives retained for further evaluation.

3.1.3 Alternatives Considered but Rejected for Further Consideration

The alternatives described below were rejected for further consideration and analysis because they failed to meet most of the basic Project objectives, were determined to be infeasible, and/or would not avoid or substantially lessen significant environmental impacts.

ALTERNATIVE 1 – Reduce Tree Removal

Alternative 1 was considered as a feasible alternative by the City during conceptual design and used during initial public outreach with interested stakeholders November 2017 through March 2018. The proposed alternative consists of a Class I multi-use trail (14 feet wide with 2-foot wide shoulders) with walking trail, and at-grade crossings and intersection modifications at each major arterial location (see Figure 22).

This alternative would significantly reduce the number of oak trees removed throughout the Project corridor as compared to the proposed Project; however, this alternative would also require the removal of approximately 50 percent of the historic track in order to avoid impacts to trees.

The City received a letter on January 19, 2018, from Cheryl Marcell, President and CEO of the California State Railroad Museum Foundation. In her letter, Ms. Marcell expressed support for the Project and plans for a multi-use trail along the route of the rail corridor. However, Ms. Marcell stated concerns about the removal of the historic property’s tracks, and whether the Project could be accomplished without separate walking and biking trails, which in the letter were suggested to be redundant and needlessly expensive. In response to this letter, the City revised the Project alignment which increased the number of trees removed but significantly reduced the amount of proposed track removal to approximately 2 percent.

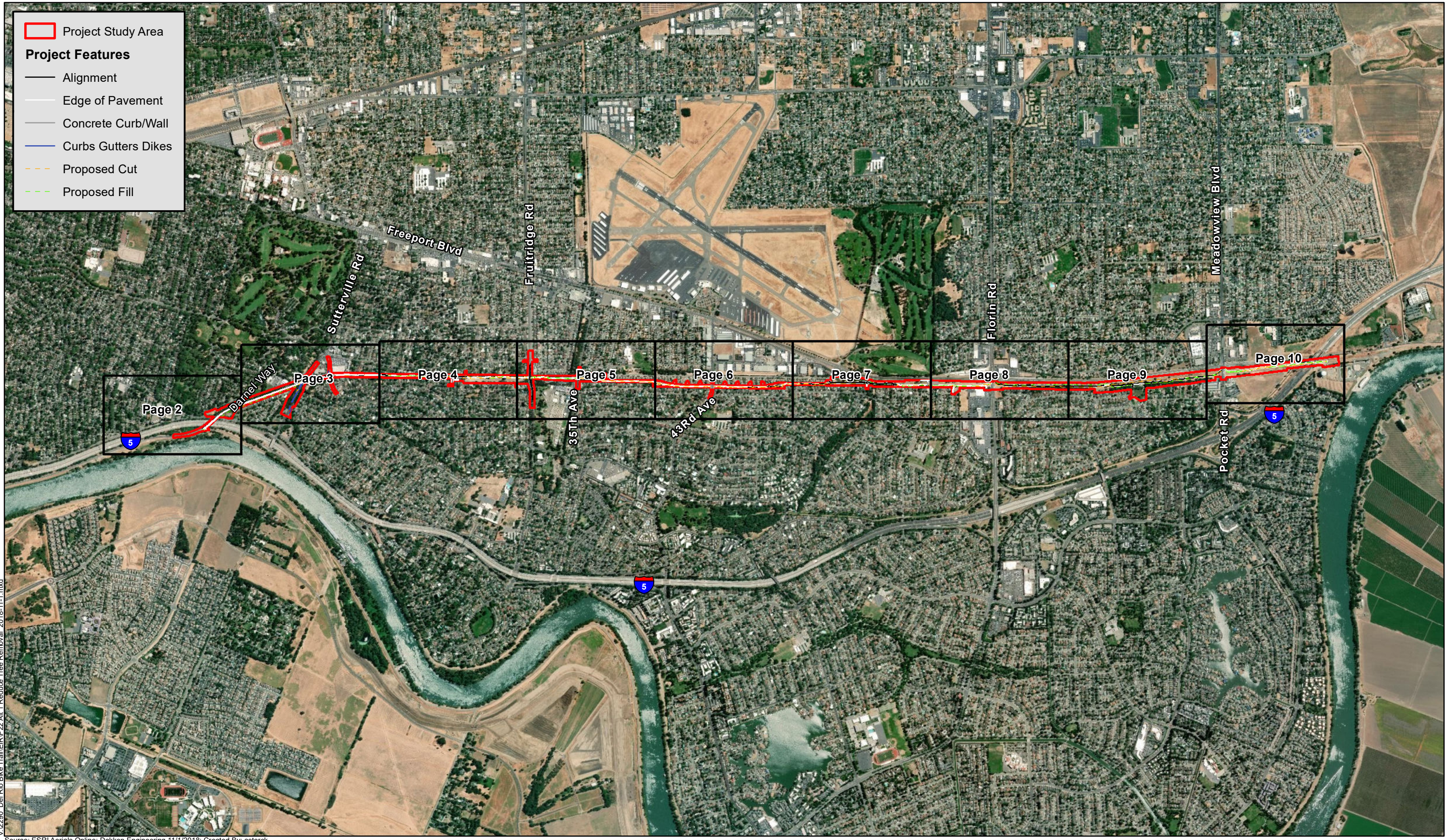
Impacts Identified as Being the Same or Similar to the Proposed Project

Aesthetics; air quality; tribal cultural resources; geology and soils; greenhouse gas; land use and planning; population and housing; public services; recreation; hazards and hazardous materials; hydrology and water quality; noise; traffic; and utilities. Alternative 1 would result in similar impacts related to the above resources as with the proposed Project due to the scale and locations of this alternative.

Project Study Area

Project Features

- Alignment
- Edge of Pavement
- Concrete Curb/Wall
- Curbs Gutters Dikes
- Proposed Cut
- Proposed Fill



V:\2290_Del Rio Bike Trail\ER\F22 Alt 1 Reduce Tree Removal_2018-11-11.mxd

Source: ESRI Aerials Online; Dokken Engineering 11/1/2018; Created By: astorck

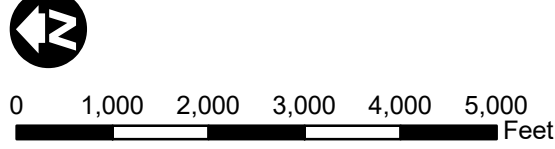
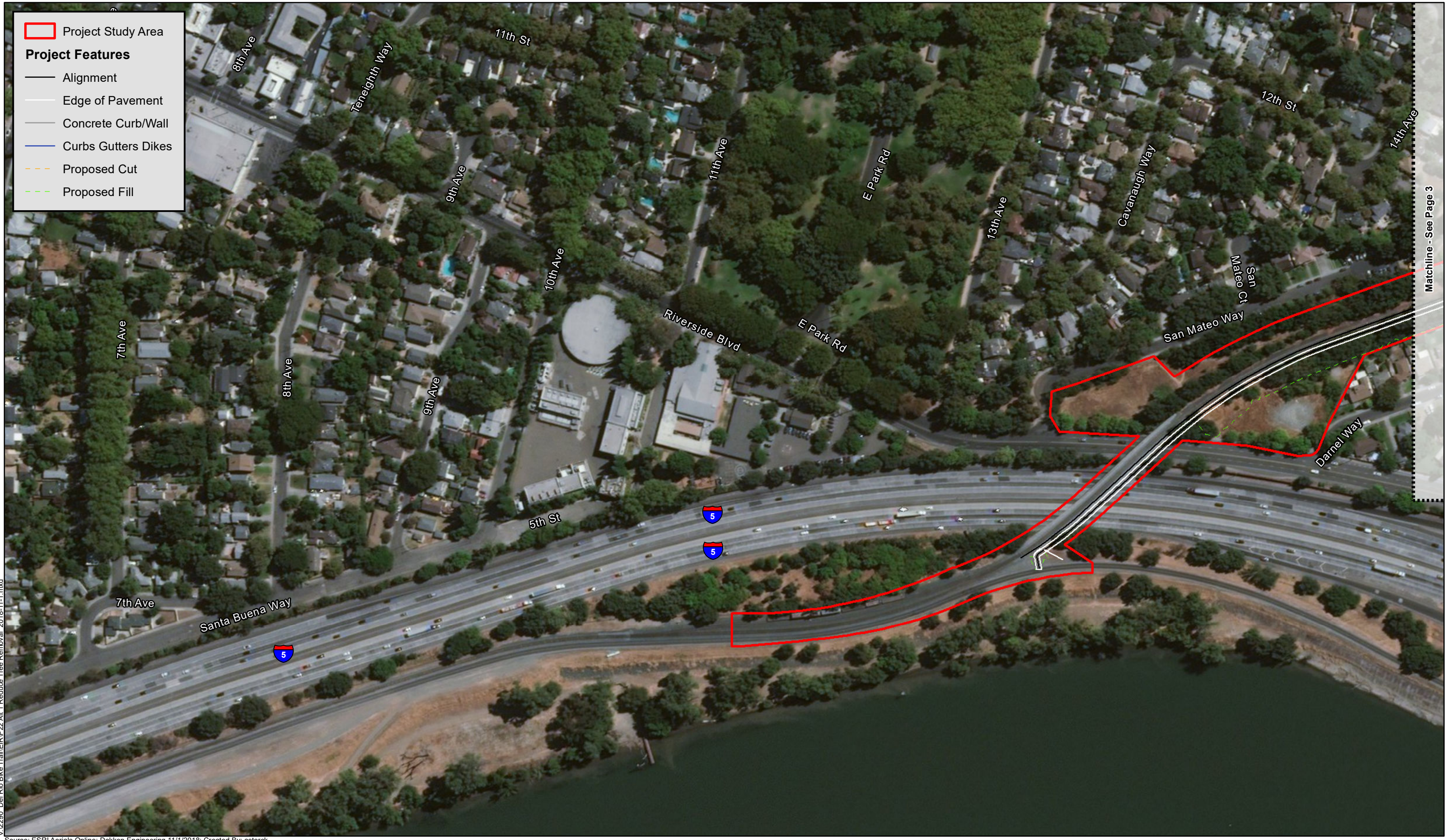


FIGURE 22
Alternative 1 - Reduce Tree Removal
Page 1 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Project Study Area

Project Features

- Alignment
- Edge of Pavement
- Concrete Curb/Wall
- Curbs Gutters Dikes
- - - Proposed Cut
- - - Proposed Fill



V:\2290_Del Rio Bike Trail\ER\F22 Alt 1 Reduce Tree Removal_2018-11-1.mxd

Source: ESRI Aerials Online; Dokken Engineering 11/1/2018; Created By: astorck

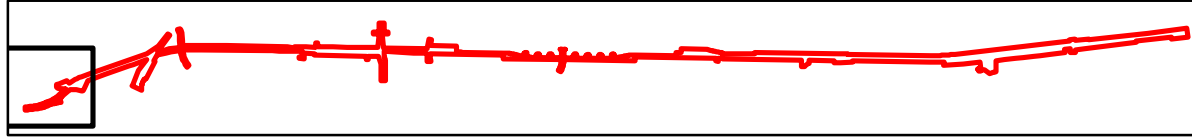
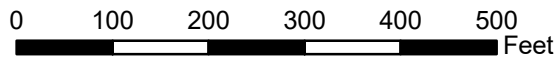
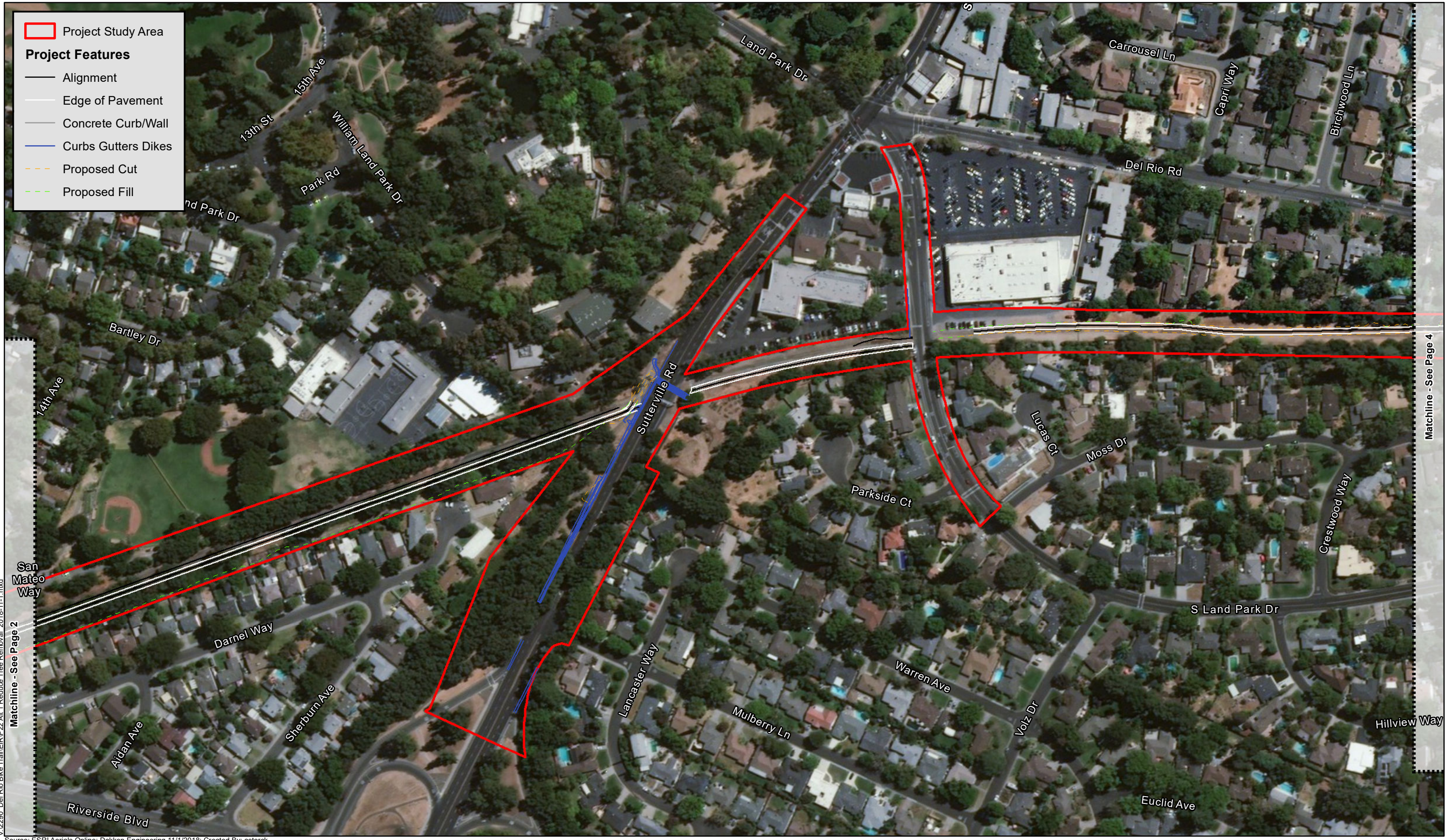


FIGURE 22
Alternative 1 - Reduce Tree Removal
 Page 2 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

- Project Study Area
- Project Features**
- Alignment
- Edge of Pavement
- Concrete Curb/Wall
- Curbs Gutters Dikes
- Proposed Cut
- Proposed Fill



V:\2290_Del Rio Bike Trail\ER\F22 Alt 1 Reduce Tree Removal_2018-11-11.mxd
Matchline - See Page 2

Matchline - See Page 4

Source: ESRI Aerials Online; Dokken Engineering 11/1/2018; Created By: astorck

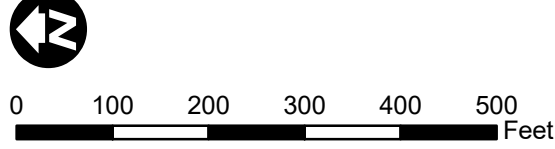
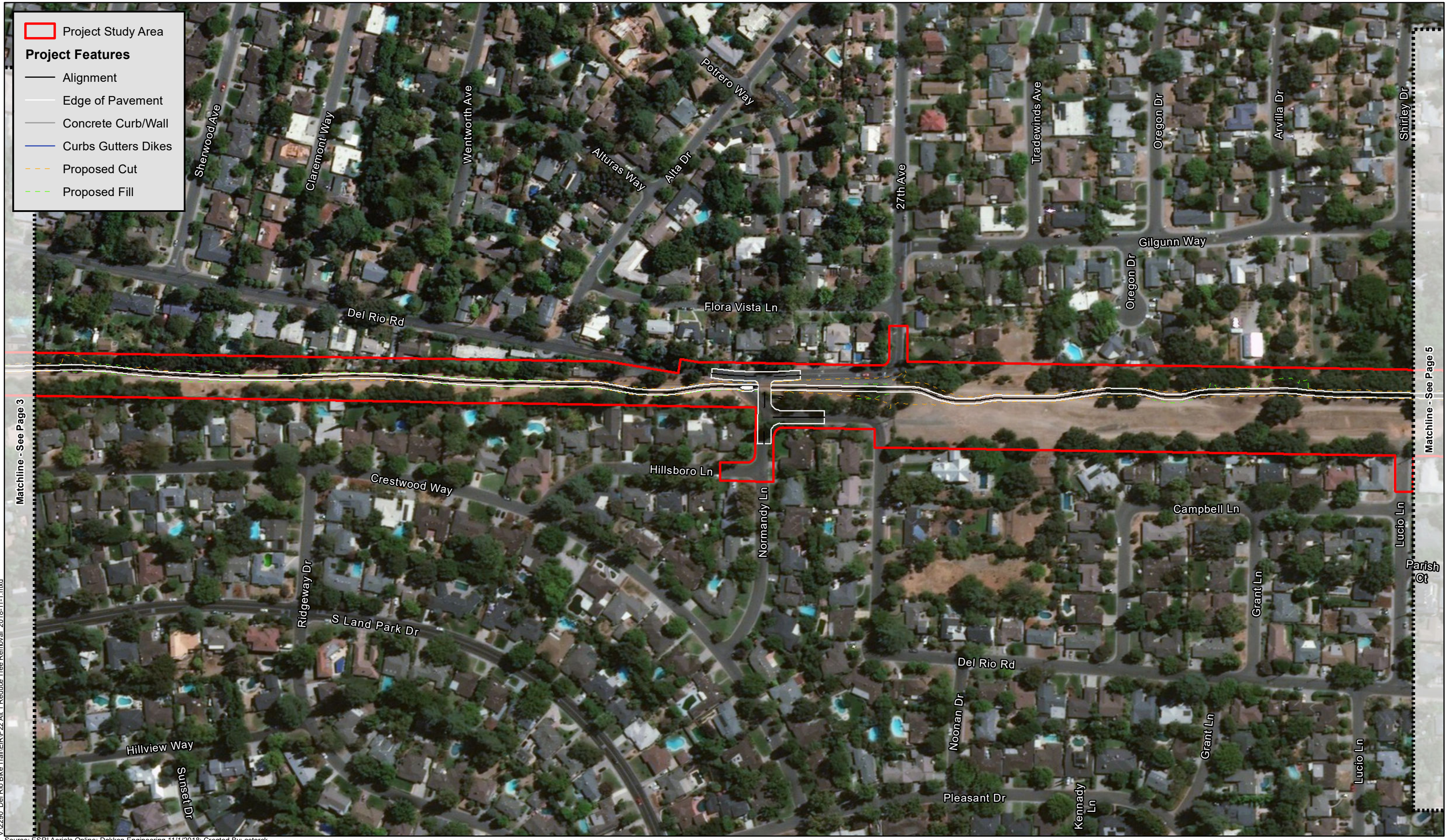


FIGURE 22
Alternative 1 - Reduce Tree Removal
 Page 3 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Project Study Area

Project Features

- Alignment
- Edge of Pavement
- Concrete Curb/Wall
- Curbs Gutters Dikes
- - - Proposed Cut
- - - Proposed Fill



Matchline - See Page 3

Matchline - See Page 5

V:\2280_Del Rio Bike Trail\ER\F22 Alt 1 Reduce Tree Removal_2018-11-1.mxd

Source: ESRI Aerials Online; Dokken Engineering 11/1/2018; Created By: astorck

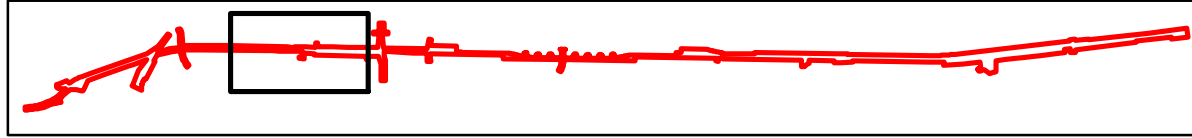
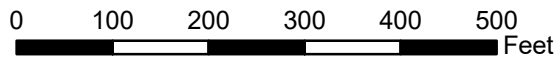
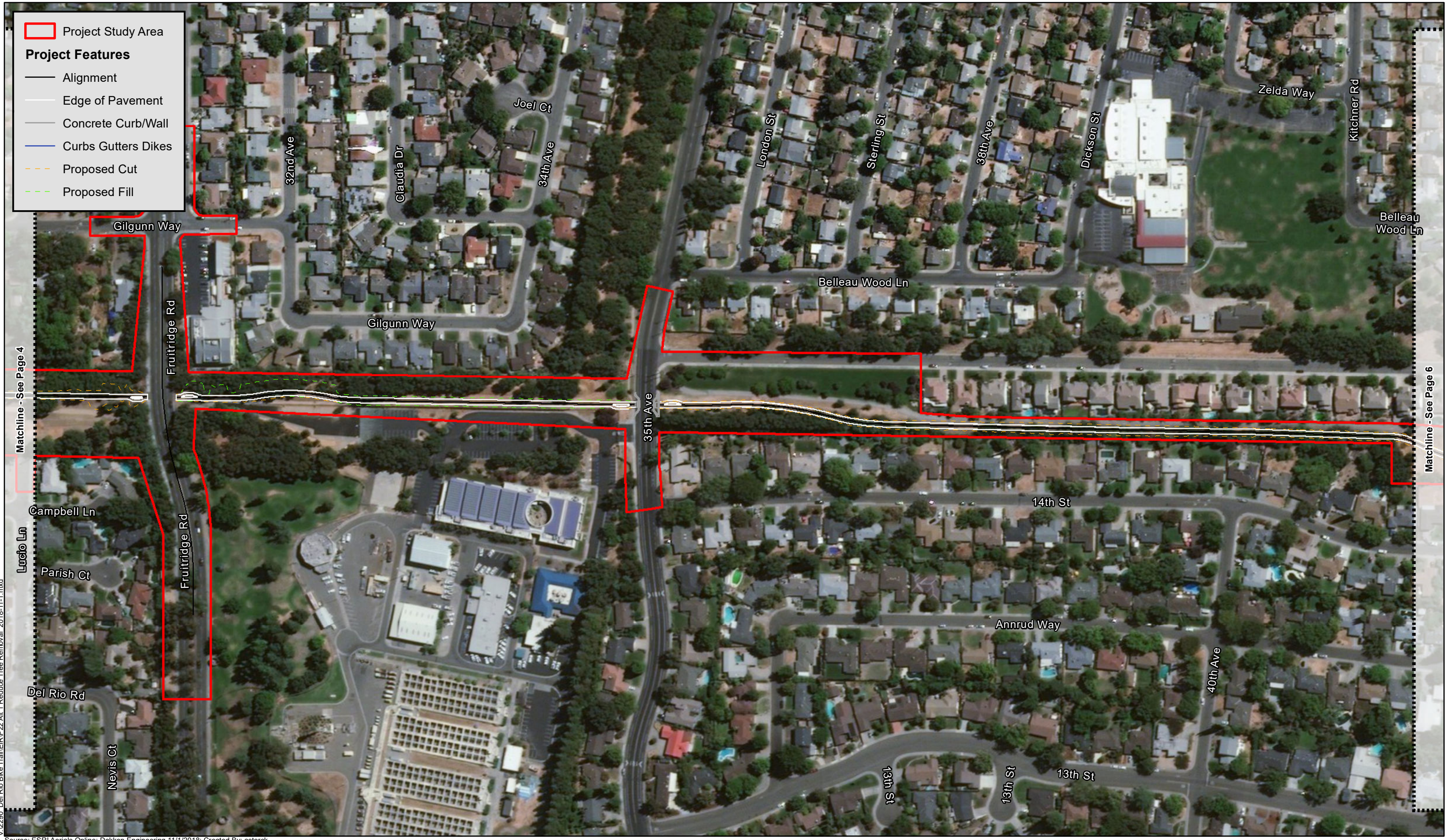


FIGURE 22
Alternative 1 - Reduce Tree Removal
 Page 4 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

- Project Study Area
- Project Features**
- Alignment
- Edge of Pavement
- Concrete Curb/Wall
- Curbs Gutters Dikes
- Proposed Cut
- Proposed Fill



V:\2280_Del Rio Bike Trail\ER\F22 Alt 1 Reduce Tree Removal_2018-11-1.mxd

Source: ESRI Aerials Online; Dokken Engineering 11/1/2018; Created By: astorck

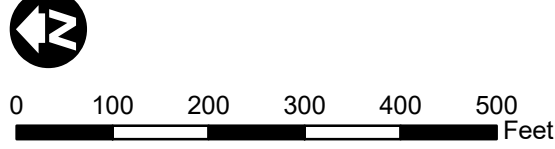


FIGURE 22
Alternative 1 - Reduce Tree Removal
 Page 5 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

- Project Study Area
- Project Features**
- Alignment
- Edge of Pavement
- Concrete Curb/Wall
- Curbs Gutters Dikes
- Proposed Cut
- Proposed Fill



VA2290_Del Rio Bike Trail\ER\F22 Alt 1 Reduce Tree Removal_2018-11-11.mxd

Source: ESRI Aerials Online; Dokken Engineering 11/1/2018; Created By: astorck

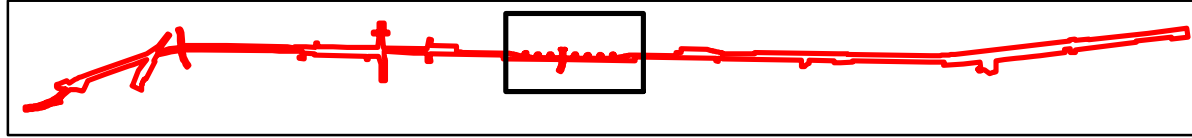
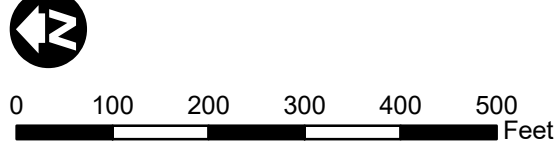


FIGURE 22
Alternative 1 - Reduce Tree Removal
 Page 6 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

- Project Study Area
- Project Features**
- Alignment
- Edge of Pavement
- Concrete Curb/Wall
- Curbs Gutters Dikes
- Proposed Cut
- Proposed Fill



V:\2280_Del Rio Bike Trail\ER\F22 Alt 1 Reduce Tree Removal_2018-11-11.mxd

Source: ESRI Aerials Online; Dokken Engineering 11/1/2018; Created By: astorck

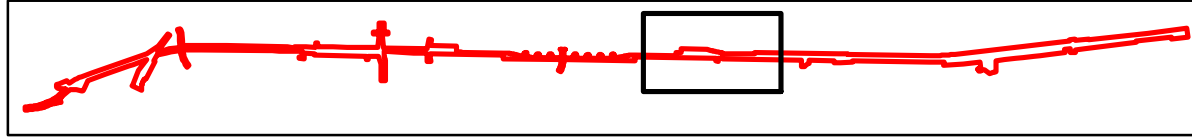
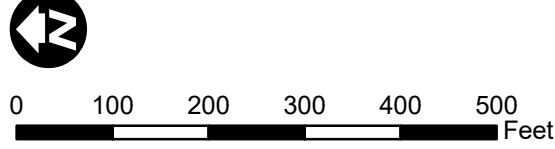


FIGURE 22
Alternative 1 - Reduce Tree Removal
 Page 7 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

- Project Study Area
- Project Features**
- Alignment
- Edge of Pavement
- Concrete Curb/Wall
- Curbs Gutters Dikes
- Proposed Cut
- Proposed Fill



Matchline - See Page 7

Matchline - See Page 9

Las Lomitas Cir

Source: ESRI Aerials Online; Dokken Engineering 11/1/2018; Created By: astorck

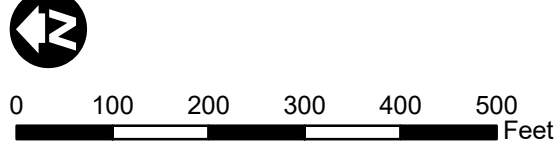


FIGURE 22
Alternative 1 - Reduce Tree Removal
 Page 8 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Project Study Area

Project Features

- Alignment
- Edge of Pavement
- Concrete Curb/Wall
- Curbs Gutters Dikes
- - - Proposed Cut
- - - Proposed Fill



V:\2290_Del Rio Bike Trail\ER\F22 Alt 1 Reduce Tree Removal_2018-11-11.mxd

Source: ESRI Aerials Online; Dokken Engineering 11/1/2018; Created By: astorck

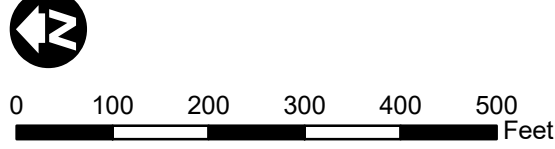


FIGURE 22
Alternative 1 - Reduce Tree Removal
 Page 9 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Project Study Area

Project Features

- Alignment
- Edge of Pavement
- Concrete Curb/Wall
- Curbs Gutters Dikes
- Proposed Cut
- Proposed Fill



V:\2280_Del Rio Bike Trail\ER\F22 Alt 1 Reduce Tree Removal_2018-11-11.mxd

Source: ESRI Aerials Online; Dokken Engineering 11/1/2018; Created By: astorck

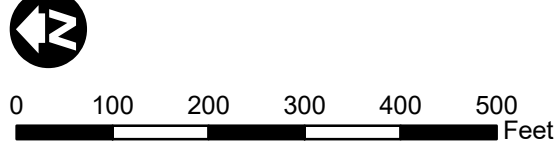


FIGURE 22
Alternative 1 - Reduce Tree Removal
 Page 10 of 10
 ATPL-5002(189)
 Del Rio Trail Project
 City of Sacramento, Sacramento County, California

Impacts Identified as Less Severe than the proposed Project

Biological Resources. Alternative 1 would result in less trees removed throughout the corridor than the proposed Project.

Impacts Identified as More Severe than the Proposed Project

Cultural Resources. Alternative 1 would have a greater impact to the Walnut Grove Branch Line of the Southern Pacific Railroad due to 50 percent of track removal.

ALTERNATIVE 2 – No Walking Path

This alternative would include constructing approximately 4.8 miles of Class 1 multi-use trail (12 to 16 feet of pavement) with unpaved shoulders ranging from 2 to 3 feet without an adjacent 5 to 6-foot wide unpaved walking trail. This alternative would include at-grade crossings and intersection modifications at each location where the trail intersects a vehicular roadway. This alternative would include limited removal of existing railroad track only where necessary for safety, particularly at major arterial intersections or where the skew of the existing track against the alignment of the proposed multi-use trail will cause a safety hazard. This alternative would ultimately result in the same amount of track removal as the proposed Project (approximately 2 percent) even without the proposed walking path. This alternative was rejected for further consideration and analysis because it would not avoid or substantially lessen significant environmental impacts.

Impacts Identified as Being the Same or Similar to the Proposed Project

Aesthetics; air quality; biological resources; cultural resources; tribal cultural resources; geology and soils; greenhouse gas; land use and planning; population and housing; public services; recreation; hazards and hazardous materials; hydrology and water quality; noise; traffic; and utilities. Alternative 1 would result in similar impacts related to the above resources as with the proposed Project due to the scale and locations of this alternative.

Impacts Identified as Less Severe than the proposed Project

There are no impacts to resource areas under Alternative 2 identified as being less severe than the proposed Project.

Impacts Identified as More Severe than the Proposed Project

There are no impacts to resource areas under Alternative 2 identified as being more severe than the proposed Project.

NO PROJECT ALTERNATIVE

CEQA Guidelines section 15126.6(e) requires consideration of a “No Project” alternative. The purpose of this alternative is to allow the decision makers to compare the impacts of the proposed Project with the impacts of not approving the Project.

Under the No-Project Alternative, the City would not accomplish the following objectives:

- Advance and complete the planned connection between the Sacramento River Parkway and the Freeport Shores Bikeway in accordance with the City of Sacramento Bikeway Master Plan utilizing public right of way and public agency parcels.
- Connect logical origins and destinations proximate to the trail alignment by improving pedestrian and bicycle access throughout the South Land Park, Freeport Manor, Z’berg, Land Park, Meadowview, and Pocket communities; or
- Provide an American’s with Disabilities Act (ADA)-compliant, active transportation connection to adjacent communities throughout the south Sacramento area for pedestrians and bicyclists of all ages and abilities to access schools, retail, jobs, and recreational amenities.

The South Land Park, Pocket, and adjacent communities in South Sacramento would continue to have limited ADA-compliant, active modes of transportation to schools, retail, jobs, and recreational amenities

thereby increasing automotive dependency and Vehicle Miles Traveled. There would also continue to be reduced opportunities for those who do not drive or do not have access to a car including children, the elderly, the disadvantaged, and persons with disabilities.

This alternative was rejected for further consideration and analysis because it failed to meet most of the basic Project objectives.

Impacts Identified as Being the Same or Similar to the Proposed Project

Population growth; mineral resources; and agriculture and forestry. Similar to the proposed Project; no impacts would occur to the resources listed above under the No Project Alternative.

Impacts Identified as Less Severe than the proposed Project

Aesthetics; air quality; biological resources; cultural resources; tribal cultural resources; geology and soils; greenhouse gas; land use and planning; population and housing; public services; recreation; hazards and hazardous materials; hydrology and water quality; noise; traffic; and utilities. Under the No Project Alternative construction for the proposed Project would not occur and the corridor would remain in its existing conditions. Although no permanent impacts would occur to any of the resources listed above, the No Project Alternative fails to meet all of the basic Project objectives.

Impacts Identified as More Severe than the Proposed Project

There are no impacts to resource areas under the No Project Alternative identified as being more severe than the proposed Project.

3.2 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA requires identification of the environmental superior alternative; that is, the alternative that has the least significant impacts on the environment.

As presented in Chapter 2.0, implementation of the proposed Project would result in less than significant environmental impacts with mitigation incorporated. As discussed in section 3.1.3, the Reduce Tree Removal, and the No Walking Trail alternatives have the potential to have greater environmental impacts than the proposed Project or would not meet most of the basic Project objectives as compared to the proposed Project.

Of the remaining alternatives considered, the No Build alternative has the least significant impacts on the environment and would be considered the environmentally superior alternative; however, this alternative does not meet the Project objectives.

Therefore, because the proposed Project would result in less environmental impacts than the other alternatives, and meets all of the basic Project objectives, it would be the environmentally superior alternative. Table 24 presents a summary of how each alternative compares to the proposed Project with respect to the impacts and the ability to meet Project objectives.

Table 24. Comparison of Environmental Impacts of the Alternatives Compared to the Proposed Project

	Proposed Project	No Project Alternative	Reduce Tree Removal	No Walking Path
Environmental Impacts	Less Than Significant With Mitigation	No Impact	Less Than Significant With Mitigation	Less Than Significant With Mitigation
Meets Project Objectives:				
Advance and complete the planned connection between the Sacramento River Parkway and the Freeport Shores Bikeway in accordance with the City of Sacramento Bikeway Master Plan utilizing public right of way and public agency parcels.	Yes	No	Yes	Yes
Connect logical origins and destinations proximate to the trail alignment by improving pedestrian and bicycle access throughout the South Land Park, Freeport Manor, Z'berg, Land Park, Meadowview, and Pocket communities	Yes	No	Yes	Yes
Provide an American's with Disabilities Act (ADA)-compliant, active transportation connection to adjacent communities throughout the south Sacramento area for pedestrians and bicyclists of all ages and abilities to access schools, retail, jobs, and recreational amenities	Yes	No	Yes	No

4.0 OTHER CEQA CONSIDERATIONS

This section describes required topics including growth inducing impacts, significant and unavoidable impacts, and significant irreversible environmental changes relative to the proposed Project. It provides a discussion of energy conservation as required by section 15126.4 of the California Environmental Quality Act (CEQA) Guidelines. Finally, this section addresses and assesses the potential for cumulative impacts from the proposed Project in conjunction with recent past, current and reasonably foreseeable future Projects.

4.1 GROWTH INDUCING IMPACTS

CEQA (Guidelines (section 15126.2(d)) requires that an Environmental Impact Report (EIR) evaluate the growth inducing impact of a proposed action. The Guidelines describe the required growth inducement analysis as follows:

Discuss the ways in which the proposed Project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this definition are public works Projects, which would remove obstacles to population growth, would tax community service facilities, or encourage or facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.

A Project can have the potential for direct and/or indirect growth inducement. Direct growth inducement would result if a Project involved construction of new housing which would facilitate new population in an area. Indirect growth inducement or secondary growth-inducement potential would be present if it would establish substantial new permanent employment opportunities (e.g., commercial, industrial, or governmental enterprises), or if it would involve a substantial construction effort with substantial long-term employment opportunities which could indirectly stimulate the need for additional housing and services to support the new employment demand.

Similarly, a Project could indirectly induce growth if it would remove a physical obstacle to additional growth and development, such as removing a constraint or adding a required public service. Examples of removing a physical obstacle would include construction of a new roadway into an undeveloped area or construction of a wastewater treatment plant with sufficient capacity to serve additional new development. Construction of these types of infrastructure projects cannot be considered isolated from the immediate development that they facilitate and serve. Projects that physically remove obstacles to growth, or projects that indirectly induce growth, are those that may provide a catalyst for future unrelated development in the area. The growth inducing potential of a project could also be considered significant if it fosters growth in excess of what is assumed in the local master plans and land use plans, or in projections made by regional planning agencies.

4.1.1 *Direct Growth Inducement*

The proposed Project would not construct new housing, businesses, or roadways, require acquisition of private property, or create new connections to undeveloped land. The proposed Project aims to improve pedestrian and bicycle access throughout the South Land Park and Pocket communities and provide multi-modal connectivity to adjacent communities throughout the Sacramento area. No impacts would occur to the surrounding communities. The Project would result in improved accessibility for surrounding communities. The proposed Project would also not create permanent employment. The proposed Project is consistent with the City of Sacramento General Plan as the proposed Project will continue to be zoned for Parks and Recreation, and the Project would not change the zoning designation of adjacent areas. Development of the site as proposed would alter the existing landscape, but the Project site has been designated for Recreation in the 2035 General Plan and the proposed development is consistent with these planning designations. The City Bikeway Master Plan also shows a continuous non-motorized trail system along the southern city limits (see Figure 22).

4.1.2 Indirect Growth Inducement

The proposed Project would not establish new permanent employment opportunities or involve a substantial construction effort with substantial long-term employment opportunities that could indirectly stimulate the need for additional housing and services to support the new employment demand. Construction of the Project would last less than one year and would not require additional housing and/or services for workers. The proposed Project would not directly or indirectly induce growth or remove an obstacle to growth, would not require or result in the need for new or expanded water or wastewater treatment facilities, and would not increase population. No growth inducing effects would occur.

4.2 SIGNIFICANT AND UNAVOIDABLE IMPACTS

CEQA Guidelines section 15126(b) requires an EIR to “describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the Project is being proposed, notwithstanding their effect, should be described.”

Section 2.0 of this EIR provides a description of the potential environmental impacts of the proposed Project and recommends mitigation measures to reduce impacts to a less than significant level, where possible. After implementation of the recommended mitigation measures, all of the potentially significant impacts associated with the proposed Project would be reduced to a less than significant level. Therefore, the proposed Project will not have significant and unavoidable impacts.

4.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines section 15126.2(c) describes irreversible environmental changes as follows:

Uses of nonrenewable resources during the initial and continued phases of a Project may be irreversible if it requires a large commitment of such resources or makes removal or nonuse thereafter unlikely. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.

The CEQA Guidelines refer to the need to evaluate and justify the consumption of nonrenewable resources and the extent to which the Project commits future generations to similar uses of nonrenewable resources. In addition, CEQA requires that irreversible damage that could result from an environmental accident associated with the Project be evaluated.

Construction of the proposed Project would result in the commitment of nonrenewable natural resources used in the construction process and during operation, including gravel, petroleum products, and other materials. As discussed in Utilities and Service Systems section (Section 3.14) and Hazards and Hazardous Materials (3.7), the proposed Project would not generate large amounts of construction waste. Construction and operation of the proposed Project would also result in commitment of energy resources such as fossil fuels and electricity. Direct energy used during construction and operation would involve using petroleum products and electricity to operate equipment, and indirect energy use would involve consuming energy to extract raw materials, manufacture items, and transport the goods and people necessary for construction activities. Construction-related energy consumption would be temporary and would be confined to the construction period. Nevertheless, construction and operation activities would, as with any construction Project, cause irreversible and irretrievable commitments of finite nonrenewable energy resources, such as gasoline and diesel fuel.

The proposed Project would include all feasible control measures to improve equipment efficiency and reduce energy use as required by the SMAQMD. These measures include an Emission and Dust Control Plan that would reduce unnecessary equipment idling and other policies that would help reduce energy use and are consistent with state and local legislation and policies to conserve energy. In addition, the proposed Project would comply with applicable Federal, State and local policies and regulations pertaining to energy standards and would ensure that natural resources are conserved to the maximum

extent possible. Therefore, due to the rate and amount of energy consumed, the proposed Project would not result in the unnecessary, inefficient, or wasteful use of resources and energy use would be accomplished in a manner consistent with applicable laws and regulations.

Finally, construction of the proposed Projects has the potential to result in accidental release of hazardous materials which may lead to irreversible damage. However, as stated in Section 2.7, hazardous materials used during construction would be typical of common construction activities. They would be handled by the contractor in accordance with applicable federal, State, and local regulation for hazardous substances.

4.4 ENERGY RESOURCES

This section was prepared pursuant to CEQA Guidelines sections 21100(b)(3) and 15126.4(a)(1)(c), and Appendix F of the State CEQA Guidelines. As stated in Appendix F, “[i]n order to ensure that energy implications are considered in Project decisions,” an Environmental Impact Report (EIR) must discuss “the potential energy impacts of proposed Projects, with particular emphasis on avoiding or reducing inefficient, wasteful and unnecessary consumption of energy.” Appendix F, Section I states that, “Potentially significant energy implications of a Project shall be considered in an EIR to the extent relevant and applicable to the Project.”

Policies 6.1.6 through 6.1.8 of the City General Plan focus on promoting the use of renewable resources, which would reduce the cumulative impacts associated with use of non-renewable energy sources. In addition, Policies 6.1.5 and 6.1.12 call for the City to work closely with utility providers and industries to promote new energy conservation technologies.

The General Plan EIR evaluated the potential impacts on energy and concluded that the effects would be less than significant (See Impacts 6.11-9 and 6.11-10). The proposed Project would not result in any impacts not identified and evaluated in the General Plan EIR.

4.5 CUMULATIVE IMPACTS

CEQA requires an environmental impact report to include a discussion of cumulative effects of a project when the project’s incremental effect is “cumulatively considerable.” An effect is cumulatively considerable when it is significant in connection with the effects of past projects, the effects of other current projects and the effects of future Projects (CEQA Guidelines section 15065(a)(3)).

A “cumulative impact” is an impact that is created as a result of the combination of a project together with other projects causing related impacts. The first step in the cumulative analysis, therefore, is to identify each impact of the project and, in each case, consider whether there are other projects (past, current, future) that could have related impacts, and then to determine whether the project’s contribution to the overall impact is “cumulatively considerable.”

For example, a project that constructs and operates a retail center would generate a substantial number of vehicle trips once the center is completed and opened for operation, which in turn would affect road operations and conditions in the vicinity of the project site. A lead agency would be required not only to consider the effects of trips generated by the project, but also those trips in combination with other projects that might contribute vehicle trips to the same roadway system. Thus, CEQA seeks to avoid situations in which a series of small projects with relatively minor effects eventually result in far larger effects as their effects are combined.

Although the proposed Del Rio Trail is part of a larger planned connection between the existing Sacramento River Parkway and the Freeport Shores Bikeway, no cumulative effects are anticipated because environmental resources that are adversely affected by the Del Rio Trail Project would be localized and of limited extent. While the elimination of large existing trees would temporarily impact the existing visual quality of the corridor, new trees and vegetation would be planted and allowed to grow; therefore, this impact would be temporary and not considered a cumulative effect. The removal of

approximately 2 percent of the Walnut Grove Branch of the Southern Pacific Railroad track would occur as a result of the proposed Project; however, this impact would be localized to the Del Rio Trail Project and is not considered a cumulative effect in comparison to the overall existing track in the Sacramento area.

Additionally, the proposed Project was analyzed in terms of consistency with project's identified in the City of Sacramento General Plan and the City of Sacramento General Plan Master Environmental Impact Report. The following sections include an overview of the relevant cumulative impacts and the proposed Project's potential to contribute to the construction related cumulative impacts. Specifically, Section 4.5.1 discusses cumulative impacts to resources in relation to their geographic scope and Table 25 identifies which method of evaluation is appropriate for each resource.

4.5.1 Geographic Scope

The geographic area that is analyzed for cumulative impacts depends on the resource being analyzed. The geographic area associated with a proposed project's different environmental impacts defines the boundaries of the area used for compiling the list of past, present, and probable future projects considered in the cumulative impact analysis. The geographic area varies depending on the type of environmental resource being considered (see Table 25). Also listed is the method of evaluation used to analyze cumulative impacts for each environmental resource.

Table 25. Geographic Scope of Cumulative Impact and Method of Evaluation

Resource Topic	Geographic Area	Method of Evaluation
Aesthetics	Immediate Project Vicinity	Projects
Air Quality	Local (Toxic Air Contaminants) Air Basin (Construction Related and Mobile Sources)	Projects and Projections
Biological Resources	Immediate Project Vicinity Region	Projects
Cultural and Tribal Resources	Immediate Project Vicinity	Projects
Geology and Soils	Immediate Project Vicinity	Project
Greenhouse Gas Emissions, Climate Change, and Energy	GHG (Statewide)	Projects and Projections
Hazards and Hazardous Materials	Immediate Project Vicinity	Projects
Hydrology and Water Quality	Immediate Project Vicinity Watershed	Projects and Projections
Land Use and Planning	Immediate Project Vicinity	Projects and Projections
Noise	Immediate Project Vicinity	Projects
Public Services	Immediate Project Vicinity	Projects and Projections
Recreation	Immediate Project Vicinity	Projects

Transportation and Traffic	Immediate Project Vicinity Regional roadway network	Projects and Projections
Utilities and Service Systems	Immediate Project Vicinity	Projects and Projections

Notes: Projects = the use of a list of past, present, and reasonable foreseeable Projects
 Projections = the use of Projections contained in relevant planning documents

For those environmental resources that were evaluated based on the projections approach, the projections take into consideration future projects that are not included in the below list of related plans and projects.

4.5.2 List of Related Plans and Projects

A list of past, current, and reasonably foreseeable future projects was compiled using information from the City. The past, present and reasonably foreseeable future projects proposed by the City within or directly adjacent to the proposed Project area, the surrounding community, or the City as a whole were identified and categorized in Table 26 below. For the purposes of this discussion, these projects that may have a cumulative effect on the resources of the Project area are often referred to as the “collective projects.” These projects are described in Table 26.

Table 26. List of Collective Past, Present, and Reasonably Anticipated Future Projects Within the City

Project/	Status *	Location	Description
North Sacramento Streams, Sacramento River East Levee, Lower American River and Related Flood Improvements Project	In progress	Sacramento River Levees	The Sacramento Area Flood Control Agency (SAFCA) is proposing to implement improvements to the flood management system protecting portions of the City and County of Sacramento along the Lower American and Sacramento Rivers and their tributaries outside the Natomas Basin. The proposed improvements would reduce flood risk and bring the flood management system in the project area into compliance with applicable engineering standards established under the National Flood Insurance Program.

Garcia Bend Bike Trail	In progress	Pocket Road and Garcia Bend Park	The Garcia Bend Bike Trail would pave a 0.5-mile Class I multi-use trail that connects the northern terminus of the existing levee top trail at Garcia Bend Park to the Pocket Canal Parkway at the City's Department of Utilities Sump Station #132.
Garden Highway Bike Trail	Complete.	Garden Highway	Bike trail constructed along Garden Highway in the City of Sacramento.
I Street Bridge Replacement	In progress	I Street over the Sacramento River	The I Street Bridge Replacement Project would replace the vehicle crossing that is currently obsolete.
McKinley Village	In progress	City of Sacramento	The McKinley Village Project consists of the construction and operation of a residential development, a neighborhood recreation center, parks, and associated infrastructure on an approximately 48-acre site within the East Sacramento Community Plan Area.
2025 L Street / 2101 Capitol Avenue Mixed-Use Project	In progress	20th Street, 21st Street, L Street, Capitol Avenue	The 2025 L Street Project component would be located on the half-block north of L Street, between 20th and 21st Streets. An existing above-ground, two story parking garage and adjacent two story building at this location would be demolished, an existing surface parking lot would be removed, and a new six story, mixed use building would be constructed.

Railyards Specific Plan	In progress	City of Sacramento	Sacramento Railyards Specific Plan area is approximately 244-acres and includes the subject property, the City's Sacramento Valley Station, and the Union Pacific Railroad rail corridor. The Project proposes to subdivide lots for a variety of uses, including residential, retail, and office. The propjet also includes a medical center campus and a major sports complex.
700 Block of K Street	In progress	K street	A mixed-use development with residential units, retail/restaurant/entertainment uses and a parking structure. The Project would renovate the majority of the existing building facades along K Street on this fully developed site.
Leisure Lane Storm Drain Improvements Project	In progress	Royal Oaks Drive/ Hwy 160 and Leisure Lane/ Exposition Blvd/ Hwy 160	Project consists of constructing a new outlet weir box north of CA-Highway 160 between the existing sewer line.
15th and 14th Street Combined Sewer Relief CIP	In Progress	City of Sacramento	The 7th Street Sewer Project includes the construction of approximately 3,200 linear feet of 72-inch, 60-inch and 48-inch diameter pipeline and appurtenances, construction of manholes and other associated work in 7th Street from P to K Street and in L Street from 7th to 9th Street.

9th Street Sewer Project	In Progress	Along 9 th street from G to L Streets	Construction of the 9th Street Sewer Project will provide additional conveyance capacity, replace deteriorated portions of the combined sewer system, add in-line storage to reduce flooding in the surrounding and upstream portions of the combined sewer system, and continue the Downtown Sewer Upsizing Project, a major component of the long-term Combined Sewer System Improvement Program.
3rd Street Sewer Relief Project	In Progress	Along 3 rd street from I to U streets	Plans and specifications for the upgrades along the 3 rd Street corridor are currently being finalized.
Yamane Mixed-Use Project	In Progress	Intersection of 25th and J Streets	The proposed Project is a new multi-story, mixed-use building southeast of the intersection of 25th and J Streets.
Oakmont of East Sacramento	In Progress	5301 F Street	The Project includes the demolition of the vacant medical office building and redevelopment of the Project site with a senior living facility.
19 J Project	In Progress	1827 and 1831 I Street	The 19J Project proposes demolition of the existing buildings on site and construction of an 11-story mixed use structure.
Accelerated Water Meter Project	In Progress	City of Sacramento	The Accelerated Water Meter Project proposes to install approximately 25,700 water meters on existing residential and commercial water service connections. The proposed Project also involves replacement of approximately 62 miles of existing distribution and transmission mains primarily in existing City street rights-of-way.

Sutter Park Neighborhood Project	In Progress	Coloma Terrace neighborhood of East Sacramento	The Sutter Park Neighborhood Project would establish a Planned Unit Development on the property on which Sutter Memorial Hospital and its associated offices and related-care facilities are located.
Sacramento Convention Center Renovation and Expansion and the 15th/K Street Hotel Projects	Future Project	13th Street W., 15th Street E., J Street N., K Street S.; Hotel: SW corner of K and 15th Streets	The proposed Sacramento Convention Center Renovation and Expansion Project will add exhibit space, meeting rooms, new lobbies, an outdoor amphitheater, and back-of-house uses to expand and renovate the existing Convention Center. The 15th/K Street Hotel Project will construct a hotel adjacent to the Convention Center.
Twin Rivers Transit-oriented Development and Light Rail Station Project	Future Project	Richards Blvd./North 12 th Street	The City, in partnership with the Sacramento Housing and Redevelopment Agency and the Sacramento Regional Transit District, proposes implementation of the Twin Rivers Transit-Oriented Development and Light Rail Station Project. The proposed Project would develop a mixed-income and mixed-use community comprising replacement public housing units, new market rare rental and low-income housing tax credit units, a realigned internal street network, green open space, and other community amenities on two noncontiguous but proximate properties that currently include public housing and undeveloped land.

4.5.3 Methods

The analysis below examines the cumulative impacts of the proposed Project for each of the topics that are analyzed in Chapter 2.0 of this EIR. The impacts are assessed by short term (construction) and long

term (operational) impacts of the proposed Project combined with the impacts of the past and planned projects listed in Table 26 (referred to as the collective projects).

The following objectives were set forth to analyze the short-term construction and long-term operational cumulative impacts. First, there is an assessment of whether the baseline condition, when considered with the proposed Project, entails a significant impact to any specific resource. Then, there is an assessment of whether the combined impacts of the proposed Project and the projects in Table 26 are cumulatively significant. Finally, there is a determination of whether the incremental effects of the proposed Project would 'contribute considerably' and therefore cause a cumulatively considerable effect. If so, there is also a determination of whether mitigation is feasible.

Specifically, the following objectives were set forth to analyze the short-term construction and long-term operational cumulative impacts discussed in Section 4.5.4:

1. Identify if the combined impacts of the proposed Project and the Projects in Table 26 are significant. If so,
2. Determine whether the proposed Project's incremental contribution to that significant impact are cumulatively considerable. If so,
3. Determine if mitigation is feasible.

Note: it is possible that even when the cumulative impact of multiple Projects is significant, the incremental contribution of the impact for the proposed Project may itself not be cumulatively considerable (California Code of Regulations [CCR] section 15064.H4, Communities for Better Environment Case Law). In this case, the Project's impact would not be cumulatively considerable.

Furthermore, a project's contribution is less than cumulatively considerable if the project implements mitigation measures designed to alleviate the cumulative impact. (CEQA Guidelines section 15130 (a)(3)).

4.5.4 Resource-Specific Cumulative Analysis

4.5.4.1 Aesthetics

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to aesthetic and visual resources is limited to areas within the physical footprint of a project area and areas adjacent to the project with views that could be changed by the proposed Project.

What is the level of significance of the Combined Impact of the Proposed Project with the projects listed in the Cumulative Impact Table?

The area surrounding the proposed Project site is a general mix of uses (see Section 2.9 Land Use). Development of past and current projects, as well as future proposed projects, continue to alter the visual environment in and around the City. In general, the visual resource impacts of the proposed Project and the majority of projects listed in Table 26 are site-specific and would not necessarily combine with other projects that are not in the same viewshed to create a cumulative impact. In addition, all proposed and reasonably foreseeable projects would be subject to City design and landscaping requirements to ensure that they do not degrade visual character. The appearance of the Project vicinity would not substantially change and the construction of the proposed Project would not create significant visual impacts that would contribute to visual resource degradation in the viewshed when assessed in conjunction with other local Projects. Therefore, the proposed Project, in conjunction with other planned Projects, would have a less-than-significant cumulative impact on aesthetic and visual resources.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The multiple development, transportation and infrastructure projects in the region around the City would have a combined aesthetic impact; however, the proposed Project would not cause a considerable increase to that impact, given the proposed Project involves constructing a bike trail and no structures or roadways would be constructed.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

While the elimination of large existing trees would temporarily impact the existing visual quality of the corridor, new trees and vegetation would be planted and allowed to grow; therefore, this impact would be temporary and ultimately result in a similar visual quality. The combined impacts of tree removal with other projects does not constitute a significant impact and the proposed Project does not entail a considerable contribution to the existing baseline (Table 26); therefore, no mitigation is necessary.

Finding: None Required

4.5.4.2 Air Quality

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to air quality is on a regional level because air quality impacts are regional in nature.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The City is at nonattainment for State and Federal Ozone, State PM10 and Federal PM2.5. The collective projects listed in Table 26 would result in new air emissions. Therefore, the combined Table 26 project impacts relative to these constituents are considered significant.

Finding: Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The SMAQMD has established operational cumulative significance thresholds for ROG and NOx, which are ozone precursors, of 85 pounds per day. Any Project emitting over 85 pounds per day of ROG or NOx would be considered a cumulatively significant impact and would require mitigation. Based on the results of the roadway emissions model, construction emissions from the proposed Project would be below the SMAQMD significance thresholds for cumulative impacts (See Air Quality Section 2.2). Additionally, the proposed Project Would be consistent with the City 2035 General Plan EIR air quality impact analyses. As such, cumulative impacts related to air quality emissions from development of the site consistent with General Plan land use designations have already been accounted for by the City 2035 General Plan EIR

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

As discussed above, the baseline cumulative contribution to air quality impacts in the region is considered significant because the City is at nonattainment for three constituents; however, the incremental addition to the problem from the proposed Project is considered mitigated to minimal levels and thus does not contribute considerably to this existing impact; therefore, no further mitigation is required.

Finding: None Required

4.5.4.3 Biological Resources

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative biological resources analysis is the Project site and adjacent surrounding areas.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The cumulative projects listed in Table 26 may result in a cumulatively significant impact to biological resources depending on site conditions and would be required to individually mitigate for impacts. When considered together, for example, the loss of potential Designated Critical Habitat (DCH) is not considered significant due to the lack of DCH in the Project area. No impacts to special status species or habitat is anticipated to occur as a result of the Del Rio Trail Project. Therefore, in general, the proposed collective Projects in Table 26 are not considered to have a cumulatively significant impact to biological resources.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

When the proposed Project is analyzed in conjunction with other recent, current, and reasonably foreseeable projects, the potential contribution to the cumulative biological resource impact to special status species, wetlands, migratory corridors, and trees, is not considered cumulatively considerable, because the proposed Project was designed and adjusted to avoid and minimize impacts to biological resources as much as feasible. While the elimination of large existing trees would temporarily impact the Project corridor, new trees and vegetation would be planted and allowed to grow; therefore, this impact would be temporary and ultimately result in a similar visual quality. Additionally, the City would obtain a tree permit and establish a replacement plan prior to removal of City trees pursuant to Sacramento City Ordinance 2016-0026, Chapter 12.56 City and Private Protected Trees.

The proposed Project would not have a cumulatively considerable impact to migratory wildlife corridors, specifically migratory nesting birds, when reviewed in conjunction with other local projects. While the elimination of large existing trees would impact nesting bird habitat, new trees and vegetation would be planted and allowed to grow; therefore, this impact would be temporary. Additionally, the proposed Project is designed to protect wildlife species such as migratory birds through implementation of pre-construction biological surveys and monitoring, as needed, to protect and avoid these biological resources.

As disclosed in the Biological Resources Section (Section 3.3), the proposed Project would not conflict with local policies or ordinances protecting biological resources, or habitat conservation plans. Therefore, it does not contribute to a cumulatively considerable impact to such plans and policies when analyzed in conjunction with other proposed projects in the region (Table 26).

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to biological resources. The proposed Project does not add a cumulatively considerable impact to the combined proposed Project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.4 Cultural and Tribal Resources

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative cultural and tribal analysis is the Project site, adjacent surrounding areas, and the entirety of the historic rail.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The records search of the State and local registers of archaeological resources did not identify any archaeological resources (prehistoric or historic period) within the Project area. In addition, based on consultation with tribal representatives summarized in Cultural Resources and Tribal Resources (Section 2.4), no tribal cultural resources were identified within the Project area. The records search of the State and local registers of historic resources identified one resource, the historic Walnut Branch Line of the Southern Pacific Railroad track as an important historical resource designated by the Office of Historic Preservation (OHP). The proposed Project includes limited removal of existing railroad track only where necessary for safety, particularly at major arterial intersections or where the skew of the existing track against the alignment of the proposed multi-use trail will cause a safety hazard. Where it exists, the majority of the track will be retained, including its metal rails, wood ties, and gravel ballast. Where other Project constraints make it necessary for the walking path to overlap with the existing track, sections of the track will be converted to a walking trail by infilling the area between the metal rails with a traversable surface such as decomposed granite (DG). Other portions of track will remain but not be converted to a walking path. Some of these portions will be incorporated into the Project through the use of landscaping, such as drought-tolerant and native plantings, as well as park-like fixtures such as benches, and trash receptacles. To avoid adverse effect, the work will comply with the Secretary of the Interior's Standards for Treatment of Historic Properties; therefore, impacts are less than significant and no mitigation is necessary. The CSO, as designated federal oversight by SHPO, concurred with this finding on October 22, 2018 (see Appendix G). Additionally, there are no other planned projects that would result in removal of the track. No cumulative effects due to impacts to the historic track are anticipated.

There is a potential for the inadvertent discovery of buried tribal cultural resources, significant paleontological resources, or human remains during the construction of the proposed Project, but with implementation of the mitigation measures proposed in Cultural Resources and Tribal Resources (Section 2.4), it would reduce the proposed Project's impacts to tribal cultural resources, significant paleontological resources, and human remains to less than significant.

Simultaneous construction of other projects in the Project area could potentially result in significant impacts on historic resources, archaeological resources, human remains, or tribal resources, should they be present within the Project site or the vicinity of the Project site. None of the projects listed in Table 26 have direct physical overlap with the proposed Project and all the projects listed in Table 26 were/are required to complete CEQA environmental assessments, by law, which include a cultural resource study within the area including any areas overlapping the proposed Project area as well as consultation with any tribes located in the area. These cultural resource studies and tribal consultations ensure proper documentation, protection, and/or mitigation of important cultural and tribal resources. Because of the CEQA requirements to assess impacts to cultural and tribal resources, there is no combined significant impact to cultural or tribal resources from these projects, and the combined impacts to cultural and tribal resources are considered less than cumulatively significant.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

Since combined impacts of the projects do not constitute a significant impact and the proposed Project does not entail a significant impact to cultural resources (as determined by CSO) or tribal cultural resources, there would not be a contribution to a cumulatively considerable impact.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to cultural or tribal resources. The proposed Project does not add a cumulatively considerable impact to the combined Project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.5 Geology and Soils

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative geologic resources is the Project site and adjacent surrounding areas.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The projects in Table 26 must be constructed in compliance with seismic regulations and include soils and erosion control BMPs. There are no overlapping projects in Table 26 with the proposed Project based on location and construction schedule that would exacerbate soil disturbances. Therefore, the potential impact to soil erosion is localized and mitigated, and not considered cumulatively significant.

Finding: Less than Cumulatively Considerable

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

Construction in a seismically-active region puts people and structures at risk from a range of earthquake-related effects, such as surface fault rupture, strong ground shaking, and landsliding. However, as discussed in Geology and Soils (Section 2.5), the proposed Project is not located within an area that is seismically active. Furthermore, the proposed Project would be built to applicable California State Building Codes to further reduce risks associated with seismic activity. The proposed Project would also entail erosion control BMPs and site restoration. Therefore, the proposed Project's contribution to seismic hazards, erosion, and sedimentation in the region is not considered cumulatively considerable.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to geologic resources. The proposed Project does not add a cumulatively considerable impact to the combined Project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.6 Greenhouse Gases

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to greenhouse gas emissions is on a regional level because greenhouse gas emissions impacts are regional in nature.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The analysis of greenhouse gas emissions (see Greenhouse Gas Emissions [Section 2.6]) is based on the regional impacts of climate change resulting from greenhouse gas emissions globally. Regional and local impacts to GHG emissions are a less-than-significant impact.

The reasonably foreseeable projects listed in Table 26 would result in new greenhouse gas emissions and may result in significant impacts related to greenhouse gas generation. However, all of the reasonably foreseeable Projects would be consistent with existing zoning and land use designations within the City General Plan and would be included in the City General Plan EIR. As such, cumulative impacts related to greenhouse gas generation for the Projects listed in Table 26 have already been accounted for by the City General Plan EIR and therefore not considered cumulatively significant.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The proposed Project would not have significant impacts related to greenhouse gas generation. The thresholds of significance analyzed within Section 3.6 for greenhouse gas impacts are cumulative in nature, taking into consideration the State's emission reduction goal per AB 32 and the California Air Resources Board's Scoping Plan. Therefore, because the Project would have less than significant greenhouse gases impact, as analyzed within Section 3.6, greenhouse gas, the proposed Project would not generate a cumulatively considerable impact for greenhouse gases.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to greenhouse gas emissions. The proposed Project does not add a cumulatively considerable impact to the combined project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.7 Hazards and Hazardous Materials

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to hazards and hazardous material is limited to the American Society for Testing and Materials (ASTM) standard of one mile area surrounding the proposed Project.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

Hazardous materials to be used during construction are of low toxicity and would consist of fuels, oils, paints, and lubricants. Because these materials are required for operation of construction vehicles and

equipment, BMPs would be implemented to reduce the potential for or exposure to accidental spills or fires involving the use of hazardous materials. Impacts from minor spills or drips would be avoided by thoroughly cleaning up minor spills as soon as they occur. While foreseeable projects have the potential to cause similar impacts, it is assumed these projects would also implement BMPs. Therefore, there would not be a significant cumulative impact.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

Hazardous materials utilized during operation include fuels, oils, and lubricants. The materials would be stored in accordance with regulatory requirements as disclosed in Section 2.7. Simultaneous construction of projects in Table 26 could also require the use of hazardous materials during construction. If these projects occurred in the immediate vicinity of the proposed Project, they could result in a cumulatively considerable potential risk of upset. However, the projects listed in Table 26 would not occur in the same project footprint as the proposed Project. Additionally, the proposed Project and the projects listed in Table 26 do not have high risk of wildfires due to the highly-urbanized nature of the City. Therefore, the proposed Project would not result in a cumulatively considerable increase in hazards.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to hazards and hazardous materials. The proposed Project does not add a cumulatively considerable impact to the combined project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.8 Hydrology and Water Quality

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to hydrology and water is on a regional level because hydrology and water quality impacts are regional in nature. The geographic scope of the cumulative hydrology and water quality analysis is the vicinity of the Project site and the Sherman Lake-Sacramento River watershed.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The cumulative projects listed in Table 26 may result in a cumulatively significant impact to regional hydrologic resources if, for example, flow alterations combined to either significantly reduce or increase flows in the region's stream, rivers and canals. The proposed Project does not entail significant proposed flow decreases or increases. Furthermore, the proposed Project and the projects listed in Table 26 would be subject to Federal, State and local regulations designed to minimize cumulative impacts to water quality. Mitigation measures implemented in the short-term (during construction of the proposed Project), in combination with compliance with Federal, state and local regulations, are expected to reduce potential short-term combined impacts to hydrology and water quality to a less than significant level. The mitigation measures proposed in Hydrology and Water Quality (Section 2.8) of this EIR would reduce the proposed Project's impacts to water quality to a less- than-significant level.

The short-term impacts of the projects listed in Table 26 on hydrology and water quality are estimated to be less than significant or less than significant with mitigation incorporated. None of the construction projects are expected to occur simultaneously in the same location, and any short term cumulative

impacts that would occur if that were not the case are considered to be less than significant due to the geographic separation of the projects from one another. Therefore, the proposed Project would have a less-than-significant cumulative impact on hydrology and water quality.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The proposed Project would mitigate impacts to a less than significant level by avoiding impacts to hydrology and water quality and would not be cumulatively considerable given the small and localized nature of the proposed Project and the potential impacts. Therefore, the proposed Project would not be cumulatively considerable and would not warrant additional mitigation.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to hydrology and water quality. The proposed Project does not add a cumulatively considerable impact to the combined project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.9 Land Use and Planning

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative land use analysis is the Project region (City). Land use decisions are made at the City level for the Project region; therefore, the City is an appropriate geographic scope.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The projects in Table 26 could both create and alleviate growth-related impacts in the City. Residential and other development-related projects will impact regional infrastructure, including impacts to finite resources such as wastewater treatment capacity and water supply. Transportation-related projects such as the Twin Rivers Transit-oriented Development and Light Rail Station Project will alleviate impacts associated with cumulative development. Water and wastewater infrastructure construction Projects such as the McKinley Village Project, 3rd and 9th Street Sewer Relief Projects, and the Water Treatment Plants Rehabilitation Project serve to alleviate impacts to existing infrastructure associated with increased development. The proposed multi-use trail would not contribute to the combined impacts associated with the past, present, and future development projects listed in Table 26

Short-term and long-term cumulative impacts to land use as a result of the Projects listed in Table 26 would be less than significant. The cumulative infrastructure development of the proposed Project and the past and planned projects, would not individually or cumulatively physically divide a community or communities. All projects must be developed in accordance with applicable land use plans and policies. Applicable zoning ordinances and land-use regulations would not be affected as a result of the projects listed in Table 26. As a result, the proposed Project and the projects listed in Table 26 would have a less than significant cumulative impact.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The combined impacts of the Projects listed in Table 26 do not constitute a significant land use impact. The proposed Project area for the multi-use trail is classified as Parks and Recreation in the City of Sacramento 2035 General Plan and zoning code and would continue to be zoned as such. The Project would not change the zoning designation of adjacent areas. Because the Project does not create new connections to undeveloped land, no impacts to growth, economics, affordable housing, or crime would occur. Development of the site as proposed would alter the existing landscape, but the Project site will continue to be consistent with these planning designations. The City Bikeway Master Plan also shows a continuous non-motorized trail system along the abandoned railway corridor (Figure 22). Since the proposed Project does not have the potential to conflict with land use plans as described above, and would not incrementally contribute to the combined impact of the past, present, and future projects listed in Table 26, there would be no cumulative impact to land use.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to land use. The proposed Project does not add a cumulatively considerable impact to the combined project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.10 Noise and Vibrations

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to noise is limited to areas within the physical footprint of a project area. Therefore, the area near the Project site would be the area most affected by Project activities and is considered the geographic scope for the noise analysis.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

If the construction of Projects in the region (Table 26) were to occur simultaneously when assessed in combination with the proposed Project they could have a cumulative impact to sensitive receptors adjacent to the proposed Project area. However, there are no overlapping project locations and/or construction schedules. The recent and proposed transportation and development projects are not within the same project vicinity as the proposed Project, thus their noise impacts would not compound to exceed a threshold, excessively vibrate the ground, cause substantial permanent increase in ambient noise, or expose neighbors of an airstrip to additional excessive noises. Additionally, the timing of these projects located nearest to the proposed Project are not anticipated to be constructed at the same time as the proposed Project. Therefore, the potential cumulative impact from the projects in the region and the proposed Project would be less than cumulatively significant.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

As discussed above, the baseline recent past, current, and reasonably foreseeable future cumulative conditions, with the addition of the proposed Project, would not create a significant noise impact in the area, such as an increase in noise levels above local and regional thresholds. Therefore, the proposed Project would not result in a cumulatively considerable impact.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to noise levels or vibration. The proposed Project does not add a cumulatively considerable impact to the combined project baseline, therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.11 Population Growth

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative population growth analysis is the Project region (City). Development and economic growth decisions are made at the City level for the Project region; therefore, the City is an appropriate geographic scope.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The projects in Table 26 could both create and alleviate growth-related impacts in the City. Residential and other development-related projects will impact regional infrastructure, including impacts to finite resources such as wastewater treatment capacity and water supply. Transportation-related projects such as the Twin Rivers Transit-oriented Development and Light Rail Station Project will alleviate impacts associated with cumulative development. Water and wastewater infrastructure construction projects such as the McKinley Village Project, 3rd and 9th Street Sewer Relief Projects, and the Water Treatment Plants Rehabilitation Project serve to alleviate impacts to existing infrastructure associated with increased development. The proposed multi-use trail would not contribute to the combined impacts associated with the past, present, and future development projects listed in Table 26.

The cumulative infrastructure development of the proposed Project and the past and planned projects, would not individually or cumulatively physically divide a community or communities. The Project would not result in the acquisition of private property or result in the displacement of people. As a result, the proposed Project and the projects listed in Table 26 would have a less than significant cumulative impact.

Finding: Less than Cumulatively Considerable

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The combined impacts of the projects listed in Table 26 do not constitute a significant economic or population growth impact. The Project would not change the zoning designation of adjacent areas. Because the Project does not create new connections to undeveloped land, no impacts to growth, economics, affordable housing, or crime would occur. Development of the site as proposed would alter the existing landscape, but the Project site will continue to be consistent with these planning designations. The City Bikeway Master Plan also shows a continuous non-motorized trail system along the abandoned railway corridor (Figure 22). Since the proposed Project does not have the potential to conflict with land use plans as described above and would not incrementally contribute to the combined impact of the past, present, and future projects listed in Table 26, there would be no cumulative impact to land use.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to population growth. The proposed Project does not add a cumulatively considerable impact to the combined project baseline, therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.12 Public Services

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative public services analysis is the service area of each of the providers serving the proposed Project area. These are discussed under Public Services (Section 2.11) of this document and include local fire districts, police departments, school districts and municipalities.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The potential for the projects in the region (Table 26) combined with the proposed Project to cumulatively trigger new or larger demand on public services is considered less than cumulatively significant. This is because the proposed projects listed in Table 26, along with the proposed Project, would not be constructed simultaneously and do not entail added demand for school or parks, or require the addition of large numbers of workers to move to the area. In addition, the potential heightened risk for fire (and demand on fire departments) during construction is temporary and significantly reduced through the application of standard fire prevention and control mitigation. As such, combined demand on local police, fire, schools, parks, and other public facilities is considered less than significant. In addition, the operation of the combined projects, most notably the housing development projects, could create additional demand on local facilities such as the police and fire department; however, such facility expansions (i.e. new parks, police, and fire stations) are typically part of the proposed development project environmental documents and the impacts were contemplated and disclosed. The combined projects therefore would not trigger the need for new governmental facilities for which impacts have not been contemplated.

Finding: Less than Cumulatively Considerable

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

As discussed above, the past, current and reasonably foreseeable future cumulative conditions with the addition of the proposed Project would not create a significant impact to public services. The proposed Project's contribution to the cumulative less than significant impact to public services is also not cumulatively considerable, as it would not cause a significant incremental increase to the demand on public services.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to public services. The proposed Project does not add a cumulatively considerable impact to the combined project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.12 Recreation

What is the Geographic Scope for this resource area?

The geographic scope of the cumulative recreation analysis is the recreation facility and adjacent housing developments serving the proposed Project.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The potential for projects in the region (Table 26) combined with the proposed Project to increase the use and accelerate the deterioration of existing recreational facilities or trigger new or expanded recreational facilities that could have an adverse environmental impact is minimal and considered a less than significant cumulative impact. Of the past, current and reasonably foreseeable projects in the region, those that entail housing development are the most likely to increase the use of existing recreational facilities, such as neighborhood parks. However, the proposed Project would not add to the increase created by these other projects. The proposed multi-use trail is designed to be a recreational facility in and of itself and to provide an alternative mode of transportation to other destinations, including parks; therefore, no impacts related to additional use would occur and there is no potential for cumulative impacts.

Finding: Less than Cumulatively Considerable

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

As discussed above, the past, current and reasonably foreseeable future cumulative conditions with the addition of the proposed Project would not create a significant impact to recreation. The proposed Project's contribution to the cumulative less than significant impact is also not cumulatively considerable. Based on the environmental setting (Section 2.13), the sensitivity of the recreation resources, and the limited extent, as well as short term construction duration, the proposed Project would not cause a significant incremental increase to the demand on recreational resources beyond the thresholds assessed above, and, therefore, the effect would not be cumulatively considerable.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to recreational resources. The proposed Project does not add a cumulatively considerable impact to the combined project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.13 Transportation and Traffic

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to transportation and traffic is limited to a quarter mile area surrounding the proposed Project.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The proposed Project would not have long-term effects on the existing transportation system. Implementation of a traffic control plan for temporary work within intersections during construction of the

trail crossing would be implemented. In addition, the projects in the region, given their locations, do not appear to have significant overlapping access footprints that would result in a cumulatively significant impact to key highways and roads. Therefore, the potential cumulative impact to transportation and traffic from past, current and reasonably foreseeable future projects is considered less than significant.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

The proposed Project consists of constructing a multi-use trail and would not include the construction of trip generating development roadways or other transportation infrastructure that would impact traffic. Implementation of a traffic control plan would help mitigate temporary traffic impacts where the trail crosses existing intersections. Based on the analysis in the Transportation and Traffic section (Section 2.14) and the limited Project footprint within existing roadways, the contribution of the proposed Project to the cumulative impact to transportation and traffic resources would not cause a significant increase to the demand on these resources beyond the thresholds listed. Therefore, the impact of the proposed Project would not be cumulatively considerable.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned Projects would not result in a significant impact to transportation and traffic resources. The proposed Project does not add a cumulatively considerable impact to the combined Project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

4.5.4.15 Utilities and Services

What is the Geographic Scope for this resource area?

The geographic scope of the potential cumulative impacts with respect to utilities and service systems is the combined area where utility services are provided.

What is the level of significance of the Combined Impact of the Proposed Project with the Projects listed in the Cumulative Impact Table?

The potential for the projects in the region (Table 26) combined with the proposed Project to cumulatively trigger new or larger demand for utilities, including stormwater facilities, is considered less than significant. This is because the proposed projects listed in Table 26, including the proposed Project, would not be constructed simultaneously. In addition, the operation of the combined projects, most notable the housing development projects could create additional demand on local facilities; however, such facility expansions are typically part of the proposed development project environmental documents and their impacts were contemplated and disclosed.

Additional electricity would be required for lighting at intersections for safety. The potential for the projects in the region (Table 26) and the proposed Project to cumulatively exceed electricity demands is considered less than significant. The development projects in the region must each individually assess and confirm the availability of electricity with SMUD prior to development.

The potential for the projects in the region (Table 26) and the proposed Project to cumulatively exceed landfill demands is considered less than significant. Most of the projects in the region are construction, not demolition projects, and thus, do not entail significant landfill contributions. Any long-term operational waste generating sources from these projects were analyzed and disclosed within their environmental

documents. Most of the solid waste in the area is transported to the Sacramento Recycling Transfer Station which is then transported to the Lockwood Landfill. The Sacramento Recycling Transfer Station has a permit capacity of 2,500 tons per day and the Lockwood Landfill does not have a maximum daily disposal limit but does have a remaining capacity of 32.5 million tons with a planned expansion in the near future. As such, both the Sacramento Recycling Transfer Station and the Lockwood Landfill have the available capacity for the current and future regional projects (Table 26) and would not trigger the expansion of solid waste handling. Therefore, this potential cumulative impact is considered less than significant.

In addition, the combination of projects in the region (Table 26) and the proposed Project would not trigger an unplanned exceedance of wastewater capacity or treatment requirements, non-compliance with solid waste or wastewater regulations, or result in the lack of sufficient water supply. The proposed Project would not generate wastewater. The development projects in the region must each individually assess and confirm the availability of wastewater capacity and water supply prior to development. The local municipalities and water purveyors develop and expand water and wastewater treatment in accordance with General, Specific, and Master Plans. As such, the combined projects in conjunction with the proposed Project would not exceed water or wastewater treatment capacity and, therefore, there would be a less than significant cumulative impact to public services and utilities.

Finding: Less than Cumulatively Significant

Is the Proposed Project's Incremental Contribution to the Combined Impact Cumulatively Considerable?

As discussed above, the baseline recent past, current and reasonably foreseeable future cumulative conditions with the addition of proposed Project would not create a significant impact to public services and utilities. The proposed Project's contribution to the cumulative less than significant impact to utilities is also not cumulatively considerable, as it would not cause a significant incremental increase to the demand on utilities beyond the thresholds assessed above.

Finding: Less than Cumulatively Considerable

Is Mitigation Feasible?

The combined impacts of planned projects would not result in a significant impact to utilities. The proposed Project does not add a cumulatively considerable impact to the combined project baseline. Therefore, no mitigation is necessary for cumulative impacts.

Finding: None Required

5.0 CEQA PREPARERS

As required by the California Environmental Quality Act (CEQA), this chapter identifies the preparers of this Environmental Impact Report (EIR).

City of Sacramento Staff
Jesse Gothan, Project Manager/ Supervising Engineer
William Shunk, Supervising Engineer
Tom Buford, Manager, Environmental Planning Services
Consultant Staff – Dokken Engineering
Pamela Dalcin-Walling, PE, Project Manager. B.S. Civil Engineering; 27 years of Project management and engineering experience. Contribution: QA/QC and Technical Review.
Namat Hosseinion, Environmental Manager. M.A. Anthropology; 18 years environmental planning experience. Contribution: QA/QC and Technical Review.
Tim Chamberlain, Senior Environmental Planner. B.A. Political Science; 13 years environmental planning experience. Contribution: QA/QC and Technical Review.
Sarah Holm, Senior Environmental Planner. B.A., Biology and B.S., Environmental Science; 10 years environmental planning experience. Contribution: Senior Consulting Biologist.
Amy Storck, Associate Environmental Planner. B.A in Environmental Studies; 8 years environmental planning experience. Contribution: Environmental Document preparation.
Brian Marks, Environmental Planner/Archaeologist. PH.D. Anthropology; 21 years of experience in cultural resources. Contribution: Historic Resources Preservation Report and Archaeological Survey Report.
Courtney Owens, Biologist/Environmental Planner. M.A. in Global Sustainability; 4 years of experience in biological studies. Contribution: Natural Environment Study (Minimal Impact).
Ken Chen, Environmental Planner/Noise Specialist. B.S. Community and Regional Development; 5 years noise and air experience. Contribution: Noise Technical Memorandum.
Consultant Staff – GPA Consulting
Laura O'Neill, Senior Architectural Historian. Contribution: Technical Review of the Finding of No Adverse Effect with Standard Conditions and Action Plan
Amanda Yoder Duane, Associate Architectural Historian. Contribution: Finding of No Adverse Effect with Standard Conditions and Action Plan Preparation
Consultant Staff – Geocon Consultants, Inc.
Matthew Tidwell, Senior Staff Geologist. Contribution: Phase I Environmental Site Assessment Report.
John Juhrend, PE, CEG, Senior Engineer. Contribution: Phase I Environmental Site Assessment Report.
Rebecca Silva, Project Manager. Contribution: Limited Soil and Railroad Ballast Investigation Results.
Jim Brake, PG, Senior Geologist. Contribution: Limited Soil and Railroad Ballast Investigation Results.

6.0 REFERENCES

All Sections: General

City of Sacramento 2015. City of Sacramento 2035 General Plan.

<http://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan>. Accessed August 2018.

City of Sacramento. 2014. City of Sacramento 2035 General Plan Draft EIR.

<http://www.cityofsacramento.org/-/media/Corporate/Files/CDD/Planning/Environmental-Impact-Reports/2035-GP-Update/Public-Draft-MEIR081114.pdf?la=en>. Accessed August 2018.

City of Sacramento. 2018. City of Sacramento Bicycle Master Plan. Amended August 14, 2018.

<https://www.cityofsacramento.org/-/media/Corporate/Files/Public-Works/Transportation/Active-Transportation/Sacramento-BMP-Amended-201808.pdf?la=en>. Accessed August 2018.

Section 2.1: Aesthetics

Caltrans. 2018. Visual Impact Assessment (Minor Level) for the Del Rio Trail Project. Callender Associates Landscape Architecture.

Sacramento City Council. Ordinance NO.2016-0026. 2016. <https://www.cityofsacramento.org/Public-Works/Maintenance-Services/Trees/Permits-Ordinances>. Accessed August 2018.

Section 2.2: Air Quality

California Geological Survey. 2011. Reported Historic Asbestos Mines, Historic asbestos Prospects, and other Natural Occurrences of Asbestos in California.

ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ms/59/MS59_Plate.pdf. Accessed August 2018.

CARB. 1998. Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant. California Air Resources Board. https://www.arb.ca.gov/toxics/dieseltac/part_a.pdf. Accessed August 2018.

CARB. 2013. The California Almanac of Emissions and Air Quality. California Air Resources Board. <https://www.arb.ca.gov/aqd/almanac/almanac.htm>. Accessed August 2018.

CARB. 2016. Area Designation Maps/State and National. California Air Resources Board. <https://www.arb.ca.gov/deg/adm/adm.htm>. Accessed August 2018.

CARB. 2017. California Ambient Air Quality Standards. California Air Resources Board. <https://www.arb.ca.gov/research/aaqs/caaqs/caaqs.htm>. Accessed August 2018.

SACOG. 2012. Metropolitan Transportation Plan/Sustainable Communities Strategy – 2035. Sacramento Area Council of Governments. <http://www.sacog.org/2035/mtpscsl/>. Accessed August 2018.

SMAQMD. 2009a. Thresholds of Significance Table. Sacramento Metropolitan Air Quality Management District. <http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable5-2015.pdf>. Accessed August 2018.

SMAQMD. 2009b. CEQA Guidance & Tools: Cumulative Air Quality Impacts. Sacramento Air Quality Management District.

<http://www.airquality.org/LandUseTransportation/Documents/Ch8Cumulativepercent20FINAL5-2016.pdf>. Accessed August 2018.

SMAQMD. 2010a. PM10 Implementation/Maintenance Plan and Redesignation Request for Sacramento County. Sacramento Metropolitan Air Quality Management District. Accessed August 2018.

SMAQMD. 2011a. Sacramento Regional 8-Hour Ozone Attainment and Reasonable Further Progress Plan (Revised). Sacramento Metropolitan Air Quality Management District. Accessed August 2018.

SMAQMD. 2016. Sacramento Valley Basinwide Air Pollution Control Council. Sacramento Metropolitan Air Quality Management District. <http://www.airquality.org/svbcc>. Accessed August 2017.

USEPA. 2017. Nonattainment Areas for Criteria Pollutants (Green Book). United States Environmental Protection Agency. <https://www.epa.gov/green-book>. Accessed August 2018.

Section 2.3: Biological Resources

Baldwin, Bruce G. 2012. The Jepson Manual, Vascular Plants of California, second edition. University of California Press. Oakland, CA. Available at: <<http://ucjeps.berkeley.edu/IJM.html>> (accessed 07/06/2017).

Barr, C. B. 1991. The Distribution, Habitat, and Status of the Valley Elderberry Longhorn Beetle: *Desmocerus californicus dimorphus*. Sacramento, CA: U.S. Fish and Wildlife Service.

Cal-IPC 2017. Online California Invasive Plant Inventory Database Available at: <<http://www.cal-ipc.org/paf/>> (accessed 10/6/2017).

Caltrans. 2018. Natural Environment Study (Minimal Impact) for the Del Rio Trail Project. Dokken Engineering.

City. 2017. Tree Permits & Ordinances. Sacramento City Ordinance 2016-0026, Chapter 12.56; City of Sacramento. Available at: <<https://www.cityofsacramento.org/Public-Works/Maintenance-Services/Trees/Permits-Ordinances>> (accessed 04/03/17).

City 2015. City of Sacramento 2035 General Plan. Available at: <<http://www.cityofsacramento.org/Community-Development/Resources/Online-Library/2035--General-Plan>> (accessed 10/5/2017).

CDFG 1994. Staff Report Regarding Mitigation for Impacts to Swainson's Hawks in the Central Valley of California. Available at: <https://www.dfg.ca.gov/wildlife/nongame/survey_monitor.html> (accessed 07/07/2017).

CNDDB. 2017. Rarefind 5. Available at: <<http://www.dfg.ca.gov/biogeodata/cnddb/mapsanddata.asp>> (accessed 07/06/2017).

CNPS. 2017. Rare and Endangered Plant Inventory. Available at: <<http://www.rareplants.cnps.org/advanced.html>> (accessed 07/06/2017).

NMFS. 2014. California Central Valley Salmon and Steelhead Recovery Plan. National Marine Fisheries Service: West Coast Region. Available at: <http://www.westcoast.fisheries.noaa.gov/publications/recovery_planning/salmon_steelhead/domains/california_central_valley/final_recovery_plan_07-11-2014.pdf> (accessed 07/07/2017).

NMFS 2017. NMFS Endangered Species Act Species List Google Earth NMFS West Coast Region, California Species List.

- NMFS. 2016b. Steelhead Trout (*Oncorhynchus mykiss*). NOAA Fisheries Office of Protected Resources. Available at: <<http://www.fisheries.noaa.gov/pr/species/fish/steelhead-trout.html>> (accessed 07/07/2017).
- NRCS 2017. National Resource Conservation Service, Web Soil Survey. Available at: <<http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx>> (accessed 07/07/2017).
- Shuford, W. D., and Gardali, T., editors. 2008. California Bird Species of Special Concern: A ranked assessment of species, subspecies, and distinct populations of birds of immediate conservation concern in California. Studies of Western Birds 1. Western Field Ornithologists, Camarillo, California, and California Department of Fish and Game, Sacramento.
- USACE. 2008. Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Arid West Region (Version 2.0). Available at: <http://www.usace.army.mil/Portals/2/docs/civilworks/regulatory/reg_supp/trel08-28.pdf> (accessed 07/07/2017).
- USFWS. 2017a. Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (*Desmocerus californicus dimorphus*). U.S. Fish and Wildlife Service; Sacramento. Available at: <https://www.fws.gov/sacramento/documents/VELB_Framework.pdf> (accessed 10/5/2017).
- USFWS. 2017b. Official Species List: Carlsbad Fish and Wildlife Office. Available at: <<http://www.fws.gov/carlsbad/>> (accessed 05/11/2017).
- USFWS. 1980. Valley Elderberry Longhorn Beetle Critical Habitat. Federal Register 45:52803; Google Maps, Sacramento, CA; available at <http://ecos.fws.gov/docs/federal_register/fr449.pdf> (accessed 11/1/2017).
- USFWS 1984. Valley Elderberry Longhorn Beetle Recovery Plan. USFWS, Portland, Oregon; available at: < https://ecos.fws.gov/docs/recovery_plan/840628.pdf > (accessed 07/07/2017).
- Wang, J. C. S. 2010. Fishes of the Sacramento–San Joaquin Estuary and Adjacent Waters, California: A Guide to the Early Life Histories. Technical Report #9. Interagency Ecological Study Program for the Sacramento–San Joaquin Estuary. Available at: <http://www.usbr.gov/mp/TFFIP/tracyreports/Tech_percent20Report_percent209r.pdf> (accessed 07/17/2017).
- Zeiner, D.C., W.F.Laudenslayer, Jr., K.E. Mayer, and M. White, eds. 1988-1990. California's Wildlife. Vol. I-III. CDFG, Sacramento, California.

Section 3.4: Cultural and Tribal Resources

- Caltrans. 2018. Finding of No Adverse Effect with Standard Conditions – Secretary of the Interior's Standards for the Treatment of Historic Properties. Del Rio Trail Project. GPA Consulting.
- Caltrans. 2018. Historic Property Survey Report and Archaeological Survey Report (CONFIDENTIAL). Del Rio Trail Project. Dokken Engineering.

Section 2.5: Geology and Soils

- [California Building Standards Code](http://www.bsc.ca.gov/Codes.aspx). 2016. California Building Standards Code (eff. January 1, 2017). <http://www.bsc.ca.gov/Codes.aspx>. Accessed August 2018.
- CGS. 2015. Landslide Inventory. California Geologic Survey. <http://maps.conservation.ca.gov/cgs/lsl/>. Accessed December 21, 2017.

City of Sacramento DOU. 2013. Administrative and Technical Procedures Manual for Grading and Erosion and Sediment Control. City of Sacramento Department of Utilities. <http://www.cityofsacramento.org/-/media/Corporate/Files/DOU/Specs-Drawings/Sediment-control-manual.pdf?la=en>. Accessed November 2, 2017.

NRCS. 2015. Hydric Soils National List. 2015. http://www.nrcs.usda.gov/wps/PA_NRCSCConsumption/download?cid=stelprdb1248596&ext=xlsx. Accessed August 2018.

NRCS. 1993. Soils Survey of Sacramento County, California. 1993. https://www.nrcs.usda.gov/Internet/FSE_MANUSCRIPTS/california/CA067/0/sacramento.pdf. Accessed August 2018.

NRCS. 2017. Web Soil Survey. Soil Properties. <https://websoilsurvey.nrcs.usda.gov/app/WebSoilSurvey.aspx>. Accessed August 2018.

Section 2.6: Greenhouse Gases

CARB. 2015. <https://www.arb.ca.gov/regact/regact15.htm>. Accessed August 2018.

California Natural Resources Agency. 2009. California Climate Action Adaption Strategy. http://resources.ca.gov/docs/climate/Statewide_Adaptation_Strategy.pdf. Accessed August 2018.

EPA. 2009b. Mandatory Reporting of Greenhouse Gases. <https://www.epa.gov/sites/production/files/2015-06/documents/ghg-mrr-finalpreamble.pdf>. Accessed August 2018.

EPA. 2012c. <https://www.epa.gov/ghgemissions/us-greenhouse-gas-inventory-report-archive>. Accessed August 2018.

ICPP. 2012. <http://www.ipcc.ch/>. Accessed August 2018.

SMAQMD. 2009. Thresholds of Significance Table. <http://www.airquality.org/LandUseTransportation/Documents/CH2ThresholdsTable5-2015.pdf>. Accessed August 2018.

Section 2.7: Hazards and Hazardous Materials

California Geological Survey. 2011. Reported Historic Asbestos Mines, Historic asbestos Prospects, and other Natural Occurrences of Asbestos in California. ftp://ftp.consrv.ca.gov/pub/dmg/pubs/ms/59/MS59_Plate.pdf. Accessed August 2018.

Caltrans. April 2006. An Overview of Naturally Occurring Asbestos. www.dot.ca.gov/hq/env/haz/docs/noa/h160.doc. Accessed August 2018.

Caltrans. May 2018. Phase I Environmental Site Assessment Report. Del Rio Trail Project. Geocon Consulting, Inc.

Caltrans. May 2018. Limited Soil and Railroad Ballast Investigation Results. Del Rio Trail Project. Geocon Consulting, Inc.

City of Sacramento Evacuation Plan. An Annex to the City of Sacramento's Emergency Operations Plan. http://www.sacramento-ready.org/Documents/sac_018943.pdf. Accessed August 2018.

- City of Sacramento Fire. 2017. <http://www.cityofsacramento.org/Emergency-Services/Prepare/Fire>. Accessed August 2018.
- EnviroStor. 2018. EnviroStor Database. <http://www.envirostor.dtsc.ca.gov/public/map/?myaddress=Sacramento&tour=True>. Accessed May 2018.
- SACOG. 2013. Sacramento International Airport Land Use Compatibility Plan. https://www.sacog.org/sites/main/files/file-attachments/smf-1-front_chapters_1-2-2013-12-12-complete.pdf. Accessed August 2018.
- SMAQMD. 2015. Rule 902 Asbestos. <http://www.airquality.org/ProgramCoordination/Documents/rule902.pdf>. Accessed August 2018.
- SWRCB. 2018. GeoTracker. <https://geotracker.waterboards.ca.gov/map/?CMD=runreport&myaddress=Sacramento>. Accessed May 2018.
- USEPA. 2016b. Emergency Planning and Community Right-to-Know Act (EPCRA). <https://www.epa.gov/epcra>. Accessed August 2018.
- USEPA. 2017. What are Hazardous Air Pollutants? <https://www.epa.gov/haps/what-are-hazardous-air-pollutants>. Accessed August 2018.

Section 2.8: Hydrology and Water Quality

- Caltrans. April 2018. Water Quality Technical Memorandum. Del Rio Trail Project. Dokken Engineering.
- FEMA 2018. FEMA Flood Service Map. <https://msc.fema.gov/portal/home>. Accessed August 2018
- NOAA. 2018. What is a seiche? <https://oceanservice.noaa.gov/facts/seiche.html>. Accessed August 2018.
- Sacramento Stormwater Quality Partnership. May 2007. *Stormwater Quality Design Manual for the Sacramento and South Placer Regions*. Created in partnership with the County of Sacramento and the Cities of Citrus Heights, Elk Grove, Folsom, Galt, Rancho Cordova and Sacramento.
- SWRCB. 2018. <https://www.waterboards.ca.gov/>. Accessed August 2018.

Section 2.9: Land Use and Planning

- City of Sacramento. 2018. Land Use and Zoning GIS file. <https://www.cityofsacramento.org/GIS/Data>. Accessed August 2018.
- Sacramento County. 2017. Assessor Parcel Viewer. <http://assessorparcelviewer.saccounty.net/jsviewer/assessor.html>. Accessed August 2018.

Section 2.10: Noise

- City of Sacramento, Sacramento City Code. May 2017.
- Caltrans. November 2017. Noise Technical Memorandum. Del Rio Trail Project. Dokken Engineering.
- Caltrans: Division of Environmental Analysis. 2006. Traffic Noise Analysis Protocol: For New Highway Construction, Reconstruction, and Retrofit Barrier Projects.

California Department of Transportation. FHWA Roadway Construction Noise Model User's Guide. Final Report January 2006.

California Department of Transportation, Transportation and Construction Vibration Guidance Manual, September 2013

Federal Transit Administration. Transit Noise and Vibration Impact Assessment. May 2006. <https://www.transit.dot.gov/regulations-and-guidance/environmental-programs/fta-noise-and-vibration-impact-assessment>

Hoover, R.M., and R.H. Keith. 1996. Noise Control for Buildings, Manufacturing Plants, Equipment and Products.

Section 2.11: Transportation and Traffic

Pedestrian Master Plan. 2006. https://www.cityofsacramento.org/-/media/Corporate/Files/Public-Works/Publications/Transportation/Bicycle-Pedestrian/Sac-Ped-Plan_9-06.pdf?la=en. Accessed September 26, 2017.