

Memorandum

To: CHAIR AND COMMISSIONERS

CTC Meeting: December 4-5, 2025

From: TANISHA TAYLOR, Executive Director

Reference Number: 2.2c.(6), Action

Prepared By: Laura Pennebaker
Deputy Director

Published Date: November 21, 2025

Subject: Approval of Project for Future Funding Consideration – Hazel Avenue/U.S. 50 Interchange Project, Resolution E-25-74

Recommendation:

Staff recommends the California Transportation Commission (Commission), as a Responsible Agency under the California Environmental Quality Act (CEQA), approve Resolution E-25-74 (Attachment A), which accepts the Final Environmental Impact Report for the Hazel Avenue/U.S. 50 Interchange Project (Project) in Sacramento County, the City of Rancho Cordova, and the City of Folsom; approves the Project for future consideration of funding; makes CEQA Findings (Attachment C); and adopts a Statement of Overriding Considerations (Attachment D).

Issue:

Sacramento County is the CEQA Lead Agency for the Project. The Project is located at the existing Hazel Avenue/U.S. 50 Interchange within Sacramento County, the City of Rancho Cordova, and the City of Folsom. The Project would modify the existing interchange and extend and grade-separate Hazel Avenue over Folsom Boulevard and the Sacramento Placerville Transportation Corridor - Joint Powers Authority rail corridor. Hazel Avenue would be extended south to a proposed intersection with the future Atlanta Street. The Project includes roadway and pedestrian improvements along 2,300 feet of Folsom Boulevard.

For all projects that are anticipated to be funded through a program under the purview of the Commission, full compliance with CEQA is required. The Commission will not allocate funds to projects for design, right-of-way, or construction until the environmental document is complete, and the Commission has approved the environmentally cleared Project for future funding consideration.

Background:

On September 22, 2020, Sacramento County certified the *Final Environmental Impact Report for the Hazel Avenue/U.S. 50 Interchange Project* and the County found that the Project would have impacts on aesthetics that would be significant and unavoidable even with mitigation to minimize light from construction.

Impacts that require mitigation in order to be reduced to less than significant levels relate to public services, air quality, noise, hydrology and water quality, geology and soils, biological resources, cultural resources, hazardous materials, and cumulative impacts. Mitigation measures include delineating the construction boundary adjacent to State Parks Land; implementing the Sacramento Metropolitan Air Quality Management District's basic construction emission control practices, such as watering surfaces, covering loose material, and minimizing idling; using model year 2010 or newer engines or paying into a mitigation fee program; using off-road diesel-powered equipment with U.S. Environmental Protection Agency Tier 4 Final engines; implementing a lead and asbestos abatement plan; applying quiet pavement or a construction noise barrier for affected noise receptors; limiting construction noise; implementing a noise control plan, which may include limiting use of noise-generating equipment at certain hours or installation of temporary barriers or enclosures; implementing Best Management Practices to control runoff and discharge of pollutants; implementing a Paleontological Mitigation Plan, which may include monitoring during earthmoving activities; installing environmentally sensitive area fencing during construction; conducting environmental awareness training; biological monitoring; designing a water conveyance system that prevents contaminants from entering suitable habitat; compensatory habitat and waters mitigation; preconstruction surveys; restoration of disturbed habitat; timing vegetation removal outside of nesting bird and roosting bat seasons; compensatory mitigation for native oaks, protected trees, and tree canopy; cultural resources awareness training, cultural monitoring, and implementing avoidance and notification procedures for cultural resources inadvertently discovered during construction; preparation of a Health and Safety Plan, Lead Compliance Plan, Best Management Practices, and/or Injury and Illness Prevention Plan; conducting hazardous materials site-specific assessments and implementing a workplan; proper handling of yellow traffic striping; and proper disposal of aerially deposited lead.

Sacramento County's Board of Supervisors approved the project under Alternative 1 because it found the economic, social, environmental, and other benefits of the project render the significant effects acceptable. The following benefits are summarized from the Findings of Fact and Statement of Overriding Considerations included in Attachment B:

- The project will enhance the economic opportunities and benefits associated with the Easton development for the surrounding community and businesses by providing an improved and reconfigured interchange that will accommodate projected traffic demand.
- The project will improve the aesthetics and visual character of the existing interchange through quality design treatments that will integrate with adjacent properties.
- The long-term value the project brings to the community in terms of safety, improved traffic service, accommodation for all modes of travel and compliance with the Americans with Disabilities Act are reasons to approve the project although there are potential short-term impacts associated with nighttime construction lights.

- Alternative 1 is the Environmentally Superior Alternative for the project, due to avoidance and mitigation of environmental impacts compared to numerous other alternatives, which were considered

On November 4, 2025, Sacramento County confirmed that the Final Environmental Impact Report remains valid; there are no new impacts requiring mitigation; and the Project set forth in the Final Environmental Impact Report is consistent with the scope of work programmed by the Commission.

Commission staff have reviewed the Final Environmental Impact Report, Findings, and Statement of Overriding Considerations prepared by Sacramento County. Based on this information, the Commission's Findings and Statement of Overriding Considerations, included in Attachment C, have been prepared pursuant to CEQA for the Commission to approve in its independent judgment as a CEQA responsible agency.

The Project is estimated to cost \$161,000,000 and is funded through construction with Senate Bill 1 Local Partnership Program – Competitive (\$15,000,000), Local Measure A Sales Tax (\$30,000,000), local development fees (\$22,000,000), local partner agency funds (\$2,000,000), local Sacramento Area Council of Governments Managed funds (\$2,000,000), and local transportation (\$90,000,000) funds.

Construction for the Project is estimated to begin in Fiscal Year 2026-27.

Attachments:

- Attachment A: Resolution E-25-74
- Attachment B: Sacramento County – CEQA Findings of Fact and Statement of Overriding Considerations for the Hazel Avenue/U.S. 50 Interchange Project
- Attachment C: California Transportation Commission – Findings of Fact
- Attachment D: California Transportation Commission – Statement of Overriding Considerations
- Attachment E: Notice of Determination
- Attachment F: Project Location Map

**CALIFORNIA TRANSPORTATION COMMISSION
Resolution for Future Funding Consideration**

**3 – Sacramento County
Resolution E-25-74**

- 1.1 WHEREAS, Sacramento County has completed and certified a Final Environmental Impact Report pursuant to the California Environmental Quality Act (CEQA) and the CEQA Guidelines for the Hazel Avenue/U.S. 50 Interchange Project (Project); and
- 1.2 WHEREAS, the Project is located at the existing Hazel Avenue/U.S. 50 Interchange within Sacramento County, the City of Rancho Cordova, and the City of Folsom; and
- 1.3 WHEREAS, the Project would modify the existing interchange and extend and grade-separate Hazel Avenue over Folsom Boulevard and the Sacramento Placerville Transportation Corridor - Joint Powers Authority rail corridor. Hazel Avenue would be extended south to a proposed intersection with the future Atlanta Street. The Project includes roadway and pedestrian improvements along 2,300 feet of Folsom Boulevard; and
- 1.4 WHEREAS, on September 22, 2020, Sacramento County certified the *Final Environmental Impact Report for the Hazel Avenue/U.S. 50 Interchange Project* and the County found that the Project's impacts on aesthetics would be significant and unavoidable; and
- 1.5 WHEREAS, impacts that require mitigation measures in order to be reduced to less than significant levels relate to public services, air quality, noise, hydrology and water quality, geology and soils, biological resources, cultural resources, hazardous materials, and cumulative impacts and certain measures were adopted to address these impacts; and
- 1.6 WHEREAS, Sacramento County's Board of Supervisors approved the project under Alternative 1 because it found the economic, social, environmental, and other benefits of the project render the significant effects acceptable. The following benefits are summarized from Sacramento County's Findings of Fact and Statement of Overriding Considerations included in Attachment B:
 - The project will enhance the economic opportunities and benefits associated with the Easton development for the surrounding community and businesses by providing an improved and reconfigured interchange that will accommodate projected traffic demand.
 - The project will improve the aesthetics and visual character of the existing interchange through quality design treatments that will integrate with adjacent properties.

- The long-term value the project brings to the community in terms of safety, improved traffic service, accommodation for all modes of travel and compliance with the Americans with Disabilities Act are reasons to approve the project although there are potential short-term impacts associated with nighttime construction lights.
 - Alternative 1 is the Environmentally Superior Alternative for the project, due to avoidance and mitigation of environmental impacts compared to numerous other alternatives, which were considered
- 1.7 WHEREAS, on November 4, 2025, Sacramento County confirmed that the Final Environmental Impact Report remains valid; there are no new impacts requiring mitigation; and the Project set forth in the Final Environmental Impact Report is consistent with the scope of work programmed by the Commission; and
- 1.8 WHEREAS, the California Transportation Commission (Commission), as a Responsible Agency, has considered the information contained in the Final Environmental Impact Report; and
- 1.9 WHEREAS, the Commission has made findings as required by California Code of Regulations, section 15096, subdivision (h); and
- 1.10 WHEREAS, the Commission has adopted a Statement of Overriding Considerations (Attachment D) pursuant to California Code of Regulations, title 14, section 15093 and has approved the project under Alternative 1 because it found the economic, social, environmental, and other benefits of the project render the significant impacts acceptable;
- 2.1 NOW, THEREFORE, BE IT RESOLVED that the Commission does hereby accept the Final Environmental Impact Report and approves the above-referenced Project for future consideration of funding.

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APPROVED
BOARD OF SUPERVISORS
By Resolution No. 2020-0616
SEP 22 2020
BY *Florence Elam*
Clerk of the Board

**COUNTY OF SACRAMENTO
CALIFORNIA**

For the Agenda of:
September 22, 2020
Timed: 10:30 A.M.

To: Board of Supervisors

Through: Navdeep S. Gill, County Executive

Steven L. Hartwig, Deputy County Executive
Public Works and Infrastructure

From: Ron E. Vicari, Director, Department of Transportation

Subject: "Hazel Avenue/U.S. 50 Interchange Project", Environmental Document: Final Environmental Impact Report/Environmental Assessment (Control No. 2011-70062) (Continued from August 11, 2020, Item No. 29)

District(s): Frost, Nottoli

RECOMMENDED ACTION

1. Find the Final Environmental Impact Report/Environmental Assessment (EIR/EA) for the subject improvement project adequate and complete (Attachment 1).
2. Find the Final EIR/EA has been completed in compliance with California Environmental Quality Act (CEQA).
3. Recognize that the Final EIR/EA was presented to the Board of Supervisors, and the Board reviewed and considered the information contained in the Final EIR/EA, and the Final EIR/EA reflects the lead agency's independent judgment and analysis.
4. Adopt the Mitigation Monitoring and Reporting Program (MMRP) (Attachment 2).
5. Approve Alternative 1 with the identified mitigation measures.
6. Authorize the Chair to execute the Resolution adopting the (CEQA) Findings of Fact and Overriding Considerations (Attachment 3).
7. Direct staff to complete the plans and specifications for Alternative 1 and to acquire the necessary rights-of-way.

BACKGROUND

The Hazel Avenue extension to Easton Valley Parkway and ultimately to White Rock Road is a priority improvement within the sub-region surrounding State Route 50 in eastern Sacramento County (Attachment 4). Through the efforts of the Highway 50 Corridor Mobility Partnership (Partnership), preliminary studies were initiated to identify potential improvements to the interchange and the extension of Hazel Avenue south of Folsom Boulevard. The purpose of these improvements, along with other priority improvements identified by the Partnership, is to relieve congestion on State Route 50 and accommodate planned growth as identified by the adopted SACOG Metropolitan Transportation Plan/Sustainable Communities Strategy.

On January 28, 2009, the Board approved the General Plan Amendment, Zoning Ordinance, Tentative Subdivision Map and Affordable Housing Plan for Easton Place and Glenborough at Easton (Easton Place Project). The Easton Place Project is located on land owned by Aerojet General Corporation (Developer) in eastern Sacramento County. The Easton Place Project includes a roadway improvement condition requiring the applicant to fund the preparation of a Project Study Report (PSR)/Project Report (PR) for improvements to the Hazel Avenue/US 50 Interchange and Folsom Boulevard Grade Separation. In order to satisfy this condition, on November 9, 2009 the Developer and the County signed a Letter of Understanding and the Developer provided the necessary funds to complete the PSR/PR for the interchange.

On March 23, 2010, the Board of Supervisors approved an agreement with Mark Thomas and Company (MTCO), for specialized professional engineering services to define the project and produce all necessary documents required to obtain approval of the PSR acceptable to the County of Sacramento, Caltrans, and the Federal Highway Administration (FHWA).

The Final EIR/EA has been prepared in accordance with, Title 14, Division 6, Chapter 3, Article 6, Sections 15080 to 15097 of the California Code of Regulations and the Procedures and Processing of Environmental Documents adopted by County Ordinance No. SCC-116. The Final EIR/EA is joint CEQA/NEPA document. The document was prepared in coordination with Caltrans, the delegated NEPA lead agency by the FHWA. NEPA documentation must be completed prior to federal funding and/or approval of projects or actions. A Notice of Preparation for the Draft EIR/EA was released on February 1, 2016. A Scoping Meeting was held at California State Office of Planning and Research on March 3, 2016. The Draft EIR/EA was released on February

13, 2020 for public review. During the public review period, an open house was held on March 9, 2020. Eleven comment letters were received on the Draft EIR/EA. A summary of those comments is provided (Attachment 5). The comments have been addressed in the Final EIR/EA. In July 2020, a Notice of Availability of the Final EIR/EA was sent to the commenters, Responsible Agencies, and other potentially affected parties. The Final EIR/EA is available online and print copies are available upon request.

As analyzed in Chapter 2 of the Final EIR/EA and summarized in Table S-3, Alternative 1 results in fewer environmental impacts, while still meeting the objectives of the proposed project, compared to Alternative 1A and Alternative 2. Based on the analysis presented in Chapter 2, Alternative 1 is the Environmentally Superior Alternative.

Mitigation Measures are recommended to lessen the following impacts: aesthetics, air quality, noise, recreation, hydrology and water quality, biology, paleontology and cultural resources. Hazardous Material Mitigation Measures are also recommended to ensure compliance with Title 8 of the California Code of Regulation (Section 1532.1), Environmental Protection Agency (EPA), Sacramento Metropolitan Air Quality Management District (SMAQMD), and Caltrans standards.

Acquisition of right-of-way will be required in order to construct the proposed project. The Environmentally Superior Alternative reduces aesthetic impacts to the community and does not require removal of the Nimbus Winery building.

The FEIR/EA identifies one unavoidable adverse impact that cannot be reduced to a less than significant level through mitigation measures as defined under CEQA. The impact is associated with night time construction lighting. The impact will be reduced to the greatest extent feasible. However, it is anticipated that the impact will still be significant to those travelling or occupying the area during construction. The impact could be avoided by eliminating night time construction; however, the alternative of no night time construction would have additional socioeconomic impacts associated with a longer construction period and increased traffic delays during construction.

On August 11, 2020, the project was on the Board agenda for certification of the FEIR/EA. The action was continued to September 22, 2020, to allow additional time for the Board to consider the project and the contents of the

FEIR/EA. At the August 11, 2020 hearing, the Board raised several questions, which are discussed below:

Potential Impacts to Rudy's Hideaway and the Nimbus Winery Building

For Alternatives 1 and 1A, a small easement is required from the Rudy's Hideaway property. Their building and signage on Folsom Boulevard are not impacted. Their existing driveway access on Folsom Boulevard will remain. The eastern driveway may be reconstructed, and the westerly driveway will become the fourth leg of the signalized intersection with the Jughandle Road at Folsom Boulevard, which will provide greater visibility as well as safer and more convenient ingress/egress to the property.

The existing driveways to the Nimbus Winery Building will remain in place so access to the property will continue to be from Folsom Boulevard. The Nimbus Winery driveways may be reconstructed. Driveway ingress/egress to the Nimbus Winery will be maintained throughout construction.

Commercial Sign Variances at Nimbus Winery:

Construction of the grade separation at the Hazel Avenue and Folsom Boulevard intersection will reduce the visibility of the existing signage for the Nimbus Winery building. The Department of Transportation (SacDOT) will work with the property owner, the County Planning Division, and Caltrans to replace the existing Nimbus Winery signage along Hazel Avenue with replacement signage that is visible from Hazel Avenue when the new grade separation is in place. Replacement or relocation of the Nimbus Winery signage along the eastbound on-ramp may be necessary. The location, details, and permitting for the replacement or relocated signage will be finalized during the acquisition phase.

Business Access during Construction:

Driveway ingress/egress to all businesses along Folsom Boulevard will be maintained throughout construction of the project.

Detours/Traffic Handling:

The alternatives considered cannot be constructed without some impact to traffic. These impacts can be reduced with construction area signs and controls, a well-planned stage construction/traffic handling plan, and an aggressive public awareness campaign during construction. The following traffic control items will likely be required:

- Temporary striping will be required to shift traffic away from construction zones;
- Temporary concrete barrier (K-rail) to separate construction zones from traffic;
- Work-period lane closures will be required for mainline US 50 and ramps (i.e. for removing pavement delineation, setting K-rail, pavement conforms, falsework erection and removal, etc.)
- No long-term closures of ramps or local roads are anticipated.
- Construction of the proposed structures will require short-term closure and traffic detours of the roadway below for erection and removal of bridge falsework (temporary structure to construct the permanent bridge). These closures are anticipated during the night to minimize delays to the travelling public. For example, Alternative 1 would require night time closures/detours on Route 50, eastbound loop on-ramp, eastbound diagonal on-ramp, Hazel Avenue, and Folsom Boulevard.
- The following ramp closures and detours are anticipated during various stages of Alternative 1 project construction: eastbound off-ramp and detour to Aerojet Road off-ramp, Aerojet Road off-ramp and detour to eastbound off-ramp, eastbound off-ramp and detour to Folsom Boulevard interchange.

Staging and Traffic Handling concepts listed in the Traffic Management Plan from the PSR/PR are preliminary and additional details will be developed during final design. Delays and disruptions to the travelling public and businesses will be minimized as much as possible.

Mitigation for Business Disruption:

Loss of business value due to required relocation, or project impacts such as a permanent change in traffic patterns or loss of signage/visibility, could potentially result in loss of business goodwill compensation claims. Lost business revenue due to temporary construction impacts is typically not compensable, but might contribute to a loss of goodwill claim if it can be attributed to permanent changes in traffic patterns or loss of signage/visibility due to the project.

Chevron Aesthetics and Project Aesthetic Treatments:

Since the acquisition impacts their building, the FEIR shows the Chevron property as a full acquisition. Chevron would be eligible for relocation assistance during the acquisition process. If Chevron relocates to a new location, they would not necessarily be subject to the additional aesthetic requirements on their current site. If they choose to rebuild on the remnant

property at their current location, they would likely be required to provide aesthetic treatments similar to what they currently have in place.

The project will implement landscaping, visual buffers, and project design aesthetics that will be an improvement over the current interchange, which has no aesthetic treatments. Due to the prominence of the Aerojet off-ramp viaduct, special aesthetics have been considered. The viaduct crosses over Hazel Avenue and provides the opportunity for a gateway entrance to the proposed developments. Aesthetic features will be coordinated with the County, Caltrans, and the adjacent Easton Place developers in future phases of the design.

Construction Staging in Business Parking Lots:

Most construction will take place within existing right-of-way or in right-of-way acquired for the project. For Alternative 1, construction of the Aerojet off-ramp viaduct will be staged in the aerial easement that will be acquired for the project. Upon completion of the project, the area within this aerial easement, which is currently a parking lot for the Nimbus Winery, will be reconstructed and can again be used as parking for the Nimbus Winery.

Location of Tree Mitigation:

Tree compensation will be through replacement tree plantings on-site and through payment into the Country Tree Preservation Fund in compliance with the requirements of the MMRP. To the extent practicable, the landscaped areas adjacent to the on/off ramps will be used to accommodate replacement tree plantings during construction of the project. We are also coordinating with nearby landowners to identify locations suitable for replacement tree plantings to keep mitigation as close to the site as possible.

Is there an Interchange Design That Could Eliminate the Right-of-Way Impacts at the Cattlemen's building?

During the alternative development process, dozens of conceptual alternatives were considered. Eighteen (18) alternatives were further analyzed during a formal peer review process that included County staff, Caltrans staff, and other stakeholders in the project area. Through this process, nine (9) alternatives were identified for more detailed study, which included a preliminary traffic analysis, alignment with the project purpose and need, and adherence to established highway design standards. Ultimately, at the completion of this process, the project development team identified two alternatives (1 & 2) and one sub alternative (1A) that provide acceptable

traffic operations and safety, minimize the amount of non-standard design features, and meet the need and purpose of the project. Direct access to Folsom Boulevard via the Aerojet off-ramp is common to all three alternatives and there is no viable alternative that avoids the Cattlemen's Building. The FEIR shows the Cattlemen's property as a full acquisition since the acquisition impacts their building. However, if the property owner wants to retain the remnant property, this could be accommodated during the acquisition phase.

What is the SACOG Application Timeline for Their Flexible Funding Program?

We expect the next SACOG call for projects in October or November 2020. With an approved environmental document in hand, this project would be a good candidate for final design and right-of-way funding through SACOG's Regional Program.

FINANCIAL ANALYSIS

The estimated total cost for the project is \$94,000,000 including design, right-of-way and construction. The project is funded through the Transportation Development Fee Program, Measure A, and future federal and state grants. The estimated design cost, including plans, specifications, and estimate is \$6,750,000 and is included in the SacDOT Fiscal Year 2020-21 Adopted Budget.

Attachments:

RES - Resolution

ATT 1 - Final EIR/EA

ATT 2 - MMRP

ATT 3 - Findings of Fact and Overriding Considerations

ATT 4 - Vicinity Map

ATT 5 - Summary of Public Comments

RESOLUTION NO. 2020-0616

RESOLUTION AUTHORIZING THE ADOPTION OF THE FINDINGS OF FACT AND A STATEMENT OF OVERRIDING CONSIDERATIONS FOR THE HAZEL AVENUE/U.S. 50 INTERCHANGE PROJECT (CONTROL NO. 2011-70062)

WHEREAS, the County of Sacramento Board of Supervisors (Board), is the governing board for the Hazel Avenue/U.S. 50 Interchange Project (Project); and

WHEREAS, local jurisdictions have provided input into the planning and evaluation process for the Project; and

WHEREAS, regional agencies have reviewed and commented on the Project; and

WHEREAS, interested organizations, community groups, and members of the public have reviewed and commented on the Project; and

WHEREAS, a Draft Environmental Impact Report was prepared for the Project and circulated between February 13, 2020 and March 30, 2020; and

WHEREAS, a public meeting was held on the Draft Environmental Impact Report on March 9, 2020; and

WHEREAS, a Final Environmental Impact Report was prepared and considered at a public hearing on August 11, 2020; and

WHEREAS, a Final Environmental Impact Report was found adequate and complete by the Sacramento County Board of Supervisors on September 22, 2020; and

WHEREAS, adequate public notice has been provided in accordance with state law.

NOW THEREFORE BE IT RESOLVED that the attached document entitled "Findings of Fact and Statement of Overriding Considerations" is hereby adopted.

Resolution Authorizing The Adoption Of The Findings of Fact And A Statement
Of Overriding Considerations For The Hazel Avenue/U.S. 50 Interchange
Project (Control No. 2011-70062)

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On a motion by Supervisor Frost, seconded by Supervisor Nottoli, the foregoing Resolution was passed and adopted by the Board of Supervisors of the County of Sacramento this 22nd day of September, 2020, by the following vote, to wit:

AYES: Supervisors Frost, Kennedy, Nottoli, Peters, Serna

NOES: None

ABSENT: None

ABSTAIN: None

RECUSAL: None

(PER POLITICAL REFORM ACT (§ 18702.5.))



ATTEST:

Florence Evans

Clerk, Board of Supervisors

Chair of the Board of Supervisors
of Sacramento County, California

FILED
BOARD OF SUPERVISORS

SEP 22 2020

BY

Florence Evans
Clerk of the Board

In accordance with Section 26103 of the Government Code
of the State of California a copy of the document has been
delivered to the Chair of the Board of Supervisors, County
of Sacramento on September 22, 2020

By:

Gueryne Dewlema
Deputy Clerk, Board of Supervisors

COUNTY OF SACRAMENTO
OFFICE OF PLANNING AND ENVIRONMENTAL REVIEW
MITIGATION MONITORING AND REPORTING PROGRAM

CONTROL NUMBER: 2011-70062

NAME: Hazel Avenue/U.S. 50 Interchange Project

LOCATION: The project site is located at the existing Hazel Avenue/US 50 interchange within Sacramento County and the City of Rancho Cordova. The project area is bounded along Hazel Avenue by Tributary Point/westbound off-ramp intersection to the north, and extends approximately 1,000 feet south of Folsom Boulevard to a future intersection within the Easton Place development. The project limits along US 50 begin approximately 3,200 feet west of the existing Hazel Avenue Overcrossing, and extend 2,500 feet east of the Natoma Overhead (post miles 15.1 to 15.4). Improvements along Folsom Boulevard would extend from approximately 1,200 feet west of the Hazel Avenue intersection to 900 feet east of the intersection.

ASSESSOR'S PARCEL NUMBERS: Various

APPLICANT: Sacramento County Department of Transportation (SacDOT)
4111 Branch Center Road
Sacramento, CA 95827
Attention: Tim Stevens

PROJECT DESCRIPTION: The County of Sacramento, in cooperation with Caltrans and the City of Rancho Cordova, proposes to modify the existing Hazel Avenue/US 50 interchange, and extend and grade-separate Hazel Avenue over Folsom Boulevard and the SPTC-JPA rail corridor. Hazel Avenue will be extended south to a proposed intersection with the future Atlanta Street (a new roadway that will be constructed as part of the Easton Place development). The project also includes:

- Construction of a portion of an eastbound auxiliary lane on US 50 from Hazel Avenue to the Folsom Boulevard Overcrossing, also known as the Natoma Overhead.
- The modification of the existing Aerojet Road off-ramp from US 50.
- Reconstruction of the US 50 westbound loop on-ramp.
- Reconstruction of the US 50 eastbound diagonal off-ramp, and both eastbound on-ramps.
- Eastbound US 50 on- and off-ramp auxiliary lanes, from west of the Hazel Avenue eastbound off-ramp, and from the loop on-ramp extending to the Folsom Boulevard interchange.

- Roadway and pedestrian improvements constructed along approximately 2,300 feet of Folsom Boulevard. Improvements include sidewalks, street lighting, and landscaping along the north side of Folsom Boulevard, and landscaping and lighting along the south.

TYPE OF ENVIRONMENTAL DOCUMENT: Final Environmental Impact Report/Environmental Assessment (FEIR/EA)

PREPARED BY: Sacramento County
Office of Planning and Environmental Review
827 7th Street, Room 225
Sacramento, CA 95814

PHONE: (916) 874-6141

MITIGATION MONITORING AND REPORTING PROGRAM

ADOPTED BY: **DATE:**

ATTEST: _____
SECRETARY/CLERK

(Insert name and title of officer)

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PURPOSE AND PROCEDURES

Pursuant to Section 21081.6 of the Public Resources Code and Chapter 20.02 of the Sacramento County Code, a Mitigation Monitoring and Reporting Program has been established for the project entitled Hazel Avenue/U.S. 50 Interchange Project (Control Number: 2011-70062). The project is subject to both the National Environmental Policy Act (NEPA) and California Environmental Quality Act (CEQA). Avoidance, Minimization, and/or Mitigation Measures (AMMs) in compliance with NEPA are also included in this document along with measures associated with the Incidental Take Permit of the Biological Opinion.

PURPOSE

The purpose of this program is to assure diligent and good faith compliance with the Mitigation Measures which have been recommended in the environmental document, and adopted as part of the project or made conditions of project approval, in order to avoid or mitigate potentially significant effects on the environment.

NOTIFICATION AND COMPLIANCE

It shall be the responsibility of the project applicant/owner to provide written notification to the Environmental Coordinator, in a timely manner, of the completion of each Mitigation Measure as identified on the following pages. The Environmental Coordinator will verify that the project is in compliance with the adopted Mitigation Monitoring and Reporting Program (MMRP). Any non-compliance will be reported to the project applicant/owner, and it shall be the project applicant's/owner's responsibility to rectify the situation by bringing the project into compliance and re-notifying the Environmental Coordinator. Any indication that the project is proceeding without good-faith compliance could result in the imposition of administrative, civil and/or criminal penalties upon the project applicant/owner in accordance with Chapter 20.02 of the Sacramento County Code.

PAYMENT

It shall be the responsibility of the project applicant to reimburse the Planning and Environmental Review Division for all expenses incurred in the implementation of the Mitigation Monitoring and Reporting Program (MMRP), including any necessary enforcement actions.

COMPLETION

Pursuant to Section 20.02.060 of the Sacramento County Code, upon the determination of the Environmental Coordinator that compliance with the terms of the approved Mitigation Monitoring and Reporting Program has been achieved, and that there has been full payment of all fees for the project, the Environmental Coordinator shall record and issue a Program Completion Certificate for the project.

STANDARD PROVISIONS

The project applicant shall submit one copy of all Project Plans and Construction Specifications and/or revisions to the Environmental Coordinator prior to Board approval to advertise Plans and Specifications. If the Environmental Coordinator determines that the Plans are not in full compliance with the adopted MMRP, the Plans shall be returned to the project applicant with a letter specifying the items of non-compliance, and instructing the applicant to revise the Plans, and then resubmit one copy of the revised Plans to the Environmental Coordinator prior to Board approval to advertise.

Additionally, the project applicant shall notify the Environmental Coordinator **no later than 48 hours** prior to the start of construction and no later than 24 hours after its completion. The applicant shall notify the Environmental Coordinator no later than 48 hours prior to any/all Final Inspection(s) by the County of Sacramento.

The project applicant shall notify the Environmental Coordinator of any pre-construction meetings. Upon notification, a determination will be made as to whether or not the Environmental Coordinator will need to attend the meeting.

The project applicant shall comply with the Mitigation Monitoring and Reporting Program for this project, including the payment of 100% of the Planning and Environmental Review Division staff costs, and the costs of any technical consultant services incurred during implementation of that Program.

☐ **MITIGATION MEASURE AE-1: MINIMIZE FUGITIVE LIGHT FROM PORTABLE SOURCES USED FOR CONSTRUCTION**

At a minimum, the construction contractor will minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights will be used. Portable lights will be operated at the lowest allowable wattage and height and will be raised to a height no greater than 20 feet. All lights will be screened and directed downward toward work activities and away from the night sky and roadway users and highway neighbors to the maximum extent possible. Lights will not be directed toward residential land uses after 10 p.m. The number of nighttime lights used will be minimized to the greatest extent possible.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE PS-1: PREVENT UNAUTHORIZED USE OF STATE PARKS LAND**

Construction-related staging, equipment, and worker parking will be kept within the approved project limits. The project boundary adjacent to State Parks Land will be delineated with Environmentally Sensitive Area fencing or other visible means. No unauthorized use of State Parks land will be allowed.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE AQ-1: IMPLEMENT SMAQMD's BASIC CONSTRUCTION EMISSION CONTROL PRACTICES (BEST MANAGEMENT PRACTICES)**

Measures to control and reduce fugitive dust from SMAQMD's Basic Construction Emission Control Practices (Sacramento Metropolitan Air Quality Management District 2017) will be implemented to the extent practicable when the measures have not already been incorporated and do not conflict with requirements of Caltrans' Standard Specifications, Special Provisions, the National Pollutant Discharge Elimination System (NPDES) permit, and the Biological Opinions, Clean Water Act Section 404 permit, Clean Water Act Section 401 Certification, and other permits issued for the project. The project-proponent will implement SMAQMD's basic construction emission control practices, including but not limited to the following measures.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least 2 feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour.
- Pave all roadways, driveways, sidewalks, and parking lots as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (required by California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485). Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE AQ-2: UTILIZE MODEL YEAR 2010 OR NEWER ENGINES TO REDUCE CONSTRUCTION-RELATED EMISSIONS FROM ON-ROAD VEHICLES**

All on-road trucks will consist of model year 2010 or newer engines. Construction contractors will provide documentation to the County of efforts to secure such a fleet. The contractors will keep a written record of equipment usage during project construction for each piece of equipment and provide the County with annual reports documenting compliance. These reports will be submitted to SMAQMD. In the event Construction contractors cannot secure all 2010 engine model year or newer on-road trucks for the project, an off-site mitigation fee program, as analyzed in the Air Quality Study Report (Volume 3 Technical Studies), or SMAQMD Off-site Construction Mitigation Fee Program shall be implemented.

The reporting plan shall follow SMAQMD's Enhanced On-site Exhaust Controls mitigation language. The plan will have at least two components: an initial report submitted before construction and a final report submitted at the completion of the job, phase or calendar year, as pre-arranged with SMAQMD staff and documented in the approval letter, to demonstrate continued project compliance. Additionally, the below requirements shall be met:

- Submit the initial report at least four (4) business days prior to construction activity using the SMAQMD's Construction Mitigation Tool (<http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation>)
- Provide project information and construction company information

Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE AQ-3: UTILIZE CLEAN DIESEL-POWERED EQUIPMENT DURING CONSTRUCTION TO CONTROL CONSTRUCTION-RELATED NO_x EMISSIONS**

The County will ensure that all off-road diesel-powered equipment used during construction is equipped with EPA Tier 4 Final engines. The County will submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 8 or more hours during any phase of the construction project. In the event Construction contractors cannot secure all 2010 engine model year or newer on-road trucks and all Tier 4 Final off-road equipment for this entire project, an off-site mitigation fee program, as analyzed in the Air Quality Study Report (Volume 3 Technical Studies), or SMAQMD Off-site Construction Mitigation Fee Program shall be implemented.

The inventory will include the following:

- CARB equipment identification number, equipment type, horsepower rating, engine model year (Tier 4 Final), and projected hours of use for each piece of off-road equipment.
- Current Certificate of Reported Compliance for CARB's In-Use Off-Road Regulation for each construction company working on the project.
- Anticipated construction timeline including start date, and name, phone number and email address of the project manager and on-site foreman.

The construction inventory will be submitted to the SMAQMD at least 4 business days prior to the use of subject equipment. The reporting plan shall comply with the requirements as outlined in Mitigation Measure AQ-2.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE AQ-4: PREPARE AND IMPLEMENT A LEAD AND ASBESTOS ABATEMENT PLAN**

Following the requirements of SMAQMD Rule 902 and Sacramento County Standard Construction Specification Section 12-1.01.C, Task Specific Safety Plan (TSSP), the County or its contractor will prepare a plan for the abatement of asbestos during demolition and removal of structures. The plan will also address abatement of structural lead. The contents of the plan will conform to Federal, State and local regulations regarding preventing environmental exposure and ensuring worker health and safety standards are implemented, including for the proper handling, removal, and disposal of the pollutants.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE NO-1: APPLY QUIET PAVEMENT OR CONSTRUCT NOISE BARRIER ALONG AEROJET ROAD (FOR ALTERNATIVE 2 ONLY)**

The County will implement one of two mitigation options.

Option 1. Apply quiet pavement to the US 50 mainline from just west of Hazel Avenue to 0.25 mile east of Aerojet Road, at a minimum. The pavement will be designed to provide a minimum of 4 dB of noise reduction relative to standard pavement that would otherwise be used. Applying quiet pavement to the off-ramp only and exclusive of US 50 would have no noise-reducing effect. As such, quiet pavement will be applied to both the US 50 mainline and Aerojet Road to achieve the required noise level reduction.

Option 2. Construct a noise barrier at a height of 14 feet along Aerojet Road in the location shown on EIR/EA Figure 2.14-5.

It may not be possible to apply quiet pavement to the US 50 mainline given that it is located within State ROWs and regulated by Caltrans. Therefore, if Option 1 is determined not to be feasible, the County will implement Option 2.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE NO-2: EMPLOY NOISE-REDUCING CONSTRUCTION PRACTICES DURING CONSTRUCTION**

During construction, the contractor will employ best practices to reduce construction noise at noise-sensitive land uses. Where possible, noise levels should not exceed 55 dBA during evening hours (8:00 p.m. to 10:00 p.m.) and 50 dBA during nighttime hours (10:00 p.m. to 6:00 a.m.)

Measures used to limit construction noise include the following.

- Limit noise-generating construction operations to daytime hours.
- Locate stationary equipment (e.g., generators, compressors, cement mixers, idling trucks) as far as possible from noise-sensitive land uses.
- Prevent excessive noise by shutting down idle vehicles or equipment.
- During use of pile drivers, include noise control measures such as pile cushions or noise shrouds.
- Require that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Use noise-reducing enclosures around noise-generating equipment.
- Construct barriers to block sound transmission from construction equipment to noise-sensitive land uses. The barriers will be designed to obstruct the line of sight from the noise-sensitive land uses to on-site construction equipment.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE NO-3: INITIATE A NOISE CONTROL PLAN FOR MITIGATION OF CONSTRUCTION NOISE DURING EVENING/NIGHTTIME HOURS**

A construction noise control plan will be prepared by the County or its contractor that describes the specific methods the contractor will use to minimize construction equipment noise levels at nearby residences. The plan will include provisions for giving advance notification of construction activity schedules to occupants of potentially affected buildings.

Prior to construction, the contractor will make a construction schedule available to residents living in the vicinity of the construction areas, and designate a noise disturbance coordinator. The coordinator will be responsible for responding to complaints regarding construction noise, will determine the cause of the complaint, and will ensure that reasonable measures are implemented to correct the problem when feasible. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the notification of the construction schedule.

In the event of complaints by affected residents due to on-site construction noise generated during evening/nighttime hours, the contractor will monitor noise levels intermittently (between 8:00 p.m. and 6:00 a.m.) at or near the residence of the person lodging the complaint. If measured construction noise at the monitor location during nighttime hours exceeds 55 dBA L_{eq} between the hours of 8:00 p.m. to 10:00 p.m. or 50 dBA L_{eq} during nighttime hours (10:00 p.m. to 6:00 a.m.), the construction contractor will implement sound-attenuating mitigation measures where site conditions allow, such as limitations on use of noise-generating equipment or installation of additional temporary barriers or enclosures.

If these measures are ineffective in reducing noise to the identified levels, or site conditions prohibit implementation of the measures, the affected residents will be offered short-term relocation assistance for the duration of the time that nighttime noise levels are expected to exceed the specified levels.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.

3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE HY-1: IMPLEMENT BEST MANAGEMENT PRACTICES TO CONTROL RUNOFF AND DISCHARGE OF POLLUTANTS DURING PROJECT CONSTRUCTION AND OPERATION AND FOLLOW REQUIREMENTS OF PERMITTING AGENCIES AND THE STORMWATER QUALITY DESIGN MANUAL**

As part of the final design process prior to project construction, the project engineers will develop and incorporate design features or BMPs into the project design. The features selected will comply with the Sacramento County SQIP and the Sacramento Region SQDM for project areas outside of Caltrans ROW, and Caltrans SWMP and Standard Specifications for project areas within Caltrans ROW. The features will be designed to meet all applicable water quality objectives for surface waters and groundwater contained in the Basin Plan.

For project areas outside of Caltrans ROW, the project engineers will follow the guidance in the SQDM including selecting measures from SQDM Table 3-3, Stormwater Quality Control Measure Selection Matrix, for street/road projects with new impervious areas larger than 5 acres. Measures that could be selected and implemented include source control, hydromodification control, treatment control, and low impact development measures such as vegetated swales, water quality detention basins, and bioretention planters.

The project engineers and construction contractor will ensure compliance with the requirements of Caltrans and County NPDES MS4 permits to control stormwater and non-stormwater discharges associated with project construction activities and discharges within the jurisdiction of each permit. Temporary diversion systems and dewatering operations will be implemented, as appropriate. The controls required by all applicable permits will be implemented to reduce the discharge of pollutants in stormwater discharges to the maximum extent possible, including management practices, control techniques, system design and engineering methods, and other measures as appropriate.

The project engineers and the construction contractor will ensure that the requirements of the County SQIP will be followed to reduce the discharge of pollutants to the MS4. The project engineers and construction contractor will also ensure construction activities and project implementation complies with Section 401 (Water Quality Certification) from the Central Valley Regional Water Quality Control Board and the Section 404 Permit from the Sacramento District U.S. Army Corps of Engineers (USACE).

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE GS-1: PREPARE AND IMPLEMENT A PALEONTOLOGICAL MITIGATION PLAN**

A non-standard special provision for paleontology mitigation will be included in the construction contract special provisions section to advise the construction contractor of the requirement to cooperate with paleontological salvage. The following items will be part of the provisions.

- A qualified principal paleontologist, as defined by the Caltrans Standard Environmental Reference, will be retained to prepare and implement a final Paleontological Mitigation Plan (PMP) prior to construction. If the qualified paleontologist is not a licensed professional geologist in the State of California, then a licensed professional geologist will need to be retained to review and approve the PMP prior to construction. The preliminary PMP prepared for the project (California Department of Transportation 2017; provided in Volume 3, *Technical Studies*, or from the project website at <http://www.sacdot.com/Pages/Project-Hazel-StatRoute50.aspx>) will be updated based on final engineering design and geotechnical information
- The geotechnical investigation conducted to support final engineering design will identify the depth and location of sensitive areas and will be used by the qualified principal paleontologist to identify locations that warrant monitoring for paleontological resources during construction
- The final PMP will list the proposed staff and professional qualifications.
- The qualified principal paleontologist will attend a task order meeting and conduct a site visit to review task order requirements; review plans, maps, initial site reports, and mitigation requirements; review site geology and paleontological sensitivity; prepare a mitigation work plan; and prepare a Code of Safe Practices.
- The qualified principal paleontologist will schedule coordination and supervision for paleontological monitors of any salvage. Monthly progress reports will be prepared for lead agency review and comment.
- The qualified principal paleontologist may designate a paleontological monitor to be present during earthmoving activities. According to preliminary engineering, excavations could occur throughout the proposed project area; therefore, paleontological monitoring is recommended during any earthmoving activities/excavations. The qualified principal paleontologist will identify locations that warrant monitoring during construction
- The paleontological monitor will have a college degree in paleontology or geology and at least 2 years of paleontological monitoring experience or other qualifications described by the Society of Vertebrate Paleontology (2010).
- The qualified principal paleontologist and paleontological monitor will be notified by the resident engineer or lead agency in advance of starting construction activity and will attend any safety training programs for the proposed project. Paleontological monitoring may be full-time during excavation for

undercrossings, in-ground structural elements such as bridge substructures and culverts, and any other project elements requiring deep excavation. If, after 50% of the grading/excavation is completed at a particular location for the proposed project, it can be demonstrated that the level of monitoring should be reduced for that site, the qualified principal paleontologist will amend the mitigation program (Society of Vertebrate Paleontology 2010). If pieces of heavy equipment are in use simultaneously at different locations, each location may be individually monitored.

- The qualified principal paleontologist will meet with the resident engineer and construction contractor at a preconstruction conference to develop an agreed-upon communication plan and to discuss provisions for worker safety. All project personnel will receive paleontological awareness training prior to commencement of work by the qualified principal paleontologist.
- If paleontological resources are discovered during earthmoving activities, the construction crew will immediately cease work within a 60-foot radius of the find and notify the resident engineer and the Sacramento County Office of Planning and Environmental Review. In the event paleontological resources are discovered, fossil specimens will be properly collected and sufficiently documented to be of scientific value.
- The collection and treatment actions described in the PMP will occur during the grading and construction process and after recovery of specimens if fossils are found, including sampling for microfossils, conducting paleomagnetic analysis, identifying and preparing fossils, arranging for a repository, and preparing a final report.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-1: INSTALL ORANGE CONSTRUCTION FENCING BETWEEN THE CONSTRUCTION AREA AND ADJACENT SENSITIVE BIOLOGICAL RESOURCES**

The County and/or their contractor will install orange construction fencing between the construction area and adjacent sensitive biological resource areas. Sensitive biological resources that occur adjacent to the construction area that could be directly affected by the project include natural communities of special concern; fairy shrimp, valley elderberry longhorn beetle and western pond turtle habitats; nest sites of Swainson's hawk, yellow-breasted chat, tricolored blackbird, song sparrow, and other migratory birds; roosting bats; and protected trees to be avoided.

Barrier fencing around sensitive areas will be installed as one of the first orders of work and prior to equipment staging. Preliminary fencing locations are included in the draft project design drawings and labeled as Environmentally Sensitive Areas. The preliminary fencing locations area also shown on EIR/EA Figure 3-1. The locations of the fencing will be updated or confirmed as part of final design, prior to construction. Before construction begins, the construction contractor will work with the project engineer and a resource specialist to identify the locations for the orange construction fencing, and a resource specialist will place stakes around the sensitive resource sites to indicate these locations. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans and described in the specifications. Barrier fencing will be installed before construction activities are initiated, maintained throughout the construction period, and removed after completion of construction.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-2: CONDUCT ENVIRONMENTAL AWARENESS TRAINING FOR CONSTRUCTION EMPLOYEES**

The County or their contractor will retain a qualified biologist to conduct environmental awareness training for construction crews before project implementation. The awareness training will be provided to all construction personnel and will brief them on the need to avoid effects on sensitive biological resources (e.g., native trees, natural communities of special concern, and special-status species habitats in and adjacent to the construction area). The education program will include a brief review of the special-status species with the potential to occur in the BSA (including their life history, habitat requirements, and photographs of the species). The training will identify the portions of the BSA in which the species may occur, as well as their legal status and protection. The program also will cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on these species during project implementation. This will include the steps to be taken if a sensitive species is found within the construction area (i.e., notifying the crew foreman, who will call a designated biologist). In addition, construction employees will be educated about the importance of controlling and preventing the spread of invasive plant infestations. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions will be provided to each crew member. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs will be conducted for appropriate new personnel as they are brought on the job during the construction period.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-3: RETAIN A QUALIFIED BIOLOGIST TO CONDUCT MONITORING DURING CONSTRUCTION IN SENSITIVE HABITATS**

The County or their contractor will retain a qualified biologist to monitor all construction activities that involve ground disturbance (e.g., vegetation removal, grading, excavation, road construction) within or adjacent to environmentally sensitive areas (e.g., wetlands, streams, riparian vegetation, special-status species habitat, active bird nests, and adjacent areas within 250-feet or where indirect effects are possible). The purpose of the monitoring is to ensure that avoidance and minimization measures are properly implemented to protect sensitive biological resources and to ensure that the project complies with all applicable permit requirements and agency conditions of approval. The biologist will regularly inspect the fencing around environmentally sensitive areas (see EIR/EA Figure 3-1) and will communicate any issues to the resident engineer or construction foreman. The contractor will be responsible for maintaining the fence during construction and ensuring that no construction personnel, equipment, or runoff/sediment from the construction area enters environmentally sensitive areas. The monitor will complete daily logs, and a final monitoring report will be prepared at the end of each construction season that will be submitted to the County and other overseeing agencies (i.e., California Department of Fish and Wildlife [CDFW], U.S. Fish and Wildlife Service [USFWS], and USACE), as appropriate.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-4: DESIGN AND IMPLEMENT WATER CONVEYANCE SYSTEMS THAT MAINTAIN HYDROLOGY OF AND PREVENT CONTAMINANTS FROM ENTERING SUITABLE VERNAL POOL BRANCHIOPOD HABITAT**

Concentrated flow conveyance systems identified for the proposed project may include roadside ditches, biofiltration swales, curb and gutters, dikes, overside drains, and culverts. Water conveyance systems surrounding suitable vernal pool branchiopod habitat in the project area will be evaluated, designed, and installed to maintain the existing hydrology of the four seasonal wetlands (see EIR/EA Figure 2.16-1, Sheet 2) that provide potential habitat for vernal pool branchiopods.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-5: FENCE ELDERBERRY SHRUBS TO BE PROTECTED**

Elderberry shrubs/clusters within 165 feet of the construction area that will not be removed will be protected during construction. A qualified biologist (i.e., with elderberry/valley elderberry longhorn beetle experience) will mark the elderberry shrubs and clusters that will be protected during construction. Orange construction barrier fencing will be placed at the edge of the buffer areas established for each shrub or cluster. The buffer area distances will be proposed by the biologist and approved by the U.S. Fish and Wildlife Service (USFWS). No construction activities will be permitted in the buffer zone other than those activities necessary to erect the fencing. Signs will be posted along fencing for the duration of construction and will contain the following information.

This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.

Temporary fences around the elderberry shrubs will be installed as the first order of work. Temporary fences will be furnished, constructed, maintained, and later removed, as shown on the plans, as specified in the special provisions, and as directed by the project engineer. Temporary fencing will be 4 feet high, commercial-quality woven polypropylene, and orange in color.

Buffer area fences around elderberry shrubs will be inspected periodically by a qualified biologist until project construction is complete or until the fences are removed, as approved by the biological monitor and the resident engineer. The contractor will be responsible for maintaining the buffer area fences around elderberry shrubs throughout construction. Biological inspection reports will be provided to the County and USFWS.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-6: COMPENSATE FOR DIRECT EFFECTS ON VALLEY ELDERBERRY LONGHORN BEETLE AND ITS HABITAT**

Before construction begins, the County will compensate for direct effects on valley elderberry longhorn beetle by transplanting shrubs that cannot be avoided to a USFWS-approved conservation bank. The County will also purchase credits at a USFWS-approved conservation bank in accordance with ratios shown in Table 3.15-2 for the alternative that is selected. Compensation ratios shown are for shrub-level impact compensation (U.S. Fish and Wildlife Service 2017).

Table 3.15-2. Compensation for Direct Effects on Elderberry Shrubs by Alternative

Alternative	Number of Elderberry Shrubs Affected	Compensation Ratio (non-riparian)	Number of Conservation Credits Required
1	3	1:1	3
1A	3	1:1	3
2	4	1:1	4

The relocation of the elderberry shrubs will be conducted according to USFWS-approved procedures outlined in the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (U.S. Fish and Wildlife Service 2017). Elderberry shrubs within the the project construction area that cannot be avoided will be transplanted during the plant's dormant phase (November through the first 2 weeks of February). A qualified biological monitor will remain on-site while the shrubs are being transplanted.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-7: COMPENSATE FOR THE PERMANENT AND TEMPORARY LOSS OF VALLEY FOOTHILL RIPARIAN WOODLAND**

The County will compensate for the permanent and temporary loss of valley foothill riparian habitat (as show on EIR/EA Figures 2.16-2 and 2.16-3, Sheet 4) by planting a minimum of 0.06 acre of valley foothill riparian woodland species (a minimum ratio of 1:1 [1 acre planted for every 1 acre permanently and temporarily affected]) on-site or off-site and/or purchasing mitigation bank credits equivalent to a minimum of 0.06 acre of valley foothill riparian habitat.

On-site compensation will be used to the maximum extent practicable, but off-site compensation and/or purchase of mitigation bank credits may be needed to achieve no net loss of existing in-kind riparian habitat. Each of these options is discussed below.

- Riparian habitat restoration and/or enhancement on-site or off-site should occur in the same year construction is completed. For on-site or off-site plantings, the County will prepare a mitigation planting plan, including a species list and number of each species, planting locations, and maintenance requirements. Plantings will consist of cuttings taken from local plants or plants grown from local material. Planted species for the mitigation plantings will be similar to those in and adjacent to the project area and will include native species, such as white alder (*Alnus rhombifolia*), Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), valley oak (*Quercus lobata*), black walnut (*Juglans hindsii*), Oregon ash (*Fraxinus latifolia*), boxelder (*Acer negundo*), and black willow (*Salix gooddingii*). All plantings will be fitted with exclusion cages or other suitable protection from herbivory until plantings are established. Plantings will be irrigated for up to 3 years or until established. Plantings will be monitored annually for 3 years or as required in the project permits. If 75% of the plants survive at the end of the monitoring period, the revegetation will be considered successful. If the survival criterion is not met at the end of the monitoring period, planting and monitoring will be repeated after mortality causes have been identified and corrected.
- The County will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The County will pay the cost of mitigation credits in effect at the time the credits are purchased. Replacement riparian habitat will include tree species that would support nesting Swainson's hawk (*Buteo swainsoni*) (i.e., oak, cottonwood) and will occur within the range of nesting Swainson's hawk within the Sacramento Valley.

Approval of riparian mitigation activities is subject to Notification that would require CDFW-approved compensatory mitigation to offset impacts. Likewise, to the extent offsite credits are utilized, the mitigation should occur at a CDFW-approved mitigation or conservation bank.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.

2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-8: COMPENSATE FOR LOSS OF WETLANDS AND NON-WETLAND WATERS OF THE UNITED STATES/WATERS OF THE STATE**

The County will compensate for the permanent fill of waters of the United States/waters of the State (a direct impact associated with roadway and interchange construction) in two wetland habitat types—emergent wetland and seasonal wetland—and in two non-wetland waters type—perennial drainage and ephemeral drainage. The minimum wetland compensation ratio to ensure no net loss of wetland or drainage functions and values will be 1:1 (1 acre of habitat credit for every 1 acre of permanent impact). The final compensation ratio will be approved by USACE. The County will compensate for permanent loss of wetlands and non-wetland waters through one or more of the following mitigation options:

- Purchase habitat credits from a USACE-approved mitigation bank with service areas for Sacramento County, such as the Cosumnes Floodplain Mitigation Bank or Elsie Gridley Mitigation Bank, and provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The County will pay the cost of mitigation credits in effect at the time the credits are purchased. The mitigation will be approved by USACE and may be modified during the permitting process.
- Pay into the National Fish and Wildlife Foundation Sacramento District In-Lieu Fee Program.

Temporarily disturbed wetlands and non-wetland waters will be returned to preconstruction condition following construction. The County also will implement the conditions and requirements of State and Federal permits that will be obtained for the proposed project.

Approval of wetland mitigation activities is subject to Notification that would require CDFW-approved compensatory mitigation to offset impacts. Likewise, to the extent offsite credits are utilized, the mitigation should occur at a CDFW-approved mitigation or conservation bank.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.

3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-9: CONDUCT PRECONSTRUCTION SURVEYS FOR WESTERN POND TURTLE AND MONITOR INITIAL IN WATER WORK**

To avoid potential injury or mortality of western pond turtles, the County will retain a qualified wildlife biologist who is CDFW-approved to capture and relocate turtles. The biologist will conduct a preconstruction survey for western pond turtles within 24 hours of the start of construction and will survey Alder Creek and the adjacent riparian and ruderal habitat within the construction area. If in-water work does not start immediately, the biologist will return to the construction site immediately prior to the start of in-water work (i.e., dewatering, vegetation removal, or any other activities in the creek) to conduct another preconstruction survey. The biologist will remain on-site until initial in-water work is complete. If a turtle becomes trapped during initial in-water work, the biologist will relocate the individual to suitable aquatic habitat upstream of the construction area (the area downstream of the construction area is not accessible because of US 50). For the remainder of construction, the biologist will remain on-call in case a turtle is discovered. The construction crew will be instructed to notify the crew foreman, who will contact the biologist if a turtle is found trapped within the construction area. Work in the area where the turtle is trapped will stop until the biologist arrives and removes and relocates the turtle. The biologist will report their activities to the County and CDFW within 1 day of relocating any turtle.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-10: RESTORE TEMPORARILY DISTURBED
RUDERAL HABITAT**

Upon project completion, the County will restore all temporarily disturbed ruderal habitat (1.92 acres under all alternatives) (as shown on EIR/EA Figures 2.16-2 and 2.16-3) to pre-project or better conditions. To the extent feasible, native grasses and forbs will be used to reseed disturbed areas.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-11: COMPENSATE FOR THE PERMANENT AND TEMPORARY LOSS OF FREMONT COTTONWOOD-OAK WOODLAND**

The County will compensate for the permanent loss of 2.97 acres and temporary loss of 0.19 acres of Fremont cottonwood-oak woodland at a minimum ratio of 1:1 (1 acre planted for every 1 acre permanently affected). The loss of most of the Fremont cottonwood-oak woodland habitat in the project area has been previously mitigated as part of Phase 2 of the Easton Project (County of Sacramento 2008). Figures 2.16-2 and 2.16-3 show the area that has been previously mitigated for Phase 2 of the Easton Project. For the proposed project, compensation would only be required for 0.90 acre of the direct impacts (see Section 2.16, Natural Communities, for further details). As part of the woodland mitigation, compensation may include either compensation for the woodland habitat at a minimum ratio of 1:1 as indicated above and/or compliance with Mitigation Measure BIO-20 and/or Mitigation Measure BIO-21.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-12: CONDUCT VEGETATION REMOVAL DURING THE NON-BREEDING SEASON OF NESTING MIGRATORY BIRDS**

To the maximum extent feasible, vegetation removal (trees, shrubs, and ground vegetation) will occur during the non-breeding season for most migratory birds (generally between September 16 and January 31). This timing is highly preferable because if an active nest is found during preconstruction surveys in a tree (or other vegetation) that would be removed by project construction, the tree (or other vegetation) cannot be removed until the end of the nesting season, which could delay construction. If vegetation cannot be removed between October and January, or if ground cover re-establishes in areas where vegetation has been removed, the affected area must be surveyed for nesting birds, as discussed in Mitigation Measures BIO-13: Conduct Focused Survey for Nesting Swainson's Hawk and White-Tailed Kite Prior to Construction and BIO-14: Conduct Preconstruction Surveys for Nesting Migratory Birds. To minimize potential impacts on roosting bats, tree trimming and removal should be conducted from September 1 through October 15 (see Mitigation Measure BIO-15: Identify Suitable Roosting Habitat for Bats and Implement Avoidance and Protective Measures). Tree trimming and removal during this timeframe would avoid or minimize impacts on nesting birds and roosting bats.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-13A: CONDUCT FOCUSED SURVEYS FOR NESTING WHITE-TAILED KITE PRIOR TO CONSTRUCTION**

For each year in which construction, grading, or project-related improvements are to commence between February 1 and September 15, a focused survey for white-tailed kite nests on the site and within 0.25 mile of the site will be conducted by a qualified biologist no greater than 15 days prior to the start of construction work (including clearing and grubbing). If White-tailed kites are found, the qualified Biologist shall develop a species-specific avoidance plan for CDFW review and approval. Any measures approved in the plan will be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, nothing further will be required. If a lapse in project-related activities of 14 days or longer occurs, another focused survey is required before Project activities can be reinitiated.

If impacts are identified during the course of the project, project personnel shall fully avoid impacts to the species and immediately notify CDFW if White-tailed kite is detected during Project activities.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-13B: CONDUCT FOCUSED SURVEYS FOR NESTING SWAINSON'S HAWK PRIOR TO CONSTRUCTION**

If equipment staging, site preparation, grading, excavation or other project-related activities are scheduled during the Swainson's hawk nesting season (typically March 1 through September 15) surveys for active nests of such birds shall be conducted by a qualified biologist in accordance with the typical survey protocol: Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000). Surveys shall be conducted at the appropriate radius and time periods listed in the survey protocol. Since the project spans over multiple years, if there is a lapse of more than 15 days in construction, a new survey shall be conducted for each nesting season to capture any new Swainson's hawk nests that may be established.

If an active Swainson's hawk nest is found during project surveys, the qualified biologist shall consult with CDFW and demonstrate compliance with CESA. If during consultation it is determined that implementation of the project as proposed may result in take of Swainson's hawk, the project may seek related take authorization as provided by the Fish and Game Code.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-14: CONDUCT PRECONSTRUCTION SURVEYS FOR NESTING MIGRATORY BIRDS**

In each year in which project activities would occur during the breeding season (generally February 1 through September 15), the County will retain a qualified wildlife biologist with knowledge of the relevant species to conduct nesting surveys 15 days or less before the start of construction. Surveys will include a search of all trees and shrubs, marsh, wetland, manmade structures, and ruderal vegetation that provide suitable nesting habitat in the project area, including staging and stockpile areas. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines: ii) 500 feet for small raptors such as accipiters: iii) 1,000 feet for larger raptors such as buteos. If no active nests are detected during these surveys, no additional measures are required. If a lapse in project-related activities of 14 days or longer occurs, another focused survey will be required before project activities can be reinitiated.

If an active nest is found in the survey area, a no-disturbance buffer will be established with fences or flags around the nest buffer area to avoid disturbance or destruction of the site until the end of the breeding season (September 15) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the project area (this date varies by species). The extent of these buffers will be determined by the biologist in coordination with USFWS and CDFW and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species. If nesting birds are showing signs of distress or disruptions to nesting behaviors or the buffer is otherwise not feasible, the qualified wildlife biologist, in coordination with USFWS and CDFW shall determine the appropriate change in response (e.g. buffer increase, temporary construction stop,. etc.) until no further interruptions to breeding behavior are detectable.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-15: IDENTIFY SUITABLE ROOSTING HABITAT FOR BATS AND IMPLEMENT AVOIDANCE AND PROTECTIVE MEASURES**

To minimize potential impacts on tree-roosting bats, tree trimming and removal should be conducted between September 1 and October 15, which corresponds to a time period when bats have not yet entered torpor or be caring for nonvolant (non-flying) young. Trimming or removing trees during this timeframe would also avoid impacts on nesting birds.

If tree removal or trimming cannot be conducted between September 1 and October 15, qualified biologists will examine trees for suitable bat roosting habitat before tree removal or trimming. High-quality habitat features (e.g., large tree cavities, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch) will be identified and the area around these features searched for bats and bat signs (e.g., guano, culled insect parts, staining). Riparian woodland and stands of mature broadleaf trees are considered potential habitat for solitary foliage-roosting bat species. Because signs of bat use are not easily found, and trees cannot be completely surveyed for bat roosts, the protective measures listed below will be implemented for trees containing high-quality habitat features.

- Removal or disturbance of trees providing bat roosting habitat will be avoided between April 1 and August 31 (the maternity period) to avoid effects on pregnant females and active maternity roosts (whether colonial or solitary).
- If a maternity roost is found, whether solitary or colonial, that roost will remain undisturbed until September 1 or until a qualified biologist has determined the roost is no longer active.
- Qualified biologists will monitor tree trimming/removal of the habitat. Trees should be trimmed or removed over two consecutive days. The first day (in the afternoon), limbs and branches should be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures should be avoided, and only branches or limbs without those features should be removed. On the second day, the entire tree should be removed. Biologists should search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW. The biologist will prepare a biological monitoring report, which will be provided to the County and CDFW.
- Habitat assessment and survey by a qualified bat biologist
- Examining all suitable habitats prior to project implementation (including tree removal, tree trimming, or other disturbance). BIO-15 should include also habitats in manmade structures (e.g. bridge, culvert, etc.)
- Including development of a Bat Avoidance and Minimization Plan (Bat Plan) in the event that bats are utilizing the Project area during Project activities. The Bat Plan should include 1) Project-specific measures to avoid and minimize impacts to roosting bats in and near the areas that will be disturbed by Project activities 2) monitoring by a qualified bat biologist to oversee bat

behavior and the avoidance and minimizations measures designed to protect nesting/roosting bats 3) exclusion measures for the habitat that will be removed or made inaccessible by the Project and 4) discussion of available alternative habitat (both temporary and permanent).

All appropriate exclusionary measures should be implemented prior to the bridge construction during the period of March 1 to April 15 or August 31 to October 15. Potential avoidance efforts may include exclusionary blocking or filling potential roosting cavities with foam or steel wool, visual monitoring, and staging Project work to avoid bats. If bats are known to use manmade structures, exclusion netting should not be used to avoid entanglement.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-16: COMPENSATE FOR THE LOSS OF PROTECTED TREES OUTSIDE OF OAK WOODLAND AND RIPARIAN HABITATS**

This measure applies to all native oaks, that have a DBH of at least 6 inches, or if it has multiple trunks of less than 6 inches each, a combined DBH of at least 10 inches.

With the exception of the removed trees that will be compensated for through measures below, all native trees in the project area, all portions of adjacent off-site native trees that have driplines that extend onto the project area, and all off-site native trees that may be affected by utility installation and/or improvements associated with this project, will be preserved and protected based on the County's tree mitigation measures as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb will constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs that make up the dripline does not change the protected area.
2. Chain link fencing or a similar protective barrier will be installed 1 foot outside the driplines of the native trees prior to initiating project construction, in order to avoid damage to the trees and their root system.
3. No signs, ropes, cables (except cables that may be installed by a certified arborist to provide limb support) or any other items will be attached to the native trees.
4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities will be driven, parked, stockpiled or located within the driplines of the native trees.
5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the native trees. Where this is necessary, an International Society of Arboriculture (ISA) Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines.
6. All underground utilities and drain or irrigation lines will be routed outside the driplines of native trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.
7. If temporary haul or access roads must pass within the driplines of oak trees, a roadbed of 6 inches of mulch or gravel will be created to protect the root zone. The roadbed will be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material will be replenished as necessary to maintain a 6-inch depth.
8. Drainage patterns on the site will not be modified so that water collects or stands within, or is diverted across, the dripline of oak trees.
9. No sprinkler or irrigation system will be installed in such a manner that it sprays water within the driplines of the oak trees.

10. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute A300 pruning standards and the ISA "Tree Pruning Guidelines".

11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials will be kept 2 feet away from the base of the trunk. The only plant species that will be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

12. Any fence/wall that will encroach into the dripline protection area of any protected tree will be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers will be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts on the trees.

13. For a project constructing during the months of June, July, August, and September, deep water trees by using a soaker hose (or a garden hose set to a trickle) that slowly applies water to the soil until water has penetrated at least 1 foot in depth. Sprinklers may be used to water deeply by watering until water begins to run off, then waiting at least an hour or two to resume watering (provided that the sprinkler is not wetting the tree's trunk. Deep water every 2 weeks and suspend watering 2 weeks between rain events of 1 inch or more.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE BIO-17: COMPENSATE FOR THE LOSS OF PROTECTED TREES**

Native trees that would be removed in the project area include valley oak, interior live oak, California black walnut, California sycamore, buckeye, and western redbud. Based on preliminary arborist survey data, the removal of up to approximately 1,846 inches DBH of native oak trees (including oaks, sycamore, and walnut) will be compensated for by planting in-kind native trees equivalent to the DBH inches lost, based on the ratios listed below. Buckeye and western redbud will be compensated by planting one individual for each individual removed. Willows and cottonwoods will be replaced based on the loss of canopy and are included in Mitigation Measure BIO-18 along with non-native trees. Final compensation amounts will be determined based on final design, and mitigation requirements will be adjusted to compensate the actual amount removed or encroached upon by over 50 percent of the dripline radius.

Equivalent compensation based on the following ratio is required:

- one 15-gallon tree = 1 inch DBH
- one 24-inch box tree = 2 inches DBH
- one 36-inch box tree = 3 inches DBH

A Replacement Tree Planting Plan will be prepared by a certified arborist or licensed landscape architect and will be submitted to the Environmental Coordinator for approval. The Replacement Tree Planting Plan(s) will include the following minimum elements:

- Species, size and locations of all replacement plantings and < 6-inch DBH trees to be preserved
- Method of irrigation
- If planting in soils with a hardpan/duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot-deep boring hole to provide for adequate drainage
- Planting, irrigation, and maintenance schedules;
- Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement trees that do not survive during that period.

No replacement tree will be planted within 15 feet of the driplines of existing native trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement native trees will be 15 feet on-center.

If tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation will be through payment into the County Tree Preservation Fund. Payment will be made at a

rate of \$325.00 per DBH inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ MITIGATION MEASURE BIO-18: REPLACE LOSS OF TREE CANOPY

Removal of non-native tree canopy for the selected alternative shall be mitigated by creation of new tree canopy equivalent to the acreage of non-native tree canopy removed. New tree canopy acreage shall be calculated using the Sacramento County Department of Transportation 15-year shade cover values for tree species. Preference is given to on-site mitigation, but if this is infeasible, then funding shall be contributed to the Sacramento Tree Foundation's Greenprint program in an amount proportional to the tree canopy lost (as determined by the 15-year shade cover calculations for the tree species to be planted through funding, with the cost to be determined by the Sacramento County Tree Foundation).

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE CUL-1: CONDUCT MANDATORY CULTURAL RESOURCES AWARENESS TRAINING FOR CONSTRUCTION PERSONNEL**

Before any ground-disturbing work occurs in the project area, a qualified archaeologist will be retained to conduct mandatory contractor/worker cultural resources awareness training for construction personnel. The awareness training will be provided to all construction personnel, including contractors and subcontractors, to brief them on the need to avoid effects on cultural resources adjacent to and within construction areas, their responsibility to report potential resources if observed, and the penalties for not complying with applicable State and Federal laws and permit requirements.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE CUL-2: MONITOR FOR ARCHAEOLOGICAL RESOURCES DURING INITIAL GROUND DISTURBANCE**

A Native American monitor will be retained to monitor all initial ground disturbing activities (e.g., grading, excavation, tree removal). The purpose of the monitoring is to ensure that no unrecorded archaeological resources are affected by the project and to ensure that the project complies with all applicable permit requirements and agency conditions of approval.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE CUL-3: IMPLEMENT AVOIDANCE AND NOTIFICATION PROCEDURES FOR CULTURAL RESOURCES DISCOVERED DURING CONSTRUCTION**

It is Caltrans' policy to avoid cultural resources whenever possible. If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find. All reasonable measures will be implemented to avoid, minimize, or mitigate further harm to the resource. If appropriate, the project proponent will notify Indian tribes or Native American groups that may attach religious or cultural significance to the affected resource.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County coroner will be contacted. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendent (MLD). The County will work with the MLD to avoid the remains, and if avoidance is not feasible, to determine the respectful treatment of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE CUL-4: INSTALL ORANGE CONSTRUCTION FENCING TO AVOID CULTURALLY SENSITIVE AREAS**

Construction-related staging, equipment, and worker parking will be kept within the approved APE boundary. The APE boundaries in the vicinity of areas identified as culturally sensitive by the UAIC as a result of consultation with the lead agencies will be delineated with orange construction fencing or other visible means to ensure complete avoidance.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE HZ-1: DEVELOP AND IMPLEMENT PLANS TO ADDRESS WORKER HEALTH AND SAFETY**

As required by Federal, State, and local regulations, prior to construction, the County will employ a Certified Industrial Hygienist who will prepare a Health and Safety Plan, Lead Compliance Plan, BMP and/or injury and illness prevention plan to address worker safety when working with potentially hazardous materials (e.g., levels of protective personal equipment, emergency action plan, procedures for encountering hazardous materials) including potential ACMs, LBPs, lead or chromium in traffic stripes, aerially deposited lead, and other construction-related materials within the ROW during any soil-disturbing activity.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE HZ-2: CONDUCT SITE-SPECIFIC ASSESSMENTS AND PREPARE AND IMPLEMENT A WORK PLAN (FOR ALTERNATIVE 1A ONLY)**

Prior to construction, the County will conduct additional assessments of soil, groundwater, and building materials within the proposed acquisition area of the parcels described below. In addition, prior to soil and groundwater testing, the County will prepare a work plan that detail testing locations and analytical methods. Testing locations will be similar to proposed excavation locations in order to characterize potentially excavated soils. The plan will incorporate the soil and groundwater data to ensure that soil and groundwater are stored, managed, and disposed of appropriately and in accordance with applicable laws and regulations.

Soil and Groundwater

Assess the Chevron Service Station (APN: 069-0160-012), Nimbus Winery (APN: 069-0050-013), Aerojet Facility (APN: 072-0231-125), and UPRR ROW for possible soil and groundwater contamination. The sampling and testing of surface soils and groundwater at these sites will be analyzed for total petroleum hydrocarbons such as diesel, heavy metals, petroleum hydrocarbons, PAHs, and chlorinated solvents. Drilling for soil and groundwater will be performed by OSHA-trained personnel with appropriate licenses (CFR 1910.120).

If soil and/or groundwater contamination is identified, the County will comply with Federal and State regulations and the Sacramento County CUPA regulatory requirements regarding the handling and disposal of hazardous wastes. These requirements include consultation with the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board and adherence to the SWPPP. The SWPPP requirement of BMPs designed to minimize the release of hazardous materials would help reduce potential impacts. Contaminated soils not reused on-site will be disposed of at a Class I landfill facility.

If groundwater is extracted as part of dewatering, the extracted groundwater will be stored in tanks, and tested for chlorinated solvents, and either sent off-site for recycling or directed to the existing groundwater treatment system at the Aerojet facilities for disposal and treatment. This will be in addition to the pre-characterization of groundwater quality during preconstruction testing.

Asbestos-Containing Materials and Lead-Based Paint

The Cattlemen's Restaurant (APN: 069-0060-085) and Nimbus Winery (APN: 069-0050-013) buildings are likely to contain ACM and LBP in their construction materials. Various bridge components, such as the overpass, could also contain ACM. The County will conduct a hazardous materials survey prior to demolition or significant renovation of Cattlemen's Restaurant, Nimbus Winery, and bridge structures.

If lead or asbestos is found in these buildings or structures, prior to removal or renovation the County will prepare an abatement plan as part of the Task-Specific Safety Plan required under Section 12-1.01.C of the County Standard Construction Specifications. The abatement plan will provide for a California-certified asbestos consultant and California Department of Health Services–certified lead project designer

to prepare hazardous materials specifications for abatement of the ACM and LBP. This specification will be the basis for selecting qualified contractors to perform the proposed asbestos and lead abatement work. The County will retain a California-licensed asbestos abatement contractor to perform the abatement of any asbestos-containing construction materials and LBP deemed potentially hazardous. Abatement of hazardous building materials will be completed prior to any work on these structures.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE HZ-3: CONDUCT SAMPLING, TESTING, REMOVAL, STORAGE, TRANSPORTATION, AND DISPOSAL OF YELLOW TRAFFIC STRIPING ALONG EXISTING ROADWAYS**

The County will sample and test yellow traffic striping scheduled for removal to determine whether lead or chromium is present. All aspects of the project associated with removal, storage, transportation, and disposal will be conducted in strict accordance with appropriate regulations of the California Health and Safety Code Section 1532.1, and Section 13-2.09, Removal of Traffic Stripes and Pavement Markings of the County's Standard Construction Specifications (2017). Section 13-2.09 includes safety requirements such as shielding sandblasting equipment and using a vacuum to ensure grindings are contained. Traffic striping will be disposed of at a Class I disposal facility. The responsibility of implementing this measure will be outlined in the contract between the County and the construction contractor.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **MITIGATION MEASURE HZ-4: APPROPRIATELY DISPOSE OF SOILS
CONTAMINATED WITH AERIALY DEPOSITED LEAD**

Soils in the project limits along the US 50 corridor identified as having hazardous levels of ADL will be handled and disposed of in accordance with applicable Cal-OSHA requirements including a project-specific worker Health and Safety Plan and Lead Compliance Plan. Cal-OSHA standards regarding lead apply to all construction work where an employee may be exposed to lead and include notification of lead testing results; providing protective clothing and equipment; hazardous materials training; and control measures to contain lead.

Implementation and Notification (Action by Project Applicant):

1. Comply fully with the above measure.
2. Include the above measure verbatim as a Construction Note and incorporate it into all Plans and Specifications for the project, and submit one copy to the Environmental Coordinator for review and approval prior to the start of any construction work (including clearing and grubbing).

Verification (Action by the Environmental Coordinator):

1. Review the Project Plans prior to the start of construction. Approve Project Plans that are determined to be in compliance with all required mitigation.
2. Monitor compliance during periodic site inspections of the construction work.
3. Participate in any Final Inspection(s) as necessary.

☐ **NEPA AVOIDANCE, MINIMIZATION, AND MITIGATION MEASURES (AMMS)**

- ☐ A Transportation Management Plan (TMP) would be developed for use during project construction. The TMP would utilize strategies described in Caltrans' Transportation Management Plan Guidelines (TMP Guidelines) (Caltrans 2015), selected in accordance with the scale and scope of the project. The TMP Guidelines identify the general categories of public information, motorist information, incident management, construction strategies, demand management, and alternate routes or detours.

☐ **PREVENT UNAUTHORIZED USE OF STATE PARKS LAND**

Construction-related staging, equipment, and worker parking will be kept within the approved project limits. The project boundary adjacent to State Parks Land will be delineated with Environmentally Sensitive Area fencing or other visible means. No unauthorized use of State Parks land will be allowed.

☐ **MINIMIZE FUGITIVE LIGHT FROM PORTABLE SOURCES USED FOR CONSTRUCTION**

At a minimum, the construction contractor will minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights will be used, or the latest requirements in Caltrans Standard Specifications will be followed. Portable lights will be operated at the lowest allowable wattage and height and will be raised to a height no greater than 20 feet. All lights will be screened and directed downward toward work activities and away from the night sky and roadway users and highway neighbors to the maximum extent possible. Lights will not be directed toward residential land uses after 10 p.m. The number of nighttime lights used will be minimized to the greatest extent possible.

☐ **CONDUCT MANDATORY CULTURAL RESOURCES AWARENESS TRAINING FOR CONSTRUCTION PERSONNEL**

Before any ground-disturbing work occurs in the project area, a qualified archaeologist will be retained to conduct mandatory contractor/worker cultural resources awareness training for construction personnel. The awareness training will be provided to all construction personnel, including contractors and subcontractors, to brief them on the need to avoid effects on cultural resources adjacent to and within construction areas, their responsibility to report potential resources if observed, and the penalties for not complying with applicable State and Federal laws and permit requirements.

☐ **MONITOR FOR ARCHAEOLOGICAL RESOURCES DURING INITIAL GROUND DISTURBANCE**

A Native American monitor will be retained to monitor all initial ground disturbing activities (e.g., grading, excavation, tree removal). The purpose of the monitoring is to ensure that no unrecorded archaeological resources are affected by the project and to ensure that the project complies with all applicable permit requirements and agency conditions of approval. There will be tribal monitors from more than one tribe, depending on the availability of the tribes' monitors at the time of construction. It is County practice to have one paid tribal monitor at a time during construction, with the multiple tribes coordinating on the sharing of monitoring duties.

☐ **IMPLEMENT AVOIDANCE AND NOTIFICATION PROCEDURES FOR CULTURAL RESOURCES**

It is County and Caltrans' policy to avoid cultural resources whenever possible. If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find. All reasonable measures will be implemented to avoid, minimize, or mitigate further harm to the resource. If appropriate, the project proponent will notify Indian tribes or Native American groups that may attach religious or cultural significance to the affected resource.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities shall cease in any area or nearby area suspected to overlie remains, and the county coroner shall be contacted. Additionally, the Caltrans PQS will be contacted if human remains are identified. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the NAHC, which will then notify the Most Likely Descendent (MLD). The County will work with the MLD to avoid the remains, and if avoidance is not feasible, to determine the respectful treatment of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable.

☐ **IMPLEMENT BEST MANAGEMENT PRACTICES TO CONTROL RUNOFF AND DISCHARGE OF POLLUTANTS DURING PROJECT CONSTRUCTION AND OPERATION AND FOLLOW REQUIREMENTS OF PERMITTING AGENCIES AND THE STORMWATER QUALITY DESIGN MANUAL**

As part of the final design process prior to project construction, the project engineers will develop and incorporate design features or BMPs into the project design. The features selected will comply with the Sacramento County SQIP and the Sacramento Region SQDM for project areas outside of Caltrans ROW, and Caltrans SWMP and Standard Specifications for project areas within Caltrans

ROW. The features will be designed to meet all applicable water quality objectives for surface waters and groundwater contained in the Basin Plan.

For project areas outside of Caltrans ROW, the project engineers will follow the guidance in the SQDM including selecting measures from SQDM Table 3-3, Stormwater Quality Control Measure Selection Matrix, for street/road projects with new impervious areas larger than 5 acres. Measures that could be selected and implemented include source control, hydromodification control, treatment control, and low impact development measures such as vegetated swales, water quality detention basins, and bioretention planters.

The project engineers and construction contractor will ensure compliance with the requirements of Caltrans and County NPDES MS4 permits to control stormwater and non-stormwater discharges associated with project construction activities and discharges within the jurisdiction of each permit. Temporary diversion systems and dewatering operations will be implemented, as appropriate. The controls required by all applicable permits will be implemented to reduce the discharge of pollutants in stormwater discharges to the maximum extent possible, including management practices, control techniques, system design and engineering methods, and other measures as appropriate.

The project engineers and the construction contractor will ensure that the requirements of the County SQIP will be followed to reduce the discharge of pollutants to the MS4. The project engineers and construction contractor will also ensure construction activities and project implementation complies with Section 401 (Water Quality Certification) from the Central Valley Regional Water Quality Control Board and the Section 404 Permit from the Sacramento District USACE.

☐ **IMPLEMENT CALIFORNIA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATION SECTION 14-7.03**

Caltrans Standard Specification 14-7.03 mandates that within their ROW if unanticipated paleontological resources are discovered at the job site, the resources will not be disturbed, and the following actions will occur immediately:

- 1. All work will stop within a 60-foot radius of the discovery
- 2. The area will be secured
- 3. The project Engineer will be notified

Caltrans Standard Specification 14-7.03 also mandates that "if paleontological resources are discovered during construction, the project proponent will investigate the discovery and modify the dimensions of the secured area, if needed. Paleontological resources will not be moved or taken from the job site. Work will not resume within the radius of discovery until authorized."

☐ **PREPARE AND IMPLEMENT A PALEONTOLOGICAL MITIGATION PLAN**

A non-standard special provision for paleontology mitigation will be included in the construction contract special provisions section to advise the construction contractor of the requirement to cooperate with paleontological salvage. The following items will be part of the provisions:

- A qualified principal paleontologist, as defined by the Caltrans Standard Environmental Reference, will be retained to prepare and implement a final Paleontological Mitigation Plan (PMP) prior to construction. If the qualified paleontologist is not a licensed professional geologist in the State of California, then a licensed professional geologist will need to be retained to review and approve the PMP prior to construction. The preliminary PMP prepared for the project (California Department of Transportation 2017; provided in Volume 3, *Technical Studies*, or on the project website at <http://www.sacdot.com/Pages/Project-Hazel-StateRoute50.aspx>) will be updated based on final engineering design and geotechnical information.
- The geotechnical investigation conducted to support final engineering design will identify the depth and location of sensitive areas and will be used by the qualified principal paleontologist to identify locations that warrant monitoring during construction.
- The final PMP will list the proposed staff and professional qualifications.
- The qualified principal paleontologist will attend a task order meeting and conduct a site visit to review task order requirements; review plans, maps, initial site reports, and mitigation requirements; review geotechnical data, site geology and paleontological sensitivity; prepare a mitigation work plan; and prepare a Code of Safe Practices.
- The qualified principal paleontologist will schedule coordination and supervision for paleontological monitors of any salvage. Monthly progress reports will be prepared for lead agency review and comment.
- The qualified principal paleontologist may designate a paleontological monitor to be present during earthmoving activities.
- The paleontological monitor will have a college degree in paleontology or geology and at least 2 years of paleontological monitoring experience or other qualifications described by the Society of Vertebrate Paleontology (2010).
- The qualified principal paleontologist and paleontological monitor will be notified by the resident engineer or lead agency in advance of starting construction activity and will attend any safety training programs for the proposed project. Paleontological monitoring may be full-time during excavation for undercrossings, in-ground structural elements such as bridge substructures and culverts, and any other project elements requiring deep excavation. If, after 50% of the grading/excavation is completed at a particular location for the proposed project, it can be demonstrated that the level of

monitoring should be reduced for that site, the qualified principal paleontologist will amend the mitigation program (Society of Vertebrate Paleontology 2010). If pieces of heavy equipment are in use simultaneously at different locations, each location may be individually monitored.

- The qualified principal paleontologist will meet with the resident engineer and construction contractor at a preconstruction conference to develop an agreed-upon communication plan and to discuss provisions for worker safety. All project personnel will receive paleontological awareness training prior to commencement of work by the qualified principal paleontologist.
- If paleontological resources are discovered during earthmoving activities, the construction crew will immediately cease work within a 60-foot radius of the find and notify the resident engineer and the Sacramento County Office of Planning and Environmental Review. In the event paleontological resources are discovered, fossil specimens will be properly collected and sufficiently documented to be of scientific value.
- The collection and treatment actions described in the PMP will occur during the grading and construction process and after recovery of specimens if fossils are found, including sampling for microfossils, conducting paleomagnetic analysis, identifying and preparing fossils, arranging for a repository, and preparing a final report.

☐ **DEVELOP AND IMPLEMENT PLANS TO ADDRESS WORKER HEALTH AND SAFETY**

As required by Caltrans, and Federal, State, and local regulations, prior to construction, the County will employ a Certified Industrial Hygienist who will prepare a Health and Safety Plan, Lead Compliance Plan, BMP and/or injury and illness prevention plan to address worker safety when working with potentially hazardous materials (e.g., levels of protective personal equipment, emergency action plan, procedures for encountering hazardous materials) including potential ACMs, LBPs, lead or chromium in traffic stripes, ADL, and other construction-related materials within the ROW during any soil-disturbing activity. The plan will be implemented during construction. The preparation of such a plan is estimated to cost approximately \$3,500 and take three weeks to prepare.

☐ **CONDUCT SITE-SPECIFIC ASSESSMENTS AND PREPARE AND IMPLEMENT A WORK PLAN**

Prior to construction, the County will conduct additional assessments of soil, groundwater, and building materials within the proposed acquisition area of the parcels described below. In addition, prior to soil and groundwater testing, the County will prepare a work plan that detail testing locations and analytical methods. Testing locations will be similar to proposed excavation locations in order to characterize potentially excavated soils. The plan will incorporate the soil and groundwater data to ensure that soil and groundwater are stored, managed,

and disposed of appropriately and in accordance with applicable laws and regulations.

Soil and Groundwater

Assess the Chevron Service Station (APN: 069-0160-012), Nimbus Winery (APN: 069-0050-013), Aerojet Facility (APN: 072-0231-125), and UPRR ROW for possible soil and groundwater contamination. The sampling and testing of surface soils and groundwater at these sites will be analyzed for total petroleum hydrocarbons as diesel, heavy metals, petroleum hydrocarbons, polynuclear aromatic hydrocarbons, and chlorinated solvents. Drilling for soil and groundwater will be performed by OSHA-trained personnel with appropriate license (CFR 1910.120).

If soil and/or groundwater contamination is identified, the County will comply with Federal and State regulations and the Sacramento County CUPA regulatory requirements regarding the handling and disposal of hazardous wastes. These requirements include consultation with the DTSC and SWRQCB and adherence to the SWPPP. The SWPPP requirement of BMPs designed to minimize the release of hazardous materials would help reduce potential impacts. Contaminated soils not reused onsite will be disposed of at a Class I landfill facility.

If groundwater is extracted as part of dewatering, the extracted groundwater will be stored in tanks, and tested for chlorinated solvents, and either sent offsite for recycling or directed to the existing groundwater treatment system at the Aerojet facilities for disposal and treatment. This will be in addition to the pre-characterization of groundwater quality during preconstruction testing.

The estimated cost of collection and testing soil and groundwater within these parcels totals approximately \$26,000 and could take up to six weeks. It should be noted that obtaining access to the UPRR parcel could take up to six months.

Asbestos-Containing Materials and Lead-Based Paint

The Cattlemens Restaurant (APN: 069-0060-085) and Nimbus Winery (APN: 069-0050-013) buildings are likely to contain ACM and LBP in their construction materials. Various bridge components, such as the overpass, could also contain ACM. The County will conduct a hazardous materials survey prior to demolition or significant renovation of Cattlemens Restaurant, Nimbus Winery, and bridge structures. If lead or asbestos is found in these buildings or structures, prior to removal or renovation the County will prepare an abatement plan as part of the TSSP required under Section 12-1.01.C of the County Standard Construction Specifications. The abatement plan will provide for a California-certified asbestos consultant and California Department of Health Services–certified lead project designer to prepare hazardous materials specifications for abatement of the ACM and LBP. This specification will be the basis for selecting qualified contractors to

perform the proposed asbestos and lead abatement work. The County will retain a California-licensed asbestos abatement contractor to perform the abatement of any asbestos-containing construction materials and LBP deemed potentially hazardous. Abatement of hazardous building materials will be completed prior to any work on these structures.

The estimated costs for ACM testing of the Cattlemens Restaurant, Nimbus Winery, and the bridge overpass ranges from \$10,000 to \$12,000 and would take approximately three weeks to complete. Preparation of the abatement plan is estimated to cost \$7,000. Abatement by a certified contractor and oversight by certified inspector is estimated at \$12,000 per building if ACM/LBP is present and would take approximately 2-3 weeks per structure.

☐ **CONDUCT SAMPLING, TESTING, REMOVAL, STORAGE, TRANSPORTATION, AND DISPOSAL OF YELLOW TRAFFIC STRIPING ALONG EXISTING ROADWAYS**

The County will sample and test yellow traffic striping scheduled for removal to determine whether lead or chromium is present. All aspects of the project associated with removal, storage, transportation, and disposal will be conducted in strict accordance with appropriate regulations of the California Health and Safety Code Section 1532.1, and Section 13-2.09, *Removal of Traffic Stripes and Pavement Markings* of the County's Standard Construction Specifications (2017). Section 13-2.09 includes safety requirements such as shielding sandblasting equipment and using a vacuum to ensure grindings are contained. Traffic striping will be disposed of at a Class I disposal facility. The responsibility of implementing this measure will be outlined in the contract between the County and the construction contractor.

Testing traffic striping would take approximately 2-3 weeks and cost approximately \$2,500. Removal, storage, transport and disposal of traffic striping is estimated to be between \$4,000 and \$10,000 if hazardous levels of lead and/or chromium are present and would occur as needed during construction.

☐ **APPROPRIATELY DISPOSE OF SOILS CONTAMINATED WITH ADL**

Soils in the project limits along the US 50 corridor identified as having hazardous levels of ADL will be handled and disposed of in accordance with applicable CalOSHA requirements including a project specific worker Health and Safety Plan and Lead Compliance Plan. CalOSHA standards regarding lead apply to all construction work where an employee may be exposed to lead and include notification of lead testing results; providing protective clothing and equipment; hazardous materials training; and control measures to contain lead.

☐ **IMPLEMENT CALIFORNIA DEPARTMENT OF TRANSPORTATION
STANDARD SPECIFICATION SECTION 14**

Construction activities within areas under Caltrans control are subject to requirements found in the *Standard Specifications* (California Department of Transportation 2018). To control the generation of construction-related PM10 emissions, the project proponent will follow the following applicable policies and procedures outlined in Caltrans Standard Specifications. Standard Specification Section 14-9.02, Air Pollution Control, requires compliance with air district rules, regulations, ordinances, and statutes that apply to work performed under the contract, including air pollution control rules, regulations, ordinances, and statutes provided in Government Code Section 11017 (Public Contract Code 10231). Standard Specification Section 10-5 addresses dust control requirements by preventing and alleviating dust by means of Standard Specification Section 18 (applying dust palliatives), Standard Specification Section 13-5 (applying temporary soil stabilization), and Standard Specification Section 13-4.03C(3) (managing material stockpiles). In addition, Standard Specification Section 14-11.04 addresses dust control associated with material containing hazardous waste or contamination.

☐ **IMPLEMENT SMAQMD'S BASIC CONSTRUCTION EMISSION CONTROL
PRACTICES (BEST MANAGEMENT PRACTICES)**

Measures to control and reduce fugitive dust from SMAQMD's Basic Construction Emission Control Practices (Sacramento Metropolitan Air Quality Management District 2017) will be implemented to the extent practicable when the measures have not already been incorporated and do not conflict with requirements of Caltrans' Standard Specifications, Special Provisions, the National Pollutant Discharge Elimination System permit, and the Biological Opinions, Clean Water Act Section 404 permit, Clean Water Act Section 401 Certification, and other permits issued for the project. The project-proponent will implement SMAQMD's basic construction emission control practices, including but not limited to the following measures.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least 2 feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour.

- Pave all roadways, driveways, sidewalks, and parking lots as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (required by 13 CCR 2449(d)(3) and 2485). Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated.

☐ **UTILIZE MODEL YEAR 2010 OR NEWER ENGINES TO REDUCE CONSTRUCTION-RELATED EMISSIONS FROM ON-ROAD VEHICLES**

All on-road trucks will consist of model year 2010 or newer engines. Construction contractors will provide documentation to the County of efforts to secure such a fleet. The contractors will keep a written record of equipment usage during project construction for each piece of equipment and provide the County with annual reports documenting compliance. These reports will be submitted to SMAQMD. In the event Construction contractors cannot secure all 2010 engine model year or newer on-road trucks for the project, an off-site mitigation fee program, as analyzed in the Air Quality Study Report (Volume 3 Technical Studies), or SMAQMD Off-site Construction Mitigation Fee Program shall be implemented.

The reporting plan shall follow SMAQMD's Enhanced On-site Exhaust Controls mitigation language. The plan will have at least two components: an initial report submitted before construction and a final report submitted at the completion of the job, phase or calendar year, as pre-arranged with SMAQMD staff and documented in the approval letter, to demonstrate continued project compliance. Additionally, the below requirements shall be met:

- Submit the initial report at least four (4) business days prior to construction activity using the SMAQMD's Construction Mitigation Tool (<http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation>)
- Provide project information and construction company information

Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used.

☐ **UTILIZE CLEAN DIESEL-POWERED EQUIPMENT DURING CONSTRUCTION TO CONTROL CONSTRUCTION-RELATED NO_x EMISSIONS**

The County will ensure that all off-road diesel-powered equipment used during construction is equipped with EPA Tier 4 Final engines. The County will submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 8 or more hours during any phase of the construction project. In the event Construction contractors cannot secure all 2010 engine model year or newer on-road trucks and all Tier 4 Final off-road equipment for this entire project, an off-site mitigation fee program, as analyzed in the Air Quality Study Report (Volume 3 Technical Studies), or SMAQMD Off-site Construction Mitigation Fee Program shall be implemented.

The inventory will include the following:

- CARB equipment identification number, equipment type, horsepower rating, engine model year (Tier 4 Final), and projected hours of use for each piece of off-road equipment.
- Current Certificate of Reported Compliance for CARB's In-Use Off-Road Regulation for each construction company working on the project.
- Anticipated construction timeline including start date, and name, phone number and email address of the project manager and on-site foreman.

The construction inventory will be submitted to the SMAQMD at least 4 business days prior to the use of subject equipment. The reporting plan shall comply with the requirements as outlined in Mitigation Measure AQ-2.

☐ **MINIMIZE NOISE EFFECTS FROM CONSTRUCTION**

Standard Caltrans procedures include implementation of the following measures to minimize the temporary noise effects from construction.

- All equipment will have sound-control devices that are no less effective than those provided on the original equipment. No equipment will have an unmuffled exhaust.
- The construction contractor will implement appropriate additional noise measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents in advance of construction work, and installing acoustic barriers around stationary construction noise sources.

☐ **APPLY QUIET PAVEMENT OR CONSTRUCT NOISE BARRIER ALONG AEROJET ROAD (FOR ALTERNATIVE 2 ONLY)**

The County will implement one of two mitigation options.

Option 1. Apply quiet pavement to the US 50 mainline from just west of Hazel Avenue to 0.25 mile east of Aerojet Road, at a minimum. The pavement will be designed to provide a minimum of 4 dB of noise reduction relative to standard pavement that would otherwise be used. Applying quiet pavement to the off-ramp only and exclusive of US 50 would have no noise-reducing effect. As such, quiet pavement will be applied to both the US 50 mainline and Aerojet Road to achieve the required noise level reduction.

Option 2. Construct a noise barrier at a height of 14 feet along Aerojet Road in the location shown on EIR/EA Figure 2.14-5.

It may not be possible to apply quiet pavement to the US 50 mainline given that it is located within State ROWs and regulated by Caltrans. Therefore, if Option 1 is determined not to be feasible, the County will implement Option 2.

☐ **NOISE ABATEMENT EVALUATION UNDER 23 CFR 772**

☐ **INSTALL ORANGE CONSTRUCTION FENCING BETWEEN THE CONSTRUCTION AREA AND ADJACENT SENSITIVE BIOLOGICAL RESOURCES**

The County and/or their contractor will install orange construction fencing between the construction area and adjacent sensitive biological resource areas. Sensitive biological resources that occur adjacent to the construction area that could be directly affected by the project include natural communities of special concern; fairy shrimp, valley elderberry longhorn beetle and western pond turtle habitats; nest sites of Swainson's hawk, yellow-breasted chat, tricolored blackbird, song sparrow, and other migratory birds; roosting bats; and protected trees to be avoided.

Barrier fencing around sensitive areas will be installed as one of the first orders of work and prior to equipment staging. Preliminary fencing locations are included in the draft project design drawings and labeled as Environmentally Sensitive Areas. The locations of the fencing will be updated or confirmed as part of final design, prior to construction. Before construction begins, the construction contractor will work with the project engineer and a resource specialist to identify the locations for the orange construction fencing, and will place stakes around the sensitive resource sites to indicate these locations. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans and described in the specifications. Barrier fencing will be installed before construction activities are initiated, maintained throughout the construction period, and removed after completion of construction.

☐ **CONDUCT ENVIRONMENTAL AWARENESS TRAINING FOR CONSTRUCTION EMPLOYEES**

The County or their contractor will retain a qualified biologist to conduct environmental awareness training for construction crews before project implementation. The awareness training will be provided to all construction personnel and will brief them on the need to avoid effects on sensitive biological resources (e.g., native trees, natural communities of special concern, and special-status species habitats in and adjacent to the construction area). The education program will include a brief review of the special-status species with the potential to occur in the BSA (including their life history, habitat requirements, and photographs of the species). The training will identify the portions of the BSA in which the species may occur, as well as their legal status and protection. The program also will cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on these species during project implementation. This will include the steps to be taken if a sensitive species is found within the construction area (i.e., notifying the crew foreman, who will call a designated biologist). In addition, construction employees will be educated about the importance of controlling and preventing the spread of invasive plant infestations. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions will be provided to each crew member. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs will be conducted for appropriate new personnel as they are brought on the job during the construction period.

☐ **RETAIN A QUALIFIED BIOLOGIST TO CONDUCT MONITORING DURING CONSTRUCTION IN SENSITIVE HABITATS**

The County or their contractor will retain a qualified biologist to monitor all construction activities that involve ground disturbance (e.g., vegetation removal, grading, excavation, road construction) within or adjacent to environmentally sensitive areas (e.g., wetlands, streams, riparian vegetation, special-status species habitat, active bird nests, and adjacent areas within 250-feet or where indirect effects are possible). The purpose of the monitoring is to ensure that avoidance and minimization measures are properly implemented to protect sensitive biological resources and to ensure that the project complies with all applicable permit requirements and agency conditions of approval. The biologist will inspect the fencing around environmentally sensitive areas regularly and will communicate any issues to the resident engineer or construction foreman. The contractor will be responsible for maintaining the fence during construction and ensuring that no construction personnel, equipment, or runoff/sediment from the construction area enters environmentally sensitive areas. The monitor will complete daily logs, and a final monitoring report will be prepared at the end of

each construction season that will be submitted to the County and other overseeing agencies (i.e., CDFW, USFWS, and USACE), as appropriate.

☐ **PROTECT NATIVE TREES DURING CONSTRUCTION**

This measure applies to all native oaks that have a diameter at breast height (dbh) of at least 6 inches, or if it has multiple trunks of less than 6 inches each, a combined dbh of at least 10 inches.

With the exception of the trees slated for removal that will be mitigated for through compensatory measures, all native oak trees in the project area, all portions of adjacent off-site native oak trees that have driplines that extend onto the project area, and all off-site native oak trees that may be impacted by utility installation and/or improvements associated with this project, will be preserved and protected as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb shall constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs which make up the dripline does not change the protected area.
2. Chain link fencing or a similar protective barrier shall be installed one foot outside the driplines of the native trees prior to initiating project construction, in order to avoid damage to the trees and their root system.
3. No signs, ropes, cables (except cables which may be installed by a certified arborist to provide limb support) or any other items shall be attached to the native trees.
4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities shall be driven, parked, stockpiled or located within the driplines of the native trees.
5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the native trees. Where this is necessary, an ISA Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines.
6. All underground utilities and drain or irrigation lines shall be routed outside the driplines of native trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.
7. If temporary haul or access roads must pass within the driplines of oak trees, a roadbed of six inches of mulch or gravel shall be created to protect the root zone. The roadbed shall be installed from outside of the dripline and while the

soil is in a dry condition, if possible. The roadbed material shall be replenished as necessary to maintain a six-inch depth.

8. Drainage patterns on the site shall not be modified so that water collects or stands within, or is diverted across, the dripline of oak trees.
9. No sprinkler or irrigation system shall be installed in such a manner that it sprays water within the driplines of the oak trees.
10. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute (ANSI) A300 pruning standards and the International Society of Arboriculture (ISA) "Tree Pruning Guidelines".
11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials shall be kept two (2) feet away from the base of the trunk. The only plant species which shall be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.
12. Any fence/wall that will encroach into the dripline protection area of any protected tree shall be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers shall be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts to the trees.
13. For a project constructing during the months of June, July, August, and September, deep water trees by using a soaker hose (or a garden hose set to a trickle) that slowly applies water to the soil until water has penetrated at least one foot in depth. Sprinklers may be used to water deeply by watering until water begins to run off, then waiting at least an hour or two to resume watering (provided that the sprinkler is not wetting the tree's trunk. Deep water every 2 weeks and suspend watering 2 weeks between rain events of 1 inch or more.

☐ **COMPENSATE FOR THE PERMANENT AND TEMPORARY LOSS OF
FREMONT COTTONWOOD-OAK WOODLAND**

The County and/or Easton will compensate for the permanent loss of 2.97 acres and temporary loss of .19 acres of Fremont cottonwood-oak woodland at a minimum ratio of 1:1 (1 acre planted for every 1 acre permanently affected). The loss of most of the Fremont cottonwood-oak woodland habitat in the project area, which is located near the intersection of Folsom Boulevard and Nimbus Road, has been previously mitigated as part of Phase 2 of the Easton Project (County of Sacramento 2008). Figures 2.16-2 and 2.16-3 show the areas of effect and the area that has been previously mitigated for Phase 2 of the Easton Project. For the proposed project, compensation would only be required for 0.90 acre of the direct impacts.

As part of the woodland mitigation, compensation may include either compensation for the woodland habitat at a minimum ratio of 1:1 as indicated above and/or compliance with Mitigation Measure BIO-17 and/or Mitigation Measure BIO-18.

☐ **COMPENSATE FOR THE PERMANENT AND TEMPORARY LOSS OF VALLEY FOOTHILL RIPARIAN WOODLAND**

The County will compensate for the permanent and temporary loss of valley foothill riparian habitat (see Figures 2.16-2 and 2.16-3, Sheet 4) by planting a minimum of 0.06 acre of valley foothill riparian woodland species (a minimum ratio of 1:1 [1 acre planted for every 1 acre permanently and temporarily affected]) on-site or off-site and/or purchasing mitigation bank credits equivalent to a minimum of 0.06 acre of valley foothill riparian habitat.

On-site compensation will be used to the maximum extent practicable, but off-site compensation and/or purchase of mitigation bank credits may be needed to achieve no net loss of existing in-kind riparian habitat. Each of these options is discussed below.

- Riparian habitat restoration and/or enhancement on-site or off-site should occur in the same year construction is completed. For on-site or off-site plantings, the County will prepare a mitigation planting plan, including a species list and number of each species, planting locations, and maintenance requirements. Plantings will consist of cuttings taken from local plants or plants grown from local material. Planted species for the mitigation plantings will be similar to those in and adjacent to the project area and will include native species, such as white alder, Fremont cottonwood, valley oak, black walnut (*Juglans hindsii*), Oregon ash (*Fraxinus latifolia*), boxelder (*Acer negundo*), and black willow (*Salix gooddingii*). All plantings will be fitted with exclusion cages or other suitable protection from herbivory until plantings are established. Plantings will be irrigated for up to 3 years or until established. Plantings will be monitored annually for 3 years or as required in the project permits. If 75% of the plants survive at the end of the monitoring period, the revegetation will be considered successful. If the survival criterion is not met at the end of the monitoring period, planting and monitoring will be repeated after mortality causes have been identified and corrected.
- The County will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The amount to be paid will be the fee that is in effect at the time the fee is paid. Replacement riparian habitat will include tree species that would support nesting Swainson's hawk (i.e., oak, cottonwood) and will occur within the range of nesting Swainson's hawk within the Sacramento Valley.

Approval of riparian mitigation activities is subject to Notification that would require CDFW-approved compensatory mitigation to offset impacts. Likewise, to the

extent offsite credits are utilized, the mitigation should occur at a CDFW-approved mitigation or conservation bank.

☐ **COMPENSATE FOR LOSS OF WETLANDS AND NON-WETLAND WATERS OF THE UNITED STATES/WATERS OF THE STATE**

The County will compensate for the permanent fill of waters of the United States/waters of the State (a direct impact associated with roadway and interchange construction) in two wetland habitat types, emergent wetland and seasonal wetland, and in two non-wetland waters type, perennial drainage and ephemeral drainage. The minimum wetland compensation ratio to ensure no net loss of wetland or drainage functions and values will be 1:1 (1 acre of habitat credit for every 1 acre of permanent impact). The final compensation ratio will be approved by USACE. The County will compensate for permanent loss of wetlands and non-wetland waters through one or more of the following mitigation options:

- Purchase habitat credits from a USACE-approved mitigation bank with service areas for Sacramento County, such as the Cosumnes Floodplain Mitigation Bank or Elsie Gridley Mitigation Bank, and provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The amount to be paid will be according to the fee schedule that is in effect at the time the fee is paid. The mitigation will be approved by USACE and may be modified during the permitting process.
- Pay into the National Fish and Wildlife Foundation Sacramento District In-Lieu Fee Program.

Temporarily disturbed wetlands and non-wetland waters will be returned to preconstruction condition following construction. The County also will implement the conditions and requirements of State and Federal permits that will be obtained for the proposed project. Approval of wetland mitigation activities is subject to Notification that would require CDFW-approved compensatory mitigation to offset impacts. Likewise, to the extent offsite credits are utilized, the mitigation should occur at a CDFW-approved mitigation or conservation bank.

☐ **IMPLEMENT BMPs TO PROTECT WATER QUALITY AND PREVENT EROSION AND SEDIMENTATION IN DRAINAGES AND WETLANDS**

☐ **PERFORMANCE OF ONE-TIME PRE-CONSTRUCTION PLANT SURVEY**

A one-time pre-construction plant survey shall be performed during the appropriate blooming period for all special-status plant species with potential to occur that may be impacted within the project site. If the survey results are negative, no further action by Permittee is needed. If the survey finds that any special-status plant species are present, Permittee shall consult with CDFW on the appropriate action and the inclusion of any additional measures.

☐ **DESIGN AND IMPLEMENT WATER CONVEYANCE SYSTEMS THAT MAINTAIN HYDROLOGY OF AND PREVENT CONTAMINANTS FROM ENTERING SUITABLE VERNAL POOL BRANCHIOPOD HABITAT**

Concentrated flow conveyance systems identified for the proposed project may include roadside ditches, biofiltration swales, curb and gutters, dikes, overside drains, and culverts. Water conveyance systems surrounding suitable vernal pool branchiopod habitat in the project area will be evaluated, designed, and installed to maintain the existing hydrology of the four potential seasonal wetlands (see Figure 2.16-1, Sheet 2) that provide potential habitat for vernal pool branchiopods.

☐ **CONDUCT PRECONSTRUCTION SURVEYS FOR WESTERN POND TURTLE AND MONITOR INITIAL IN-WATER WORK**

To avoid potential injury or mortality of western pond turtles, the County will retain a qualified wildlife biologist who is CDFW-approved to capture and relocate turtles. The biologist will conduct a preconstruction survey for western pond turtles within 24 hours of the start of construction and will survey Alder Creek and the adjacent riparian and ruderal habitat within the construction area. If in-water work does not start immediately, the biologist will return to the construction site immediately prior to the start of in-water work (i.e., dewatering, vegetation removal, or any other activities in the creek) to conduct another preconstruction survey. The biologist will remain on-site until initial in-water work is complete. If a turtle becomes trapped during initial in-water work, the biologist will relocate the individual to suitable aquatic habitat upstream of the construction area (the area downstream of the construction area is not accessible because of US 50). For the remainder of construction, the biologist will remain on-call in case a turtle is discovered. The construction crew will be instructed to notify the crew foreman, who will contact the biologist if a turtle is found trapped within the construction area. Work in the area where the turtle is trapped will stop until the biologist arrives and removes and relocates the turtle. The biologist will report their activities to the County and CDFW within 1 day of relocating any turtle.

☐ **RESTORE TEMPORARILY DISTURBED RUDERAL HABITAT**

Upon project completion, the County will restore all temporarily disturbed ruderal habitat (1.92 acres under all alternatives) to pre-project or better conditions. To the extent feasible, native grasses and forbs will be used to reseed disturbed areas.

☐ **CONDUCT VEGETATION REMOVAL DURING THE NON-BREEDING SEASON OF NESTING MIGRATORY BIRDS**

To the maximum extent feasible, vegetation removal (trees, shrubs, and ground vegetation) will occur during the non-breeding season for most migratory birds (generally between September 16 and January 31). This timing is highly preferable because if an active nest is found during preconstruction surveys in a

tree (or other vegetation) that would be removed by project construction, the tree (or other vegetation) cannot be removed until the end of the nesting season, which could delay construction. If vegetation cannot be removed between October and January, or if ground cover re-establishes in areas where vegetation has been removed, the affected area must be surveyed for nesting birds, as discussed in the following measures: *Conduct Focused Surveys for Nesting Swainson's Hawk and White-Tailed Kite Prior to Construction and Implement Protective Measures during Construction*, and *Conduct Preconstruction Surveys for Nesting Migratory Birds*. To minimize potential impacts on roosting bats, tree trimming and removal should be conducted from September 1 through October 15 (see the measure: *Identify Suitable Roosting Habitat for Bats and Implement Avoidance and Protective Measures*). Tree trimming and removal during this timeframe would avoid or minimize impacts on nesting birds and roosting bats.

☐ **CONDUCT FOCUSED SURVEY FOR NESTING WHITE-TAILED KITE PRIOR TO CONSTRUCTION**

For each year in which construction, grading, or project-related improvements are to commence between February 1 and September 15, a focused survey for white-tailed kite nests on the site and within 0.25 mile of the site will be conducted by a qualified biologist no greater than 15 days prior to the start of construction work (including clearing and grubbing). If White-tailed kites are found, the qualified Biologist shall develop a species-specific avoidance plan for CDFW review and approval. Any measures approved in the plan will be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, nothing further will be required. If a lapse in project-related activities of 14 days or longer occurs, another focused survey is required before Project activities can be reinitiated.

If impacts are identified during the course of the project, project personnel shall fully avoid impacts to the species and immediately notify CDFW if White-tailed kite is detected during Project activities.

☐ **CONDUCT FOCUSED SURVEY FOR NESTING SWAINSON'S HAWK PRIOR TO CONSTRUCTION**

If equipment staging, site preparation, grading, excavation or other project-related activities are scheduled during the Swainson's hawk nesting season (typically March 1 through September 15) surveys for active nests of such birds shall be conducted by a qualified biologist in accordance with the typical survey protocol: Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000). Surveys shall be conducted at the appropriate radius and time periods listed in the survey protocol. Since the project spans over multiple years, if there is a lapse of more than 15 days in construction, a new survey shall be conducted for each nesting season to capture any new Swainson's hawk nests that may be established.

If an active Swainson's hawk nest is found during project surveys, the qualified biologist shall consult with CDFW and demonstrate compliance with CESA. If during consultation it is determined that implementation of the project as proposed may result in take of Swainson's hawk, the project may seek related take authorization as provided by the Fish and Game Code.

☐ **CONDUCT PRECONSTRUCTION SURVEYS FOR NESTING MIGRATORY BIRDS**

In each year in which project activities would occur during the breeding season (generally February 1 through September 15), the County will retain a qualified wildlife biologist with knowledge of the relevant species to conduct nesting surveys 15 days or less before the start of construction. Surveys will include a search of all trees and shrubs, marsh, wetland, manmade structures, and ruderal vegetation that provide suitable nesting habitat in the project area, including staging and stockpile areas. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines: ii) 500 feet for small raptors such as accipiters: iii) 1,000 feet for larger raptors such as buteos. If no active nests are detected during these surveys, no additional measures are required. If a lapse in project-related activities of 14 days or longer occurs, another focused survey will be required before project activities can be reinitiated.

If an active nest is found in the survey area, a no-disturbance buffer will be established with fences or flags around the nest buffer area to avoid disturbance or destruction of the site until the end of the breeding season (September 15) or until a qualified wildlife biologist determines that the young have fledged and moved out of the project area (this date varies by species). The extent of these buffers will be determined by the biologist in coordination with USFWS and CDFW and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species. If nesting birds are showing signs of distress or disruptions to nesting behaviors or the buffer is otherwise not feasible, the qualified wildlife biologist, in coordination with USFWS and CDFW shall determine the appropriate change in response (e.g. buffer increase, temporary construction stop, etc.) until no further interruptions to breeding behavior are detectable.

☐ **IDENTIFY SUITABLE ROOSTING HABITAT FOR BATS AND IMPLEMENT AVOIDANCE AND PROTECTIVE MEASURES**

To minimize potential impacts on tree roosting bats, tree trimming and removal should be conducted between September 1 and October 15, which corresponds to a time period when bats have not yet entered torpor or be caring for nonvolant (non-flying) young. Trimming or removing trees during this timeframe would also avoid impacts on nesting birds.

If tree removal or trimming cannot be conducted between September 1 and October 15, qualified biologists will examine trees for suitable bat roosting habitat before tree removal or trimming. High-quality habitat features (e.g., large tree cavities, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch) will be identified and the area around these features searched for bats and bat signs (e.g., guano, culled insect parts, staining). Riparian woodland and stands of mature broadleaf trees are considered potential habitat for solitary foliage-roosting bat species. Because signs of bat use are not easily found, and trees cannot be completely surveyed for bat roosts, the protective measures listed below will be implemented for trees containing high-quality habitat features.

- Removal or disturbance of trees providing bat roosting habitat will be avoided between April 1 and August 31 (the maternity period) to avoid effects on pregnant females and active maternity roosts (whether colonial or solitary).
- If a maternity roost is found, whether solitary or colonial, that roost will remain undisturbed until September 1 or until a qualified biologist has determined the roost is no longer active.
- Qualified biologists will monitor tree trimming/removal of the habitat. Trees should be trimmed or removed over two consecutive days. The first day (in the afternoon), limbs and branches should be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures should be avoided, and only branches or limbs without those features should be removed. On the second day, the entire tree should be removed. Biologists should search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW. The biologist will prepare a biological monitoring report, which will be provided to the County and CDFW.
- Habitat assessment and survey by a qualified bat biologist
- Examining all suitable habitats prior to project implementation (including tree removal, tree trimming, or other disturbance). BIO-15 should include also habitats in manmade structures (e.g. bridge, culvert, etc.)
- Including development of a Bat Avoidance and Minimization Plan (Bat Plan) in the event that bats are utilizing the Project area during Project activities. The Bat Plan should include 1) Project-specific measures to avoid and minimize impacts to roosting bats in and near the areas that will be disturbed by Project activities 2) monitoring by a qualified bat biologist to oversee bat behavior and the avoidance and minimizations measures designed to protect nesting/roosting bats 3) exclusion measures for the habitat that will be removed or made inaccessible by the Project and 4) discussion of available alternative habitat (both temporary and permanent).

All appropriate exclusionary measures should be implemented prior to the bridge construction during the period of March 1 to April 15 or August 31 to October 15. Potential avoidance efforts may include exclusionary blocking or filling potential roosting cavities with foam or steel wool, visual monitoring,

and staging Project work to avoid bats. If bats are known to use manmade structures, exclusion netting should not be used to avoid entanglement.

☐ **FENCE ELDERBERRY SHRUBS TO BE PROTECTED**

Elderberry shrubs/clusters within 165 feet of the construction area that will not be removed will be protected during construction. A qualified biologist (i.e., with elderberry/valley elderberry longhorn beetle experience) will mark the elderberry shrubs and clusters that will be protected during construction. Orange construction barrier fencing will be placed at the edge of the buffer areas established for each shrub or cluster. The buffer area distances will be proposed by the biologist and approved by USFWS. No construction activities will be permitted in the buffer zone other than those activities necessary to erect the fencing. Signs will be posted along fencing for the duration of construction and will contain the following information.

This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.

Temporary fences around the elderberry shrubs will be installed as the first order of work. Temporary fences will be furnished, constructed, maintained, and later removed, as shown on the plans, as specified in the special provisions, and as directed by the resident engineer. Temporary fencing will be 4 feet high, commercial-quality woven polypropylene, and orange in color.

Buffer area fences around elderberry shrubs will be inspected periodically by a qualified biologist until project construction is complete or until the fences are removed, as approved by the biological monitor and the resident engineer. The contractor will be responsible for maintaining the buffer area fences around elderberry shrubs throughout construction. Biological inspection reports will be provided to the County and USFWS.

☐ **COMPENSATE FOR DIRECT EFFECTS ON VALLEY ELDERBERRY LONGHORN BEETLE AND ITS HABITAT**

Before construction begins, the County will compensate for direct effects on valley elderberry longhorn beetle by transplanting shrubs that cannot be avoided to a USFWS-approved conservation bank. The County will also purchase credits at the approved conservation bank in accordance with ratios shown in Table 2.20-9 for the alternative selected. Compensation ratios shown are for shrub-level impact compensation (U.S. Fish and Wildlife Service 2017).

Table 2.20-9. Compensation for Direct Effects on Elderberry Shrubs by Alternative

Alternative	Number of Elderberry Shrubs Effected	Compensation Ratio (Non-Riparian)	Number of Conservation Credits Required
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1	3	1:1	3
1A	3	1:1	3
2	4	1:1	4

The relocation of the elderberry shrubs will be conducted according to USFWS-approved procedures outlined in the *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (U.S. Fish and Wildlife Service 2017).

Elderberry shrubs within the project construction area that cannot be avoided will be transplanted during the plant's dormant phase (November through the first 2 weeks of February). A qualified biological monitor will remain on-site while the shrubs are being transplanted.

☐ **AVOID AND MINIMIZE THE SPREAD OF INVASIVE PLANT SPECIES DURING PROJECT CONSTRUCTION**

The County will require its contractor to avoid and minimize the introduction of new invasive plants and the spread of invasive plants previously documented in the project area. BMPs that may be used, though not limited to, include the following.

- Retain all fill material onsite to prevent the spread of invasive plants to uninfested areas.
- Use a weed-free source for project materials (e.g., straw wattles for erosion control that are weed-free or contain less than 1% weed seed).
- Prevent invasive plant contamination of project materials during transport and when stockpiling (e.g., by covering soil stockpiles with a heavy-duty, contractor-grade tarpaulin).
- Use sterile wheatgrass seed and native plant stock during revegetation.
- Revegetate or mulch disturbed soils within 30 days of completion of ground-disturbing activities to reduce the likelihood of invasive plant establishment.
- Decontaminate project equipment and gear
- Establish a vehicle wash station
- Ensure straw waddles do not contain plastic monofilament netting that may entrap wildlife or fail to degrade

The goal for implementation of these BMPs is to minimize the disturbance and transport of soil and vegetation to the greatest extent feasible to complete the work. Detailed information about implementing these BMPs is available in the Cal-IPC publication *Preventing the Spread of Invasive Plants: Best Management Practices for Transportation and Utility Corridors* (California Invasive Plant Council 2012).

☐ **CONSERVATION MEASURES FROM THE BIOLOGICAL OPINION**

In addition to implementing Caltrans' standard BMPs throughout the proposed project for the duration of construction, including erosion and sediment control, the following measures to minimize effects to the beetle are proposed. The purchasing of beetle conservation credits referenced in Conservation Measure #1 pertains to the three elderberry shrubs that will be removed and transplanted. Conservation Measures #2-5 pertain to the remaining 10 elderberry shrubs that will not be removed during construction activities.

1. The three impacted elderberry shrubs will be mitigated for using the *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (Desmocerus californicus dimorphus)* (Service 2017). The three elderberry shrubs will be transplanted to a Service-approved beetle conservation bank in accordance with the framework. These elderberry shrubs will be compensated utilizing shrub-level impact compensation. Mitigation requirements will be satisfied by purchasing three (3) credits from a Service-approved beetle conservation bank.
2. The construction limits will be clearly identified prior to construction and all areas containing elderberry shrubs to be avoided during construction will be fenced or flagged off.
3. Retain a Service-approved biologist to conduct monitoring during construction in sensitive habitats.
4. The Service-approved biological monitor will conduct environmental awareness training for construction employees.
5. For elderberry shrubs occurring within or immediately adjacent to work locations, 20-foot avoidance buffers will be established around the driplines of the shrub to help protect the shrubs and their root zones during project activities. The avoidance buffers will be maintained for the duration of work activities in the area.

☐ **REASONABLE AND PRUDENT MEASURES**

All necessary and appropriate measures to avoid or minimize effects on the beetle resulting from implementation of this project have been incorporated into the project's proposed conservation measures. Therefore, the Service believes the following reasonable and prudent measure is necessary and appropriate to minimize incidental take of the beetle:

- 1.) All conservation measures, as described in the biological assessment and restated here in the *Project Description* section of this biological opinion, shall be fully implemented and adhered to. Further, this reasonable and prudent measure shall be supplemented by the terms and conditions below.

☐ **TERMS AND CONDITIONS**

In order to be exempt from the prohibitions of section 9 of the Act, Caltrans must ensure compliance with the following terms and conditions, which implement the reasonable and prudent measure described above. These terms and conditions are nondiscretionary.

1. Caltrans will include full implementation and adherence to the conservation measures as a condition of any permit or contract issued for the project.
2. Caltrans will provide a copy of the completed bill of sale and payment receipt to the Service upon the purchase of beetle conservation credits.
3. In order to monitor whether the amount or extent of incidental take anticipated from implementation of the proposed project is approached or exceeded, Caltrans will adhere to the following reporting requirement. Should this anticipated amount or extent of incidental take be exceeded, Caltrans must immediately reinitiate formal consultation, as per 50 CFR §402.16.
 - a. For those components of the action that will result in habitat degradation or modification whereby incidental take in the form of harm is anticipated, Caltrans will provide a precise accounting of the elderberry shrubs impacted to the Service after the completion of construction. This report will also include any information about changes in project implementation that result in habitat disturbance not described in the *Description of the Action* and not analyzed in this biological opinion.

**BEFORE THE BOARD OF SUPERVISORS
OF THE COUNTY OF SACRAMENTO**

Control No. 2011-70062

Re: Hazel Avenue/U.S. 50 Interchange Project))
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**CEQA FINDINGS OF FACT
AND STATEMENT OF
OVERRIDING
CONSIDERATIONS; PLAN
CONSISTENCY FINDINGS**

**CEQA FINDINGS OF FACT, STATEMENT OF OVERRIDING CONSIDERATIONS
AND PLAN CONSISTENCY FINDINGS**

I. INTRODUCTION

The Final Environmental Impact Report/Environmental Assessment (“FEIR/EA”) prepared for the Hazel Avenue/U.S. 50 Interchange Project (“Project”) addresses the environmental effects associated with the Project. These Findings of Fact and Statement of Overriding Considerations have been prepared to comply with the requirements of the California Environmental Quality Act (“CEQA”) (California Public Resources Code section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, title 14, section 15000 et seq.).

II. DEFINITIONS

“Applicant” means Sacramento County, Transportation Department.

“BMP” or “BMPs” means Best Management Practices.

“Board” means the Board of Supervisors of the County of Sacramento.

“CDFW” means the California Department of Fish and Wildlife.

“CEQA” means the California Environmental Quality Act.

“County” means County of Sacramento.

“dB” means decibels.

“dbh” means diameter at breast height.

“DEIR/EA or “Draft EIR/EA” means the Draft Environmental Impact Report and Environmental Assessment for the Project (February 13, 2020).

“DWR” means the County of Sacramento, Department of Water Resources.

“EIR” means Environmental Impact Report.

“Environmental Coordinator” means the Environmental Coordinator for the County of Sacramento.

“FEIR/EA/” or “Final EIR/EA” means the Final Environmental Impact Report and Environmental Assessment for the Project (July 14, 2020).

“Findings” means this Findings of Fact and Statement of Overriding Considerations.

“General Plan” means the Sacramento County 2030 General Plan, adopted November 2011.

“ $L_{\max}$ ” means maximum noise level.

“MMRP” means the Mitigation Monitoring and Reporting Program.

“NOP” means the Notice of Preparation.

“ NO_x ” means oxides of nitrogen.

“Planning and Environmental Review” means the County of Sacramento, Office of Planning and Environmental Review.

“ $\text{PM}_{2.5}$ ” means particulate matter 2.5 microns in diameter or less.

“ PM_{10} ” means particulate matter 10 microns in diameter or less.

“Project” means the Hazel Avenue/U.S. 50 Interchange Project.

“RWQCB” means the California Regional Water Quality Control Board, Central Valley.

“ROG” means reactive organic gas.

“SMAQMD” means the Sacramento Metropolitan Air Quality Management District.

“USACE means the United States Army Corps of Engineers.

III. PROJECT DESCRIPTION

Project Location and Setting

The project is located at the existing Hazel Avenue/US 50 interchange within Sacramento County and the City of Rancho Cordova. The project area is bounded along Hazel Avenue by the Tributary Point/westbound off-ramp intersection to the north, and extends approximately 1,000 feet south of Folsom Boulevard to a future intersection within the Easton Place development. The project limits along US 50 begin approximately 3,200 feet west of the existing Hazel Avenue Overcrossing, and extend 2,500 feet east of the Natoma Overhead (post miles 15.1 to 15.4). Improvements along Folsom Boulevard would extend from approximately 1,200 feet west of the Hazel Avenue intersection to 900 feet east of the intersection. (FEIR/EA p. 1-1)

Project Description

The County of Sacramento, in cooperation with Caltrans and the City of Rancho Cordova, proposes to modify the existing Hazel Avenue/US 50 interchange, and extend and grade-separate Hazel Avenue over Folsom Boulevard. Hazel Avenue will be extended south to a proposed intersection with the future Atlanta Street. The project also includes:

- Construction of a portion of an eastbound auxiliary lane on US 50 from Hazel Avenue to the Folsom Boulevard Overcrossing, also known as the Natoma Overhead.
- The modification of the existing Aerojet Road off-ramp from US 50.
- Reconstruction of the US 50 westbound loop on-ramp.
- Reconstruction of the US 50 eastbound diagonal off-ramp, and both eastbound on-ramps.
- Eastbound US 50 on- and off-ramp auxiliary lanes, from west of the Hazel Avenue eastbound off-ramp, and from the loop on-ramp extending to the Folsom Boulevard interchange.
- Roadway and pedestrian improvements constructed along approximately 2,300 feet of Folsom Boulevard. Improvements include sidewalks, street lighting, and landscaping along the north side of Folsom Boulevard, and landscaping and lighting along the south.

The primary purpose of the proposed project is to modify the existing interchange to reduce congestion, improve traffic operations, accommodate travel demand due to planned and approved developments, and improve safety of all modes of travel, including bicycles and pedestrians. The proposed project is needed to relieve existing and forecasted traffic operations and congestion, accommodate planned and approved developments, and implement mitigation identified in the Easton Project Final EIR (County of Sacramento 2008). (FEIR/EA pp. 1-14 thru 1-15)

Project Purpose, Objectives, and Need

The primary purpose of the project is to modify the existing interchange to reduce congestion, improve traffic operations, accommodate travel demand due to planned and approved developments, and improve safety of all modes of travel, including bicycles and pedestrians.

The proposed build alternatives will meet the following objectives.

- Improve operations by removing the close intersection spacing between the eastbound ramps and Folsom Boulevard.
 - Proposed alternatives accomplish this by grade-separating Hazel Avenue over Folsom Boulevard.
- Provide sufficient capacity in the ramps and roadways for future traffic volumes.
 - Proposed alternatives accomplish this by widening and/or lengthening the on- and off-ramps and Hazel Avenue as required by their respective traffic analyses.
- Maintain the Aerojet Road off-ramp connection to the approved development while improving the mainline operations.
 - Proposed alternatives accomplish this by removing the Aerojet Road exit from US 50 but still providing direct access to Aerojet Road through the eastbound Hazel Avenue off-ramp. (FEIR/EA pp. 1-1 thru 1-5)

The proposed project is needed for the following reasons.

- Existing and forecasted traffic operations and congestion are below acceptable operating standards at the Hazel Avenue/US 50 interchange.
- Planned and approved developments identified by the adopted Sacramento County General Plan and SACOG's RTP, including the increased traffic volumes associated with the proposed Easton Project, will increase the traffic volumes at the Hazel Avenue/US 50 interchange beyond acceptable operating standards.
- Implementation of mitigation identified in the Easton Project Final EIR (County of Sacramento 2008) is required in order to accommodate the increased traffic volumes associated with that development. The Easton Project mitigation includes reconstruction of the Hazel Avenue/US 50 interchange as well as grade separation of Hazel Avenue over Folsom Boulevard and the light rail tracks. The light rail grade separation has been constructed. The Easton Project will contribute its fair share of funding to the improvements. (FEIR/EA pp. 1-1 thru 1-6)

IV. BACKGROUND

The Hazel Avenue extension to Easton Valley Parkway and ultimately White Rock Road is a priority improvement within the sub-region surrounding US 50 in eastern Sacramento County. (FEIR/EA p. 1-1)

On January 28, 2009, the Sacramento County Board of Supervisors approved the General Plan Amendment, Zoning Ordinance, Tentative Subdivision Map and Affordable Housing Plan for the Easton Project: Easton Place and Glenborough at Easton development project (Easton Project). The Easton Project is located on approximately 6,699 acres of land owned by the Easton Development Company, LLC (Easton) in eastern Sacramento County, and are identified by the adopted SACOG Blueprint and Regional Transportation Plan (RTP). (FEIR/EA pp. 1-1 thru 1-2)

Through the efforts of the 50 Corridor Mobility Partnership, preliminary studies were initiated to identify potential improvements to the interchange and the extension of Hazel Avenue south beyond Folsom Boulevard to accommodate the planned and approved growth. (FEIR/EA pp. 1-1 thru 1-2)

On January 29, 2016, the County published a Notice of Preparation (NOP) of an EIR for the Project. The NOP for the Project was distributed to the State Clearinghouse, responsible agencies, interested groups and individuals, and surrounding property owners. The NOP was circulated for a 30-day comment period, which ended on March 4, 2016.

On March 3, 2016, the County convened an agency and public scoping meeting at the Governor's Office of Planning and Research (OPR) located at 1400 10th Street, Large Conference Room 202, Sacramento, California. A notice of the scoping meeting was sent to all individuals and agencies on the NOP mailing list. The purpose of the scoping meeting was to solicit comments regarding the scope of the EIR/EA.

Along with a Notice of Completion, the Draft EIR/EA was released to the Governor's Office of Planning and Research to begin the Public Review Period (Public Resources Code Section 21161) on February 13, 2020. Concurrent with the NOC, the County also provided public notice of the availability of the Draft EIR/EA for public review through publication in a Daily Recorder and with notices which were sent to responsible agencies, interested groups and individuals, surrounding property owners, and individuals who had requested such notification. The written comment period began on February 13, 2020 and closed on March 30, 2020.

On July 14, 2020 the County published the Final EIR/EA for the Project, which included responses to all comments received on the DEIR/EA.

On August 11, 2020, the project was on the Board agenda for certification of the FEIR/EA. The action was continued to September 22, 2020, to allow additional time for the Board to consider the project and the contents of the FEIR/EA. In addition, property owners who are impacted by the increased right-of-way required to construct the proposed project were mentioned at the

hearing by Supervisor Frost. The constituent had requested an opportunity to perhaps define an alternative to the project that has less impacts on their property. The alternatives analysis for the proposed project considered 18 various alternatives for design and carried 3 alternatives forward for environmental review in equal level of detail. The FEIR/EA supports the decision to approve any of those three alternatives. Any other proposal would likely delay construction. The Project will serve the Easton Development. A proponent (Roy Brewer, on behalf of Easton Development Company, LLC), provided public comment via telephone, which is the current protocol due to COVID 19 social distancing recommendations. The caller encouraged the Board to be expeditious in their actions to avoid delays to the Easton Development. Concern was expressed by numerous Board members over the loss of businesses including Cattlemen's Restaurant as a long standing business cherished by the community and the Chevron Station, which is relatively new construction with thought given to aesthetic design. Concern was also expressed regarding the impacts to the Nimbus Winery Center related to access and visibility. Supervisor Nottoli expressed the desire to mitigate for the substantial tree loss on-site and in the community if possible.

In order to avoid further delay, these findings are prepared in advance of the September 22, 2020 public hearing before the Board on the Project and based on the expressed need for the Project and the anticipated approval of the recommended action. These Findings for Alternative 1 are appropriate for All Build Alternatives only where referenced. Mitigation Measures for Alternative 1A and Alternative 2 are not included unless they also apply to Alternative 1. It is recommended that the Board certify the FEIR/EA, adopt the Mitigation Monitoring and Reporting Program, adopt the Findings of Fact and Statement of Overriding Considerations for the Project, and approve Alternative 1 for the Hazel Avenue/U.S. 50 Interchange Project. These Findings of Fact and Statement of Overriding Considerations for the Project were prepared for the Environmentally Superior Alternative (Alternative 1), which results in avoiding environmental impacts, while still meeting the objectives of the proposed project, compared to Alternative 1A and Alternative 2.

V. RECORD OF PROCEEDINGS

The record of proceedings for the Board's decision on the Project consists of the following documents, at a minimum:

1. The proposal package consisting of a written description of the project by the Sacramento County Department of Transportation (SacDOT), including written documentation, technical information and studies, maps and all attachments;
2. The Notice of Preparation and other public notices issued by the County in connection with the Project and all hearings held by any public bodies to consider the Project;
3. The Draft Environmental Impact Report/Environmental Assessment for the Project (dated February 13, 2020)
4. All comments submitted by agencies or members of the public during the comment period on the Draft EIR/EA and responses to those comments;

5. The Final Environmental Impact Report/Environmental Assessment for the Project (dated July 14, 2020), including timely comments received on the Draft EIR/EA and responses to those comments;
6. All comments and correspondence submitted to the County with respect to the Project, in addition to the timely comments on the Draft EIR/EA;
7. The Mitigation, Monitoring and Reporting Program for the Project;
8. All findings and resolutions adopted by the Board in connection with the Project, and all documents cited or referred to therein;
9. All reports, studies, memoranda, maps, staff reports, or other documents relating to the Project prepared by or for the County, consultants to the County, or responsible or trustee agencies with respect to the County's compliance with the requirements of CEQA and with respect to the County's environmental review and action on the Project;
10. Any minutes and/or verbatim transcripts of all information sessions, scoping meetings, public meetings, and
11. Matters of common knowledge to the Board, including but not limited to the following:
 - a. Federal, state and local laws and regulations;
 - b. The General Plan;
 - c. The Zoning Code;
 - d. The Sacramento County Code; and
 - e. Other formally adopted policies, resolutions and ordinances.
12. Any documents expressly cited in these findings, in addition to those cited above; and
13. Any other materials required for the record of proceedings by the Public Resources Code section 21167.6(c).

The official custodian of the record is the Clerk of the Sacramento County Board of Supervisors, 700 H Street, Sacramento, California 95814.

VI. FINDINGS REQUIRED UNDER CEQA

Pursuant to Sections 21002 and 21002.1 of the Public Resources Code, no public agency shall approve or carry out a project for which an environmental impact report has been certified which identifies one or more significant effects on the environment that would occur if the project is approved or carried out unless both of the following occur:

- (a) The public agency makes one or more of the following findings with respect to each significant effect:

- (1) Changes or alterations have been required in, or incorporated into, the project which mitigate or avoid the significant effects on the environment.
 - (2) Those changes or alterations are within the responsibility and jurisdiction of another public agency and have been, or can and should be, adopted by that other agency.
 - (3) Specific economic, legal, social, technological or other considerations, including the considerations for provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or alternatives identified in the environmental impact report.
- (b) With respect to significant effects which were subject to a finding under paragraph (3) of subdivision (a), the public agency finds that the specific overriding economic, legal, social, technological, or other benefits of the project outweigh the significant effects on the environment.

CEQA Guidelines section 15091 requires the following:

- (a) No public agency shall approve or carry out a project for which an EIR has been certified which identifies one or more significant environmental effects of the project unless the public agency makes one or more written findings for each of those significant effects, accompanied by a brief explanation of the rationale for each finding. The possible findings are:
 - (1) Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the final EIR.
 - (2) Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding. Such changes have been adopted by such other agency or can and should be adopted by such agency.
 - (3) Specific economic, legal, social, technological, or other considerations, including provision of employment opportunities for highly trained workers, making infeasible the mitigation measures or project alternatives identified in the final EIR.

Accordingly, for each significant impact identified herein, a finding has been made as to one or more of the following, as appropriate in accordance with Public Resources Code section 21002. and CEQA Guidelines section 15091:

- A. Changes or alterations have been required in, or incorporated into, the project which avoid or substantially lessen the significant environmental effect as identified in the FEIR. Such changes or alterations reduce the significant environmental effect identified in the FEIR to a level of less than significant;

- B. Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the County. Such changes have been adopted by such other agency or can and should be adopted by such other agency; and/or
- C. Specific economic, legal, social, technological or other considerations, including provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the FEIR.

A narrative of supporting facts follows the appropriate finding. For many of the impacts, one or more of the findings have been made. Finding (B) appears because, although the County is the lead agency, it has limitations on its power to require or enforce certain mitigation. Whenever finding (B) occurs, agencies with jurisdiction to impose certain mitigation measures have been identified. It is these agencies, within their respective scopes of authority, which would have the ultimate responsibilities to adopt, implement and enforce the mitigation discussed within each type of impact that could result from Project implementation.

Whenever finding (C) was made, the County has determined that there will be, even after mitigation, an unavoidable significant level of impact due to the Project, and sufficient mitigation is not feasible to reduce the impact to a level of less than significant. Such impacts are always specifically identified in the supporting discussions. The Statement of Overriding Considerations applies to all such unavoidable significant impacts, as required by sections 15092 and 15093 of the CEQA Guidelines.

The concept of “feasibility” also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. (*City of Del Mar v. City of San Diego*, 133 Cal. App. 3d 401, 417 (1982)). “Feasibility” under CEQA encompasses ‘desirability’ to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors.” (*Id.*; see also *Sequoyah Hills Homeowners Ass’n v. City of Oakland*, 23 Cal. App. 4th 704, 715 (1993)).

The CEQA Guidelines do not define the difference between “avoiding” a significant environmental effect and merely “substantially lessening” such an effect. The County must therefore glean the meaning of these terms from the other context in which the terms are used. Public Resources Code section 21081, on which CEQA Guidelines section 15091 is based, uses the term “mitigate” rather than “substantially lessen.” The CEQA Guidelines therefore equate “mitigating” with “substantially lessening.” Such an understanding of the statutory term is consistent with the policies underlying CEQA, which include the policy that “public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects.” (Public Resources Code section 21002)

For purposes of these findings, the term “avoid” refers to the effectiveness of one or more mitigation measures to reduce an otherwise significant effect to a less than significant level. In contrast, the term “substantially lessen” refers to the effectiveness of such measure or measures to substantially reduce the severity of a significant effect, but not to reduce the effect to a less

than significant level. These interpretations are consistent with the holding in *Laurel Hills Homeowners Ass'n v. City Council*, 83 Cal. App. 3d 515, 519-21 (1978), in which the Court of Appeal held that an agency had satisfied its obligation to substantially lessen or avoid significant effects by adopting numerous mitigation measures, not all of which rendered the significant impacts in question less than significant.

Although CEQA Guidelines section 15091 requires only that the approving agencies specify that a particular significant effect is “avoid(ed) or substantially lessen(ed),” these findings, for purposes of clarity, in each case will specify whether the effect in question has been reduced to a less than significant level, or has simply been substantially lessened but remains significant.

Additionally, although section 15091, read literally, does not require findings to address environmental effects that an EIR identifies as merely “potentially significant,” these findings will nevertheless fully account for all such effects identified in the FEIR.

CEQA requires that the lead agency adopt mitigation measures or alternatives, where feasible, to substantially lessen or avoid significant environmental impacts that would otherwise occur. Project modification or alternatives are not required, however, where such changes are infeasible or where the responsibility for modifying the project lies with some other agency. (CEQA Guidelines section 15091(a), (b)).

With respect to a project for which significant impacts are not avoided or substantially lessened, a public agency, after adopting proper findings, may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the Project’s “benefits” rendered “acceptable” the project’s “unavoidable adverse environmental effects.” (CEQA Guidelines sections 15043, 15093) The California Supreme Court has stated “[t]he wisdom of approving...any development project, a delicate task which requires the balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced.” *Citizens of Goleta Valley v. Board of Supervisors*, 52 Cal. 3d 553, 576 (1990).

These Findings constitute the Board’s best efforts to set forth the evidentiary and policy basis for its decision to approve the Project in a manner consistent with the requirements of CEQA. To the extent that these findings conclude that various proposed mitigation measures outlined in the FEIR are feasible and have not been modified, superseded or withdrawn, the County hereby binds itself to implement these measures. These Findings, in other words, are not merely informational, but constitute a binding set of obligations that will come into effect when the Board adopts a resolution approving the Project.

VII. MITIGATION MONITORING AND REPORTING PROGRAM

A Mitigation Monitoring and Reporting Program (“MMRP”) was prepared for the Project and approved by the Board by the same resolution that has adopted these Findings. (See Public Resources Code section 21081.6(a) (1); CEQA Guidelines section 15097). The County will use

the MMRP to track compliance with the Project mitigation measures. The MMRP will remain available for public review during the compliance period.

VIII. SIGNIFICANT EFFECTS AND MITIGATION MEASURES

A. Impacts that are Less than Significant.

These Findings do not address impacts that are considered less than significant or beneficial prior to mitigation. Therefore, these Findings do not address the following impacts because they were determined to be either less than significant or beneficial in the EIR/EA under Alternative 1.

1. Population/Housing

Impact PH-1 (All Build Alternatives): Indirect growth inducement. (FEIR/EA p. S-32)

2. Aesthetics

Impact AE-1 (All Build Alternatives): Alteration of the viewshed of a designated scenic highway. (FEIR/EA p. S-32)

Impact AE-2 (Alternatives 1 and 1A): Visual introduction of new transportation infrastructure and change in visual character. (FEIR/EA p. S-32)

Impacts AE-3: (Alternatives 1 and 1A): Visual introduction of new transportation infrastructure and change in visual character. (FEIR/EA p. S-32)

Impact AE-5 (All Build Alternatives): Creation of new nighttime street lighting. (FEIR/EA p. S-33)

Impact AE-6 (All Build Alternatives): Creation of new daytime glare source. (FEIR/EA p. S-33)

3. Public Services

Impact PS-1 (All Build Alternatives): Possible temporary effects on public services, including emergency services. (FEIR/EA p. S-34)

4. Transportation/Traffic

Impact TR-1 (All Build Alternatives): Changes in volumes of traffic at peak hours. (FEIR/EA p. S-34)

Impact TR-2 (All Build Alternatives): Temporary and permanent changes in access and circulation. (FEIR/EA p. S-36)

5. Air Quality

Impact AQ-3 (All Build Alternatives). Create objectionable odors affecting a substantial number of people. (FEIR p. S-39)

6. Noise

Impact NO-1 (Alternatives 1 and 1A): Permanent increases in traffic noise levels. (FEIR/EA p. S-40)

Impact NO-2 (Alternatives 1 and 1A): Permanent increases in traffic noise levels above acceptable thresholds. (FEIR/EA p. S-40)

Impact NO-4 (All Build Alternatives): Temporary increase in groundborne vibration. (FEIR/EA p. S-43)

7. Hydrology and Water Quality

Impact HY-1 (All Build Alternatives): Potential for effects on groundwater supplies or recharge. (FEIR/EA p. S-43)

Impact HY-3: (All Build Alternatives): Development within a 100-year floodplain. (FEIR/EA p. S-45)

Impact HY-4 (All Build Alternatives): Placement of structures within a 100-year floodplain. (FEIR/EA p. S-45)

Impact HY-5 (All Build Alternatives): Develop an area subject to 200-year urban levels of flood protection. (FEIR/EA p. S-45)

Impact HY-6 (All Build Alternatives): Potential to expose people or structures to a substantial flood-related risk of loss, injury or death. (FEIR/EA p. S-45)

8. Geology and Soils

Impact GS-1 (All Build Alternatives): Expose people or structures to risk of loss, injury, or death involving rupture of an earthquake fault. (FEIR/EA p. S-47)

Impact GS-2 (All Build Alternatives): Result in soil erosion, siltation, or loss of topsoil. (FEIR/EA p. S-47)

Impact GS-3 (All Build Alternatives): Construction on geologic unit or soil that is unstable, or that would become unstable as a result of the project. (FEIR/EA p. S-47)

9. Hazardous Materials

Impact HZ-1 (All Build Alternatives): Potential exposure risk during transport, use, or disposal of hazardous commonly used construction materials. (FEIR/EA p. S-79)

Impact HZ-3 (Alternative 1 and 2): Exposure to potentially contaminated groundwater. (FEIR/EA p. S-83)

Impact HZ-5 (All Build Alternatives): Temporary and permanent changes in routing of emergency services. (FEIR/EA p. S-84)

Impact HZ-6 (All Build Alternatives): Create risk of loss, injury or death involving wildland fire. (FEIR/EA p. S-84)

10. Greenhouse Gas Emissions

Impact GHG-1 (All Build Alternatives): Generate greenhouse gas emissions, directly and indirectly, or conflict with applicable plans. (FEIR/EA p. S-85)

11. Cumulative Impacts

Cumulative Contribution (Alternative 1 and 1A): Contribution to permanent visual and aesthetic changes. (FEIR/EA p. S-86)

Cumulative Contribution (Alternative 1 and 1A): Contribution to cumulative increases in noise levels. (FEIR/EA p. S-87)

The Project's impacts under Alternative 1 to these environmental issues are less than significant. Therefore, the EIR/EA did not identify or require mitigation measures for these issues.

B. Impacts that are Less than Significant with Mitigation

The EIR/EA identified some significant or potentially significant environmental effects (or "impacts") that the Project under Alternative 1 will or may cause. These significant effects can be fully avoided through the adoption of feasible mitigation measures. The Project under Alternative 1 would result in significant or potentially significant environmental effects with respect to the following issues or resources. Other effects cannot be substantially lessened or avoided by the adoption of feasible mitigation measures or alternatives and are, therefore, considered significant and unavoidable. However, for reasons set forth in Section X of these Findings, the Board has determined that the significant, unavoidable effects of the Project are outweighed by overriding economic, social and other considerations.

1. Public Services

Impact PS-2 (All Build Alternatives): Potential for temporary access delays and impacts at recreational facilities. (FEIR/EA p. S-34)

2. Air Quality

Impact AQ-1 (All Build Alternatives): Cumulatively considerable temporary net increase of criteria pollutants. (FEIR/EA p. S-36)

Impact AQ-2 (All Build Alternatives). Expose sensitive receptors to pollutant concentrations in excess of standards. (FEIR/EA p. S-39)

3. Noise

Impact NO-3 (All Build Alternatives): Temporary increase in noise levels during construction. (FEIR/EA p. S-41)

4. Hydrology and Water Quality

Impact HY-2 (All Build Alternatives): Risk of flooding on- or off-site due to changes in drainage patterns and increased surface runoff. (FEIR/EA p. S-43)

Impact HY-7 (All Build Alternatives): Changes in runoff volumes that could exceed stormwater drainage system capacity. (FEIR/EA p. S-46)

Impact HY-8 (All Build Alternatives): Potential source of polluted runoff and degradation of groundwater or surface water quality. (FEIR/EA p. S-46)

5. Geology and Soils

Impact GS-4 (All Build Alternatives): Potential for destruction of a unique paleontological resource or site. (FEIR/EA p. S-48)

6. Biological Resources

Impact BIO-1 (All Build Alternatives): Temporary disturbance of habitat for vernal pool fairy shrimp and midvalley fairy shrimp. (FEIR/EA p. S-50)

Impact BIO-2 (All Build Alternatives): Direct loss of habitat for valley elderberry longhorn beetle. (FEIR/EA p. S-53)

Impact BIO-3 (All Build Alternatives): Direct impacts on western pond turtle habitat. (FEIR/EA p. S-55)

Impact BIO-4 (All Build Alternatives): Direct impacts on Swainson's hawk and white-tailed kite nesting season and habitat. (FEIR/EA p. S-59)

Impact BIO-5 (All Build Alternatives): Direct impacts on yellow-breasted chat nesting habitat. (FEIR/EA p. S-64)

Impact BIO-6 (All Build Alternatives): Direct impacts on tricolored blackbird nesting habitat. (FEIR/EA p. S-65)

Impact BIO-7 (All Build Alternatives): Direct impacts on song sparrow (Modesto population) nesting habitat. (FEIR/EA p. S-66)

Impact BIO-8 (All Build Alternatives): Removal or disturbance of special-status and non-special status bat roosting habitat or colonies. (FEIR/EA p. S-67)

Impact BIO-9 (All Build Alternatives): Disturbance of nesting migratory birds. (FEIR/EA p. S-70)

Impact BIO-10 (All Build Alternatives): Permanent loss of Fremont cottonwood-oak woodland (FEIR/EA p. S-71)

Impact BIO-11 (All Build Alternatives): Temporary and permanent loss of valley foothill-riparian woodland. (FEIR/EA p. S-71)

Impact BIO-12 (All Build Alternatives): Permanent loss of and temporary impacts on emergent wetland, seasonal wetland, perennial drainage, and ephemeral drainage. (FEIR/EA p. S-72)

Impact BIO-13 (All Build Alternatives): Permanent impacts on roadside ditch (FEIR/EA p. S-72)

Impact BIO-14 (All Build Alternatives): Removal of ordinance-protected native trees. (FEIR/EA p. S-73)

Impact BIO-15 (All Build Alternatives): The Removal of non-drought tolerant native trees and non-native trees that provide shade and/or are considered landmark trees. (FEIR/EA p. S-77)

7. Cultural Resources

Impact CUL-1 (All Build Alternatives): Adverse effect on an archaeological resource. (FEIR/EA p. S-77)

Impact CUL-2 (All Build Alternatives): Disturb any human remains. (FEIR/EA p. S-79)

8. Hazardous Materials

Impact HZ-2 (All Build Alternatives): Release of, or exposure to hazardous materials during construction. (FEIR/EA p. S-80)

Impact HZ-4 (All Build Alternatives): Exposure to contaminated soil and groundwater during ground-disturbing activities at the Aerojet site. (FEIR/EA p. S-83)

9. Cumulative Impacts

Cumulative Contribution (All Build Alternatives): Temporary contribution to cumulative increases in nighttime light. (FEIR/EA p. S-85)

Cumulative Contribution (All Build Alternatives): Contribution to cumulative impacts on air quality during construction. (FEIR/EA p. S-86)

Cumulative Contribution (All Build Alternatives): Contribution to the loss of Fremont cottonwood-oak woodland and valley foothill riparian woodland. (FEIR/EA p. S-87)

Cumulative Contribution (All Build Alternatives): Contribution to the loss of wetlands and non-wetland waters. (FEIR/EA p. S-88)

Cumulative Contribution (All Build Alternatives): Contribution to loss of habitat for Midvalley fairy shrimp, western pond turtle, white-tailed kite, yellow-breasted chat, tricolored blackbird, song sparrow, special-status bats, and migratory birds. (FEIR/EA p. S-88)

Cumulative Contribution (All Build Alternatives): Contribution to loss of habitat for threatened and endangered Species (vernal pool fairy shrimp, valley elderberry longhorn beetle, and Swainson's hawk). (FEIR/EA p. S-90)

The FEIR/EA identified mitigation measures to reduce these impacts to a less-than-significant level.

C. Significant and Unavoidable Impacts.

The Project would result in significant and unavoidable environmental effects with respect to the following impacts:

Aesthetics

Impact AE-4 (All Build Alternatives): Creation of a temporary new source of nighttime light. (FEIR/EA p. S-33)

D. Summary of Impacts, Findings, and Mitigation Measures.

1. Aesthetics

- a. Impact AE-4: Creation of a temporary new source of nighttime light.**
(Significant and Unavoidable – All Build Alternatives) New temporary sources of light, (e.g., bright lights used during construction), would negatively affect highway users and nighttime views of and from the work area. Implementation of mitigation to minimize fugitive light would reduce impacts, but it may not be possible to reduce all effects to less-than-significant levels. (FEIR/EA p. S-33)

Finding: Impacts related to light and glare would be the same or very similar under all build alternatives. Evening and nighttime construction activities would require the use of extremely bright lights, which would negatively affect highway users and nighttime views of and from the work area. Construction is anticipated to last 2 years but during an approximate 6-month period work at night could periodically occur. This temporary impact is considered potentially significant. With implementation of the measure below, the impact would be reduced. However, it may not be possible in all cases to reduce the effects of temporary lighting to levels considered less than significant. Therefore, after mitigation, this impact would remain significant and unavoidable. The long term value the project brings to the community in terms of safety, improved traffic service, accommodation for all modes of travel and compliance with ADA are reasons to approve the project although there are potential short-term impacts associated with nighttime construction lights (FEIR/EA p. 3-11).

Mitigation: The following mitigation measure has been incorporated into the MMRP for this project to reduce this impact to the extent feasible:

Mitigation Measure AE-1: Minimize Fugitive Light from Portable Sources Used for Construction. At a minimum, the construction contractor will minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights will be used. Portable lights will be operated at the lowest allowable wattage and height and will be raised to a height no greater than 20 feet. All lights will be screened and directed downward toward work activities and away from the night sky and roadway users and highway neighbors to the maximum extent possible. Lights will not be directed toward residential land uses after 10 p.m. The number of nighttime lights used will be minimized to the greatest extent possible. (FEIR/EA p. 3-12)

2. Public Services

- a. **Impact PS-2: Potential for temporary access delays and impacts at recreational facilities. (Potentially Significant – All Build Alternatives)**
Project construction (e.g., lane closures, separated bicycle route construction, park-and-ride lot reconfiguration, equipment staging) could result in temporary, intermittent access delays to recreational areas at Lake Natoma or could affect park facilities. Implementation of mitigation to prevent unauthorized use of State Park land would reduce impacts to less-than-significant levels. (FEIR/EA p. S-34)

Finding: California State Parks expressed a need to prevent unauthorized placement of construction equipment or staging outside of pre-determined areas of the project. Unauthorized placement of equipment or staging within park facilities could damage the park or its facilities. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-16)

Mitigation: The following mitigation measure has been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure PS-1: Prevent Unauthorized Use of State Parks Land
Construction-related staging, equipment, and worker parking will be kept within the approved project limits. The project boundary adjacent to State Parks Land will be delineated with Environmentally Sensitive Area fencing or other visible means. No unauthorized use of State Parks land will be allowed. (FEIR/EA p. 3-16)

3. Air Quality

- a. **Impact AQ-1: Cumulatively considerable temporary net increase of criteria pollutants. (Potentially Significant – All Build Alternatives)** With

implementation of the project, pollutant emissions would decrease for most pollutants except particulate matter. The project has the potential to result in a negligible change in ozone precursors (reactive organic gasses, nitrogen oxides), carbon monoxide, and particulate matter (10 and 2.5 micrometers or smaller). During project construction, a cumulatively considerable temporary net increase of criteria pollutants was modeled to occur, exceeding SMAQMD thresholds. Implementation of mitigation requiring use of SMAQMD's BMPs, use of newer model engines, and use of clean diesel-powered equipment would reduce impacts to less-than-significant levels. (FEIR/EA p. S-36)

Finding: Compared to the existing conditions, pollutant emissions would decrease for most pollutants, except particulate matter. Particulate matter emissions would increase in certain conditions due to re-entrained dust, brake wear, and tire wear emissions. These emissions are directly correlated to the growth in regional vehicle miles traveled (VMT). Implementation of the build alternatives would result in a negligible change compared to the No Build Alternative for O₃ precursors (ROG, NO_x), CO, PM₁₀, and PM_{2.5}. The reduction in emissions relative to the No Build Alternative is considered a long-term air quality benefit. All emission increases would be below Sacramento Metropolitan Air Quality Management District (SMAQMD) thresholds. This impact would be less than significant. (FEIR/EA p. 3-25)

During construction of any of the build alternatives emissions of NO_x would exceed SMAQMD's threshold of significance, and during construction of Alternatives 1 and 1A PM₁₀ emissions would exceed SMAQMD's PM₁₀ threshold. These temporary increases in criteria pollutants would contribute to a cumulative net increase in pollutants during project construction. This impact is considered potentially significant. With implementation of the measures below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-26 thru 3-27)

Mitigation: The following mitigation measures has been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure AQ-1: Implement SMAQMD's Basic Construction Emission Control Practices (Best Management Practices)

Measures to control and reduce fugitive dust from SMAQMD's Basic Construction Emission Control Practices (Sacramento Metropolitan Air Quality Management District 2017) will be implemented to the extent practicable when the measures have not already been incorporated and do not conflict with requirements of Caltrans' Standard Specifications, Special Provisions, the National Pollutant Discharge Elimination System (NPDES) permit, and the Biological Opinions, Clean Water Act Section 404 permit, Clean Water Act Section 401 Certification, and other permits issued for the project. The project-proponent will implement SMAQMD's basic construction emission control practices, including but not limited to the following measures.

- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least 2 feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour.
- Pave all roadways, driveways, sidewalks, and parking lots as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (required by California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485). Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated. (FEIR/EA pp. 3-27 thru 3-28)

Mitigation Measure AQ-2: Utilize Model Year 2010 or Newer Engines to Reduce Construction-Related Exhaust Emissions from On-Road Vehicles

All on-road trucks will consist of model year 2010 or newer engines.

Construction contractors will provide documentation to the County of efforts to secure such a fleet. The contractors will keep a written record of equipment usage during project construction for each piece of equipment and provide the County with annual reports documenting compliance. These reports will be submitted to SMAQMD. In the event Construction contractors cannot secure all 2010 engine model year or newer on-road trucks for the project, an off-site mitigation fee program, as analyzed in the Air Quality Study Report (Volume 3 Technical Studies), or SMAQMD Off-site Construction Mitigation Fee Program shall be implemented.

The reporting plan shall follow SMAQMD's Enhanced On-site Exhaust Controls mitigation language. The plan will have at least two components: an initial report submitted before construction and a final report submitted at the completion of the job, phase or calendar year, as pre-arranged with SMAQMD staff and documented in the approval letter, to demonstrate continued project compliance. Additionally, the below requirements shall be met:

- Submit the initial report at least four (4) business days prior to construction activity using the SMAQMD's Construction Mitigation Tool (<http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation>)
- Provide project information and construction company information

Include the equipment type, horsepower rating, engine model year, projected hours of use, and the CARB equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used. (FEIR/EA pp. 3-28 thru 3-29)

Mitigation Measure AQ-3: Utilize Clean Diesel-Powered Equipment during Construction to Control Construction-Related No_x Emissions

The County will ensure that all off-road diesel-powered equipment used during construction is equipped with EPA Tier 4 Final engines. The County will submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used an aggregate of 8 or more hours during any phase of the construction project. In the event Construction contractors cannot secure all 2010 engine model year or newer on-road trucks and all Tier 4 Final off-road equipment for this entire project, an off-site mitigation fee program, as analyzed in the Air Quality Study Report (Volume 3 Technical Studies), or SMAQMD Off-site Construction Mitigation Fee Program shall be implemented.

The inventory will include the following:

- CARB equipment identification number, equipment type, horsepower rating, engine model year (Tier 4 Final), and projected hours of use for each piece of off-road equipment.
- Current Certificate of Reported Compliance for CARB's In-Use Off-Road Regulation for each construction company working on the project.
- Anticipated construction timeline including start date, and name, phone number and email address of the project manager and on-site foreman.

The construction inventory will be submitted to the SMAQMD at least 4 business days prior to the use of subject equipment. The reporting plan shall comply with the requirements as outlined in Mitigation Measure AQ-2. (FEIR/EA p. 3-29)

b. Impact AQ-2: Expose sensitive receptors to pollutant concentrations in excess of standards. (Potentially Significant – All Build Alternatives)

Construction of the project could expose workers to hazardous levels of lead and asbestos above Occupational Safety and Health Administration standards. Implementation mitigation requiring an abatement plan would reduce impacts to less-than-significant levels. (FEIR/EA p. S-39)

Finding: With respect to exposure to, or release of, structural asbestos and lead, there is the potential for these pollutants to be encountered during the demolition and removal of structures required as part of project construction. Exposure to, or release of, these pollutants could be hazardous to human health. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-34)

Mitigation: The following mitigation measure has been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure AQ-4: Prepare and Implement a Lead and Asbestos Abatement Plan

Following the requirements of SMAQMD Rule 902 and Sacramento County Standard Construction Specification Section 12-1.01.C, Task Specific Safety Plan (TSSP), the County or its contractor will prepare a plan for the abatement of asbestos during demolition and removal of structures. The plan will also address abatement of structural lead. The contents of the plan will conform to Federal, State and local regulations regarding preventing environmental exposure and ensuring worker health and safety standards are implemented, including for the proper handling, removal, and disposal of the pollutants. (FEIR/EA p. 3-34)

4. Noise

a. Impact NO-3: Temporary increase in noise levels during construction.

(Potentially Significant – All Build Alternatives) Project construction activities, such as impact and/or vibratory pile-driving, could result in a temporary substantial increase in ambient noise levels (95 A-weighted decibels (dBA) at 50 feet) at residential and recreational outdoor use areas exceeding relevant standards set by the Federal Transit Administration for daytime construction noise thresholds during daytime hours. Construction work done at night would exceed the County ordinance standard of 55 dBA. Implementation of mitigation to reduce and control construction noise would reduce impacts to less-than-significant levels. (FEIR/EA p. S-41)

Finding: Construction work done outside of County exempt hours would exceed the County ordinance standard of 55 dBA between the hours of 8:00 p.m. and 10:00 p.m. and 50 dBA between the hours of 10:00 p.m. and 6:00 a.m. at a distance of over 1,500 feet from construction sites. This impact is considered potentially significant. With implementation of mitigation measures, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. S-43)

Mitigation: The following mitigation measures has been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure NO-2: Employ Noise-Reducing Construction Practices During Construction

During construction, the contractor will employ best practices to reduce construction noise at noise-sensitive land uses. Where possible, noise levels should not exceed 55 dBA during evening hours (8:00 p.m. to 10:00 p.m.) and 50 dBA during nighttime hours (10:00 p.m. to 6:00 a.m.)

Measures used to limit construction noise include the following.

- Limit noise-generating construction operations to daytime hours.

- Locate stationary equipment (e.g., generators, compressors, cement mixers, idling trucks) as far as possible from noise-sensitive land uses.
- Prevent excessive noise by shutting down idle vehicles or equipment.
- During use of pile drivers, include noise control measures such as pile cushions or noise shrouds.
- Require that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Use noise-reducing enclosures around noise-generating equipment.
- Construct barriers to block sound transmission from construction equipment to noise-sensitive land uses. The barriers will be designed to obstruct the line of sight from the noise-sensitive land uses to on-site construction equipment. (FEIR/EA p. S-43)

Mitigation Measure NO-3: Initiate a Noise Control Plan for Mitigation of Construction Noise during Evening/Nighttime Hours

A construction noise control plan will be prepared by the County or its contractor that describes the specific methods the contractor will use to minimize construction equipment noise levels at nearby residences. The plan will include provisions for giving advance notification of construction activity schedules to occupants of potentially affected buildings.

Prior to construction, the contractor will make a construction schedule available to residents living in the vicinity of the construction areas, and designate a noise disturbance coordinator. The coordinator will be responsible for responding to complaints regarding construction noise, will determine the cause of the complaint, and will ensure that reasonable measures are implemented to correct the problem when feasible. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the notification of the construction schedule.

In the event of complaints by affected residents due to on-site construction noise generated during evening/nighttime hours, the contractor will monitor noise levels intermittently (between 8:00 p.m. and 6:00 a.m.) at or near the residence of the person lodging the complaint. If measured construction noise at the monitor location during nighttime hours exceeds 55 dBA L_{eq} between the hours of 8:00 p.m. to 10:00 p.m. or 50 dBA L_{eq} during nighttime hours (10:00 p.m. to 6:00 a.m.), the construction contractor will implement sound-attenuating mitigation measures where site conditions allow, such as limitations on use of noise-generating equipment or installation of additional temporary barriers or enclosures.

If these measures are ineffective in reducing noise to the identified levels, or site conditions prohibit implementation of the measures, the affected residents will be offered short-term relocation assistance for the duration of the time that nighttime

noise levels are expected to exceed the specified levels. (FEIR/EA pp. S-43 thru S-44)

5. Hydrology and Water Quality

a. **Impact HY-2: Risk of flooding on- or off-site due to changes in drainage patterns and increased surface runoff. (Potentially Significant- All Build Alternatives)**

The project would result in increased impervious areas that could reduce infiltration capacities thereby hindering recharge of the underlying aquifer. A total area of 8.4 acres, 8.6 acres, and 9.6 acres of new impervious surfaces would result from Alternatives 1, 1A, and 2, respectively.

If Alternative 1A is selected, construction dewatering would likely be needed during construction of the undercrossing connector ramp and could result in a temporary reduction in shallow groundwater volumes during excavation activities.

Temporary in-water work for the new bridge structure on US 50 and supports at Alder Creek would require excavation, mobilization, and grading within the creek and its banks, temporarily affecting drainage patterns. To prevent increased runoff or the possibility of flooding, the project would implement temporary diversion systems and dewatering operations, as appropriate. Once construction is completed, water flows would be restored, and drainage patterns would return to existing conditions.

Implementation of mitigation requiring best management practices, compliance with requirements of permitting agencies and the requirements of the Stormwater Quality Design Manual would reduce impacts to less-than-significant levels (FEIR/EA pp. S-43 thru S-44)

b. **Impact HY-7: Changes in runoff volumes that could exceed stormwater drainage system capacity. (Potentially Significant – All Build Alternatives)**

Increased runoff volumes from the project's increase in impervious surfaces may not be contained by the existing drainage system. Low impact development concepts and post-construction stormwater runoff BMPs would promote infiltration. Each build alternative would be designed to direct and control stormwater flows such that the existing stormwater drainage system would not need modification. Implementation of mitigation requiring best management practices, compliance with requirements of permitting agencies and the requirements of the Stormwater Quality Design Manual would reduce impacts to less-than-significant levels. (FEIR/EA p. S-46)

c. **Impact HY-8: Potential source of polluted runoff and degradation of groundwater or surface water quality. (Potentially Significant – All Build Alternatives)**

During construction, discharges of sediments, oil, grease, and chemical pollutants into nearby storm drains or Alder Creek and runoff from impervious surfaces) could result in degradation of surface water quality.

Groundwater at the project area is affected by chlorinated solvents, including trichloroethene, tetrachloroethene, and perchlorate as a result of historical operations at the Aerojet facility and could be encountered during excavation for construction of the proposed project, and especially during construction of the direct tunnel ramp under Hazel Avenue proposed as part of Alternative 1A. Waterproofing is included

in the project design of Alternative 1A to prevent contaminated water from reaching the ground surface.

During operations, potential sources of pollutants from the roadway include total suspended sediments, nutrients, volatile and semi-volatile organics, pesticides, metals, and litter.

Implementation of mitigation requiring best management practices, compliance with requirements of permitting agencies and the requirements of the Stormwater Quality Design Manual would reduce impacts to less-than-significant levels. (FEIR/EA pp. S-46 thru S-47)

Findings: Temporary in-water work for the new bridge structure and supports at Alder Creek would require excavation, mobilization, and grading within the creek and its banks, temporarily affecting drainage patterns. To prevent increased runoff or the possibility of flooding, the project would implement temporary diversion systems and dewatering operations, as appropriate. Once construction is completed, water flows would be restored, and drainage patterns would return to existing conditions. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-49)

The increase in impervious surfaces that would result from construction of the proposed project would increase the quantity of runoff from roadways. Each of the build alternatives would modify, remove/replace, or construct drainage features and would be designed to direct and control stormwater flows such that the existing stormwater drainage system would not need modification. Further, to comply with the SWMP, the project would implement measures to ensure treatment, detention, and infiltration of the increased quantity of runoff from the added impervious area. The project design would also include low impact development concepts that promote infiltration and post-construction stormwater runoff BMPs. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p S-53)

During construction, the potential for short-term discharges of sediments, oil, grease, and chemical pollutants into nearby storm drains or Alder Creek and runoff from impervious surfaces could result in a degradation of water quality. The potential for release of contaminated groundwater during construction and operation is greatest for Alternative 1A. Waterproofing is included in the project design of that alternative to prevent contaminated water from reaching the ground surface. Exposure to contaminated groundwater is also addressed under Impact HZ-4. All build alternatives have the potential to cause an increase in polluted runoff during construction and operation of the project that could result in a degradation of surface water quality. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation

incorporated. (FEIR/EA p. 3-56)

Mitigation: The following mitigation measure has been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure HY-1: Implement Best Management Practices to Control Runoff and Discharge of Pollutants during Project Construction and Operation and Follow Requirements of Permitting Agencies and the Stormwater Quality Design Manual

As part of the final design process prior to project construction, the project engineers will develop and incorporate design features or BMPs into the project design. The features selected will comply with the Sacramento County SQIP and the Sacramento Region SQDM for project areas outside of Caltrans ROW, and Caltrans SWMP and Standard Specifications for project areas within Caltrans ROW. The features will be designed to meet all applicable water quality objectives for surface waters and groundwater contained in the Basin Plan.

For project areas outside of Caltrans ROW, the project engineers will follow the guidance in the SQDM including selecting measures from SQDM Table 3-3, Stormwater Quality Control Measure Selection Matrix, for street/road projects with new impervious areas larger than 5 acres. Measures that could be selected and implemented include source control, hydromodification control, treatment control, and low impact development measures such as vegetated swales, water quality detention basins, and bioretention planters.

The project engineers and construction contractor will ensure compliance with the requirements of Caltrans and County NPDES MS4 permits to control stormwater and non-stormwater discharges associated with project construction activities and discharges within the jurisdiction of each permit. Temporary diversion systems and dewatering operations will be implemented, as appropriate. The controls required by all applicable permits will be implemented to reduce the discharge of pollutants in stormwater discharges to the maximum extent possible, including management practices, control techniques, system design and engineering methods, and other measures as appropriate.

The project engineers and the construction contractor will ensure that the requirements of the County SQIP will be followed to reduce the discharge of pollutants to the MS4. The project engineers and construction contractor will also ensure construction activities and project implementation complies with Section 401 (Water Quality Certification) from the Central Valley Regional Water Quality Control Board and the Section 404 Permit from the Sacramento District U.S. Army Corps of Engineers (USACE). (FEIR/EA pp. 3-49 thru 3-50)

6. Geology and Soils

- a. Impact GS-4: Potential for destruction of a unique paleontological resource or site. (Potentially Significant – All Build Alternatives).** Excavation and

earthmoving activities in areas shown to be sensitive for paleontological resources could damage or destroy a unique paleontological resource. The geologic units immediately underlying the project area include the Pleistocene Riverbank and Modesto Formations, known to have vertebrate fossil content and as a result have high potential or high sensitivity for paleontological resources, though past projects in the county have not unearthed important paleontological resources from these formations. Excavation for the project could range in depth from approximately 5 to 30 feet. Preparation of a plan to identify project locations that warrant monitoring during construction and specific measures to implement in the event of the discovery of a paleontological resource would reduce the impact to less-than-significant levels. (FEIR/EA p. S-48)

Finding: The geologic units immediately underlying the project area are Pleistocene Riverbank and Modesto Formations and disturbed areas underlain by dredge tailings. The Riverbank Formation and Modesto Formation are known to have vertebrate fossil content and as a result have a high potential or high sensitivity for paleontological resources, though past projects in the county have not unearthed important paleontological resources from these formations. Nevertheless, earth-disturbing activities proposed during construction could potentially damage paleontological resources if they exist at the project site. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-60 thru 3-61)

Mitigation: The following mitigation measure has been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure GS-1: Prepare and Implement a Paleontological Mitigation Plan

A non-standard special provision for paleontology mitigation will be included in the construction contract special provisions section to advise the construction contractor of the requirement to cooperate with paleontological salvage. The following items will be part of the provisions.

- A qualified principal paleontologist, as defined by the Caltrans Standard Environmental Reference, will be retained to prepare and implement a final Paleontological Mitigation Plan (PMP) prior to construction. If the qualified paleontologist is not a licensed professional geologist in the State of California, then a licensed professional geologist will need to be retained to review and approve the PMP prior to construction. The preliminary PMP prepared for the project (California Department of Transportation 2017; provided in Volume 3, *Technical Studies*, or from the project website at <http://www.sacdot.com/Pages/Project-Hazel-StatRoute50.aspx>) will be updated based on final engineering design and geotechnical information.

- The geotechnical investigation conducted to support final engineering design will identify the depth and location of sensitive areas and will be used by the qualified principal paleontologist to identify locations that warrant monitoring for paleontological resources during construction.
- The final PMP will list the proposed staff and professional qualifications.
- The qualified principal paleontologist will attend a task order meeting and conduct a site visit to review task order requirements; review plans, maps, initial site reports, and mitigation requirements; review site geology and paleontological sensitivity; prepare a mitigation work plan; and prepare a Code of Safe Practices.
- The qualified principal paleontologist will schedule coordination and supervision for paleontological monitors of any salvage. Monthly progress reports will be prepared for lead agency review and comment.
- The qualified principal paleontologist may designate a paleontological monitor to be present during earthmoving activities. According to preliminary engineering, excavations could occur throughout the proposed project area; therefore, paleontological monitoring is recommended during any earthmoving activities/excavations. The qualified principal paleontologist will identify locations that warrant monitoring during construction.
- The paleontological monitor will have a college degree in paleontology or geology and at least 2 years of paleontological monitoring experience or other qualifications described by the Society of Vertebrate Paleontology (2010).
- The qualified principal paleontologist and paleontological monitor will be notified by the resident engineer or lead agency in advance of starting construction activity and will attend any safety training programs for the proposed project. Paleontological monitoring may be full-time during excavation for undercrossings, in-ground structural elements such as bridge substructures and culverts, and any other project elements requiring deep excavation. If, after 50% of the grading/excavation is completed at a particular location for the proposed project, it can be demonstrated that the level of monitoring should be reduced for that site, the qualified principal paleontologist will amend the mitigation program (Society of Vertebrate Paleontology 2010). If pieces of heavy equipment are in use simultaneously at different locations, each location may be individually monitored.
- The qualified principal paleontologist will meet with the resident engineer and construction contractor at a preconstruction conference to develop an agreed-upon communication plan and to discuss provisions for worker safety. All project personnel will receive paleontological awareness training prior to commencement of work by the qualified principal paleontologist.
- If paleontological resources are discovered during earthmoving activities, the construction crew will immediately cease work within a 60-foot radius of the find and notify the resident engineer and the Sacramento County Office of Planning and Environmental Review. In the event paleontological resources are discovered, fossil specimens will be properly collected and sufficiently documented to be of scientific value.

- The collection and treatment actions described in the PMP will occur during the grading and construction process and after recovery of specimens if fossils are found, including sampling for microfossils, conducting paleomagnetic analysis, identifying and preparing fossils, arranging for a repository, and preparing a final report. (FEIR/EA pp. 3-61 thru 3-62)

7. Biological Resources

a. Impact BIO-1: Temporary disturbance of habitat for vernal pool fairy shrimp and midvalley fairy shrimp. (Potentially Significant – All Build Alternatives)

Construction of the project has the potential to temporarily disturb vernal pool fairy shrimp and midvalley fairy shrimp habitat through changes in hydrology and increased contaminants. Implementation of mitigation measures designed to avoid sensitive areas, educate construction personnel, conduct biological monitoring, and create appropriate water conveyance systems to maintain existing hydrology would reduce these impacts less-than-significant levels. (FEIR/EA p. S-50)

Finding: Potential habitat for vernal pool fairy shrimp (*Branchinecta lynchi*) and midvalley fairy shrimp (*Branchinecta mesovallensis*) would not be removed or filled as a result of construction of any of the build alternatives; however, potential habitat could be temporarily disturbed during construction and potential indirect impacts could occur as a result of changes in hydrology and increased contaminants entering habitat. Because habitat for these species has declined substantially in the project region, these impacts are considered potentially significant. With implementation of the measures below, the impacts on vernal pool fairy shrimp and midvalley fairy shrimp would be reduced to a less-than-significant level. The impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-64)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources

The County and/or their contractor will install orange construction fencing between the construction area and adjacent sensitive biological resource areas. Sensitive biological resources that occur adjacent to the construction area that could be directly affected by the project include natural communities of special concern; fairy shrimp, valley elderberry longhorn beetle and western pond turtle habitats; nest sites of Swainson's hawk, yellow-breasted chat, tricolored blackbird, song sparrow, and other migratory birds; roosting bats; and protected trees to be avoided.

Barrier fencing around sensitive areas will be installed as one of the first orders of work and prior to equipment staging. Preliminary fencing locations are included in the draft project design drawings and labeled as Environmentally Sensitive Areas. The preliminary fencing locations area also shown on EIR/EA Figure 3-1. The locations of the fencing will be updated or confirmed as part of final design, prior to

construction. Before construction begins, the construction contractor will work with the project engineer and a resource specialist to identify the locations for the orange construction fencing, and a resource specialist will place stakes around the sensitive resource sites to indicate these locations. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans and described in the specifications. Barrier fencing will be installed before construction activities are initiated, maintained throughout the construction period, and removed after completion of construction. (FEIR/EA pp. 3-64 thru 3-65)

Mitigation Measure BIO-2: Conduct Environmental Awareness Training for Construction Employees

The County or their contractor will retain a qualified biologist to conduct environmental awareness training for construction crews before project implementation. The awareness training will be provided to all construction personnel and will brief them on the need to avoid effects on sensitive biological resources (e.g., native trees, natural communities of special concern, and special-status species habitats in and adjacent to the construction area). The education program will include a brief review of the special-status species with the potential to occur in the BSA (including their life history, habitat requirements, and photographs of the species). The training will identify the portions of the BSA in which the species may occur, as well as their legal status and protection. The program also will cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on these species during project implementation. This will include the steps to be taken if a sensitive species is found within the construction area (i.e., notifying the crew foreman, who will call a designated biologist). In addition, construction employees will be educated about the importance of controlling and preventing the spread of invasive plant infestations. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions will be provided to each crew member. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs will be conducted for appropriate new personnel as they are brought on the job during the construction period. (FEIR/EA p. 3-65)

Mitigation Measure BIO-3: Retain a Qualified Biologist to Conduct Monitoring during Construction in Sensitive Habitats

The County or their contractor will retain a qualified biologist to monitor all construction activities that involve ground disturbance (e.g., vegetation removal, grading, excavation, road construction) within or adjacent to environmentally sensitive areas (e.g., wetlands, streams, riparian vegetation, special-status species habitat, active bird nests, and adjacent areas within 250-feet or where indirect effects are possible). The purpose of the monitoring is to ensure that avoidance and minimization measures are properly implemented to protect sensitive biological resources and to ensure that the project complies with all applicable permit requirements and agency conditions of approval. The biologist will regularly inspect

the fencing around environmentally sensitive areas (see EIR/EA Figure 3-1) and will communicate any issues to the resident engineer or construction foreman. The contractor will be responsible for maintaining the fence during construction and ensuring that no construction personnel, equipment, or runoff/sediment from the construction area enters environmentally sensitive areas. The monitor will complete daily logs, and a final monitoring report will be prepared at the end of each construction season that will be submitted to the County and other overseeing agencies (i.e., California Department of Fish and Wildlife [CDFW], U.S. Fish and Wildlife Service [USFWS], and USACE), as appropriate. (FEIR/EA pp. 3-65 thru 3-66)

Mitigation Measure BIO-4: Design and Implement Water Conveyance Systems that Maintain Hydrology of and Prevent Contaminants from Entering Suitable Vernal Pool Branchiopod Habitat

Concentrated flow conveyance systems identified for the proposed project may include roadside ditches, biofiltration swales, curb and gutters, dikes, overside drains, and culverts. Water conveyance systems surrounding suitable vernal pool branchiopod habitat in the project area will be evaluated, designed, and installed to maintain the existing hydrology of the four seasonal wetlands (see EIR/EA Figure 2.16-1, Sheet 2) that provide potential habitat for vernal pool branchiopods. (FEIR/EA p. 3-66)

- b. Impact BIO-2: Direct loss of habitat for valley elderberry longhorn beetle (Potentially Significant – All Build Alternatives)** Construction of any of the build alternatives has the potential to reduce the local population size of valley elderberry longhorn beetle through direct mortality or habitat loss by removal of three elderberry shrubs under Alternatives 1 and 1A and removal of four shrubs under Alternative 2. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring, and provide for compensation (1:1 ratio) would reduce impacts to less-than-significant levels. (FEIR/EA p. S-53)

Finding: Because the removal of elderberry shrubs could reduce the local population size of a Federally listed species through direct mortality or habitat loss, this direct impact is considered potentially significant. The terms and conditions under which the project would proceed are determined by the USFWS Biological Opinion for the proposed project. Mitigation to reduce project impacts to a less-than-significant level is proposed below. With implementation of standardized measures and the measures below, the impacts on valley elderberry longhorn beetle would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-66 thru 3-67)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-2 and BIO-3. (FEIR/EA p. 3-67)

Mitigation Measure BIO-5: Fence Elderberry Shrubs to be Protected

Elderberry shrubs/clusters within 165 feet of the construction area that will not be removed will be protected during construction. A qualified biologist (i.e., with elderberry/valley elderberry longhorn beetle experience) will mark the elderberry shrubs and clusters that will be protected during construction. Orange construction barrier fencing will be placed at the edge of the buffer areas established for each shrub or cluster. The buffer area distances will be proposed by the biologist and approved by the U.S. Fish and Wildlife Service (USFWS). No construction activities will be permitted in the buffer zone other than those activities necessary to erect the fencing. Signs will be posted along fencing for the duration of construction and will contain the following information.

This area is habitat of the valley elderberry longhorn beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.

Temporary fences around the elderberry shrubs will be installed as the first order of work. Temporary fences will be furnished, constructed, maintained, and later removed, as shown on the plans, as specified in the special provisions, and as directed by the project engineer. Temporary fencing will be 4 feet high, commercial-quality woven polypropylene, and orange in color.

Buffer area fences around elderberry shrubs will be inspected periodically by a qualified biologist until project construction is complete or until the fences are removed, as approved by the biological monitor and the resident engineer. The contractor will be responsible for maintaining the buffer area fences around elderberry shrubs throughout construction. Biological inspection reports will be provided to the County and USFWS. (FEIR/EA p. 3-67)

Mitigation Measure BIO-6: Compensate for Direct Effects on Valley Elderberry Longhorn Beetle and Its Habitat

Before construction begins, the County will compensate for direct effects on valley elderberry longhorn beetle by transplanting shrubs that cannot be avoided to a USFWS-approved conservation bank. The County will also purchase credits at a USFWS-approved conservation bank in accordance with ratios shown in Table 3.15-2 for the alternative that is selected. Compensation ratios shown are for shrub-level impact compensation (U.S. Fish and Wildlife Service 2017).

Table 3.15-2. Compensation for Direct Effects on Elderberry Shrubs by Alternative

Alternative	Number of Elderberry Shrubs Affected	Compensation Ratio (non-riparian)	Number of Conservation Credits Required
1	3	1:1	3
1A	3	1:1	3
2	4	1:1	4

The relocation of the elderberry shrubs will be conducted according to USFWS-approved procedures outlined in the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (U.S. Fish and Wildlife Service 2017). Elderberry shrubs within the project construction area that cannot be avoided will be transplanted during the plant's dormant phase (November through the first 2 weeks of February). A qualified biological monitor will remain on-site while the shrubs are being transplanted. (FEIR/EA pp. 3-67 thru 3-68)

- c. **Impact BIO-3: Direct impacts on western pond turtle habitat. (Potentially Significant – All Build Alternatives)** Construction of the project would result in direct permanent and temporary impacts on western pond turtle and its habitat by injury/mortality from being struck or crushed by construction equipment or becoming entrapped in open trenches. Release of contaminants into suitable aquatic habitat, also have the potential to result in sickness/ mortality of western pond turtle and degradation of habitat. The project would result 0.34 acres of permanent impacts to habitat and 0.48 acres of temporary impacts to habitat. However, implementation of mitigation measures designed to, avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring, provide for compensation (1:1 ratio), and conduct preconstruction surveys would reduce impacts on western pond turtle habitat to less-than-significant levels. (FEIR/EA p. S-55)

Finding: Loss of habitat and potential mortality of individuals as a result of the project could diminish the local population and lower reproductive potential. These impacts are potentially significant. With implementation of the measures below, the impacts on western pond turtle would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-68)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru BIO-3. (FEIR/EA p. 3-69)

Mitigation Measure BIO-7: Compensate for the Permanent and Temporary Loss of Valley Foothill Riparian Woodland

The County will compensate for the permanent and temporary loss of valley foothill riparian habitat (as show on EIR/EA Figures 2.16-2 and 2.16-3, Sheet 4) by planting a minimum of 0.06 acre of valley foothill riparian woodland species (a minimum ratio of 1:1 [1 acre planted for every 1 acre permanently and temporarily affected]) on-site or off-site and/or purchasing mitigation bank credits equivalent to a minimum of 0.06 acre of valley foothill riparian habitat.

On-site compensation will be used to the maximum extent practicable, but off-site compensation and/or purchase of mitigation bank credits may be needed to achieve

no net loss of existing in-kind riparian habitat. Each of these options is discussed below.

- Riparian habitat restoration and/or enhancement on-site or off-site should occur in the same year construction is completed. For on-site or off-site plantings, the County will prepare a mitigation planting plan, including a species list and number of each species, planting locations, and maintenance requirements. Plantings will consist of cuttings taken from local plants or plants grown from local material. Planted species for the mitigation plantings will be similar to those in and adjacent to the project area and will include native species, such as white alder (*Alnus rhombifolia*), Fremont cottonwood (*Populus fremontii* ssp. *fremontii*), valley oak (*Quercus lobata*), black walnut (*Juglans hindsii*), Oregon ash (*Fraxinus latifolia*), boxelder (*Acer negundo*), and black willow (*Salix gooddingii*). All plantings will be fitted with exclusion cages or other suitable protection from herbivory until plantings are established. Plantings will be irrigated for up to 3 years or until established. Plantings will be monitored annually for 3 years or as required in the project permits. If 75% of the plants survive at the end of the monitoring period, the revegetation will be considered successful. If the survival criterion is not met at the end of the monitoring period, planting and monitoring will be repeated after mortality causes have been identified and corrected.
- The County will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The County will pay the cost of mitigation credits in effect at the time the credits are purchased. Replacement riparian habitat will include tree species that would support nesting Swainson's hawk (*Buteo swainsoni*) (i.e., oak, cottonwood) and will occur within the range of nesting Swainson's hawk within the Sacramento Valley.

Approval of riparian mitigation activities is subject to Notification that would require CDFW-approved compensatory mitigation to offset impacts.

Likewise, to the extent offsite credits are utilized, the mitigation should occur at a CDFW-approved mitigation or conservation bank. (FEIR/EA pp. 3-69 thru 3-70)

Mitigation Measure BIO-8: Compensate for Loss of Wetlands and Non-Wetland Waters of the United States/Waters of the State

The County will compensate for the permanent fill of waters of the United States/waters of the State (a direct impact associated with roadway and interchange construction) in two wetland habitat types—emergent wetland and seasonal wetland—and in two non-wetland waters type—perennial drainage and ephemeral drainage. The minimum wetland compensation ratio to ensure no net loss of wetland or drainage functions and values will be 1:1 (1 acre of habitat credit for every 1 acre of permanent impact). The final compensation ratio will be approved by USACE. The County will compensate for permanent loss of wetlands and non-wetland waters through one or more of the following mitigation options:

- Purchase habitat credits from a USACE-approved mitigation bank with service areas for Sacramento County, such as the Cosumnes Floodplain Mitigation Bank or Elsie Gridley Mitigation Bank, and provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The County will pay the cost of mitigation credits in effect at the time the credits are purchased. The mitigation will be approved by USACE and may be modified during the permitting process.
- Pay into the National Fish and Wildlife Foundation Sacramento District In-Lieu Fee Program.

Temporarily disturbed wetlands and non-wetland waters will be returned to preconstruction condition following construction. The County also will implement the conditions and requirements of State and Federal permits that will be obtained for the proposed project.

Approval of wetland mitigation activities is subject to Notification that would require CDFW-approved compensatory mitigation to offset impacts. Likewise, to the extent offsite credits are utilized, the mitigation should occur at a CDFW-approved mitigation or conservation bank. (FEIR/EA p. 3-70)

Mitigation Measure BIO-9: Conduct Preconstruction Surveys for Western Pond Turtle and Monitor Initial In-Water Work

To avoid potential injury or mortality of western pond turtles, the County will retain a qualified wildlife biologist who is CDFW-approved to capture and relocate turtles. The biologist will conduct a preconstruction survey for western pond turtles within 24 hours of the start of construction and will survey Alder Creek and the adjacent riparian and ruderal habitat within the construction area. If in-water work does not start immediately, the biologist will return to the construction site immediately prior to the start of in-water work (i.e., dewatering, vegetation removal, or any other activities in the creek) to conduct another preconstruction survey. The biologist will remain on-site until initial in-water work is complete. If a turtle becomes trapped during initial in-water work, the biologist will relocate the individual to suitable aquatic habitat upstream of the construction area (the area downstream of the construction area is not accessible because of US 50). For the remainder of construction, the biologist will remain on-call in case a turtle is discovered. The construction crew will be instructed to notify the crew foreman, who will contact the biologist if a turtle is found trapped within the construction area. Work in the area where the turtle is trapped will stop until the biologist arrives and removes and relocates the turtle. The biologist will report their activities to the County and CDFW within 1 day of relocating any turtle. (FEIR/EA pp. 3-70 thru 3-71)

Mitigation Measure BIO-10: Restore Temporarily Disturbed Ruderal Habitat

Upon project completion, the County will restore all temporarily disturbed ruderal habitat (1.92 acres under all alternatives) (as shown on EIR/EA Figures 2.16-2 and 2.16-3) to pre-project or better conditions. To the extent feasible, native grasses and forbs will be used to reseed disturbed areas. (FEIR/EA p. 3-71)

d. Impact BIO-4: Direct impacts on Swainson's hawk and white-tailed kite nesting season and habitat. (Potentially Significant – All Build Alternatives)

Construction of any of the build alternatives would result in disturbance (noise and/or activity) during the Swainson's hawk and white-tailed kite nesting seasons and could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Also, the project would remove trees, thereby reducing the amount of available nesting habitat for these species. The project would permanently impact 3.00 acres of habitat and temporarily impact 0.22 acres of habitat. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring and preconstruction and focused surveys, provide for compensation (1:1 ratio), provide for compensation and avoid vegetation removal during breeding season would reduce impacts to less-than-significant levels. (FEIR/EA p. S-59)

Finding: Because direct impacts from the project could affect the local populations of these species, including reduced reproductive potentials, these impacts are considered potentially significant. With implementation of the measures below, the impacts on Swainson's hawk and white-tailed kite would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-71 thru 3-72)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru BIO-3, MM BIO-7, MM BIO-10. (FEIR/EA p. 3-72)

Mitigation Measure BIO-11: Compensate for the Permanent and Temporary Loss of Fremont Cottonwood-Oak Woodland

The County will compensate for the permanent loss of 2.97 acres and temporary loss of 0.19 acres of Fremont cottonwood-oak woodland at a minimum ratio of 1:1 (1 acre planted for every 1 acre permanently affected). The loss of most of the Fremont cottonwood-oak woodland habitat in the project area has been previously mitigated as part of Phase 2 of the Easton Project (County of Sacramento 2008). Figures 2.16-2 and 2.16-3 show the area that has been previously mitigated for Phase 2 of the Easton Project. For the proposed project, compensation would only be required for 0.90 acre of the direct impacts (see Section 2.16, Natural Communities, for further details). As part of the woodland mitigation, compensation may include either compensation for the woodland habitat at a minimum ratio or 1:1 as indicated above and/or compliance with Mitigation Measure BIO-20 and/or Mitigation Measure BIO-21. (FEIR/EA p. 3-72)

Mitigation Measure BIO-12: Conduct Vegetation Removal during the Non-Breeding Season of Nesting Migratory Birds

To the maximum extent feasible, vegetation removal (trees, shrubs, and ground vegetation) will occur during the non-breeding season for most migratory birds (generally between September 16 and January 31). This timing is highly preferable because if an active nest is found during preconstruction surveys in a tree (or other vegetation) that would be removed by project construction, the tree (or other vegetation) cannot be removed until the end of the nesting season, which could delay construction. If vegetation cannot be removed between October and January, or if ground cover re-establishes in areas where vegetation has been removed, the affected area must be surveyed for nesting birds, as discussed in Mitigation Measures BIO-13: Conduct Focused Survey for Nesting Swainson's Hawk and White-Tailed Kite Prior to Construction and BIO-14: Conduct Preconstruction Surveys for Nesting Migratory Birds. To minimize potential impacts on roosting bats, tree trimming and removal should be conducted from September 1 through October 15 (see Mitigation Measure BIO-15: Identify Suitable Roosting Habitat for Bats and Implement Avoidance and Protective Measures). Tree trimming and removal during this timeframe would avoid or minimize impacts on nesting birds and roosting bats. (FEIR/EA p. 3-73)

Mitigation Measure BIO-13a: Conduct Focused Surveys for Nesting White-Tailed Kite Prior to Construction

For each year in which construction, grading, or project-related improvements are to commence between February 1 and September 15, a focused survey for white-tailed kite nests on the site and within 0.25 mile of the site will be conducted by a qualified biologist no greater than 15 days prior to the start of construction work (including clearing and grubbing). If White-tailed kites are found, the qualified Biologist shall develop a species-specific avoidance plan for CDFW review and approval. Any measures approved in the plan will be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, nothing further will be required. If a lapse in project-related activities of 14 days or longer occurs, another focused survey is required before Project activities can be reinitiated.

If impacts are identified during the course of the project, project personnel shall fully avoid impacts to the species and immediately notify CDFW if White-tailed kite is detected during Project activities. (FEIR/EA p. 3-73)

Mitigation Measure BIO-13b: Conduct Focused Surveys for Nesting Swainson's hawk prior to construction

If equipment staging, site preparation, grading, excavation or other project-related activities are scheduled during the Swainson's hawk nesting season (typically March 1 through September 15) surveys for active nests of such birds shall be conducted by a qualified biologist in accordance with the typical survey protocol: Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000). Surveys shall be conducted at the appropriate radius and time periods

listed in the survey protocol. Since the project spans over multiple years, if there is a lapse of more than 15 days in construction, a new survey shall be conducted for each nesting season to capture any new Swainson's hawk nests that may be established.

If an active Swainson's hawk nest is found during project surveys, the qualified biologist shall consult with CDFW and demonstrate compliance with CESA. If during consultation it is determined that implementation of the project as proposed may result in take of Swainson's hawk, the project may seek related take authorization as provided by the Fish and Game Code. (FEIR/EA p. 3-74)

Mitigation Measure BIO-14: Conduct Preconstruction Surveys for Nesting Migratory Birds

In each year in which project activities would occur during the breeding season (generally February 1 through September 15), the County will retain a qualified wildlife biologist with knowledge of the relevant species to conduct nesting surveys 15 days or less before the start of construction. Surveys will include a search of all trees and shrubs, marsh, wetland, manmade structures, and ruderal vegetation that provide suitable nesting habitat in the project area, including staging and stockpile areas. The minimum survey radii surrounding the work area shall be the following: i) 250 feet for passerines: ii) 500 feet for small raptors such as accipiters: iii) 1,000 feet for larger raptors such as buteos. If no active nests are detected during these surveys, no additional measures are required. If a lapse in project-related activities of 14 days or longer occurs, another focused survey will be required before project activities can be reinitiated.

If an active nest is found in the survey area, a no-disturbance buffer will be established with fences or flags around the nest buffer area to avoid disturbance or destruction of the site until the end of the breeding season (September 15) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the project area (this date varies by species). The extent of these buffers will be determined by the biologist in coordination with USFWS and CDFW and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species. If nesting birds are showing signs of distress or disruptions to nesting behaviors or the buffer is otherwise not feasible, the qualified wildlife biologist, in coordination with USFWS and CDFW shall determine the appropriate change in response (e.g. buffer increase, temporary construction stop, etc.) until no further interruptions to breeding behavior are detectable. (FEIR/EA pp. 3-74 thru 3-75)

- e. **Impact BIO-5: Direct impacts on yellow-breasted chat nesting habitat. (Potentially Significant – All Build Alternatives)** Construction of any of the project build alternatives would result in impacts on suitable nesting habitat (valley foothill riparian woodland) for yellow-breasted chat. Additionally, construction disturbance (noise and/or activity) during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest

abandonment. The project would permanently impact 0.03 acres of habitat and temporarily impact 0.03 acres of habitat. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring and preconstruction surveys, provide for compensation (1:1 ratio), and avoid vegetation removal during breeding season would reduce impacts to less-than-significant levels. (FEIR/EA p. S-64)

Finding: Because direct impacts from the project could affect the local populations of this species, including reduced reproductive potential, these impacts are considered potentially significant. With implementation of the measures below, the impacts on yellow-breasted chat would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-75)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru BIO-3, MM BIO-7, MM BIO-12, MM BIO-14. (FEIR/EA pp. 3-75 thru 3-76)

- f. Impact BIO-6: Direct impacts on tricolored blackbird nesting habitat. (Potentially Significant – All Build Alternatives)** Construction of any of the project build alternatives would result in impacts on suitable nesting habitat (0.06 acres of emergent wetland) for tricolored blackbird. Additionally, construction disturbance (noise and/or activity) during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring and preconstruction surveys, provide for compensation (1:1 ratio), restore disturbed areas, and avoid vegetation removal during breeding season would reduce impacts to less-than-significant levels. (FEIR/EA p. S-65)

Finding: Since direct impacts from the project could affect the local populations of this species, including reduced reproductive potential, these impacts are considered potentially significant. With implementation of the measures below, the impacts on tricolored blackbird would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-76)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru BIO-3, MM BIO-8, MM BIO-10, MM BIO-12, MM BIO-14. (FEIR/EA pp. 3-76 thru 3-77)

- g. Impact BIO-7: Direct impacts on song sparrow (Modesto population) nesting**

habitat. (Potentially Significant – All Build Alternatives) Construction of any of the project build alternatives would result in impacts on suitable nesting habitat (0.09 acres valley foothill riparian and emergent wetland) for song sparrow (Modesto population). Additionally, construction disturbance (noise and/or activity) during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring and preconstruction surveys, provide for compensation (1:1 ratio), restore disturbed areas, and avoid vegetation removal during breeding season would reduce impacts to less-than-significant levels. (FEIR/EA p. S-66)

Finding: Because direct impacts from the project could affect the local populations of this species, including reduced reproductive potential, these impacts are considered potentially significant. With implementation of the measures below, the impacts on the Modesto population of song sparrow would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-77)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru BIO-3, MM BIO-7, MM BIO-8, MM BIO-12, MM BIO-14. (FEIR/EA p. 3-78)

h. Impact BIO-8: Removal or disturbance of special-status and non-special-status bat roosting habitat or colonies. (Potentially Significant – All Build Alternatives) Construction during the bat maternity season would result in the removal or disturbance of trees that may provide suitable roosting habitat for special-status bats. Removal or disturbance of suitable roosting habitat could result in the injury or mortality of roosting bats. Removal of occupied roost habitat would also displace bats, causing them to relocate to another roost site and potentially compete with other bats for the roost site. Additional disturbance (i.e., vibrations, noise) would occur during widening of the Hazel Avenue bridge under Alternatives 1 and 1A. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring, provide for compensation, avoid and protect bats would reduce impacts to less-than-significant levels. (FEIR/EA p. S-67)

Finding: Because direct impacts from the project could affect the local populations of special-status and non-special-status bats, including reduced reproductive potential, these impacts are considered potentially significant. With implementation of the measures below, the impacts on special-status bats and roosting colonies of non-special-status bats would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-79)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru BIO-3, MM BIO-7, MM BIO-11. (FEIR/EA p. 3-79)

Mitigation Measure BIO-15: Identify Suitable Roosting Habitat for Bats and Implement Avoidance and Protective Measures

To minimize potential impacts on tree-roosting bats, tree trimming and removal should be conducted between September 1 and October 15, which corresponds to a time period when bats have not yet entered torpor or be caring for nonvolant (non-flying) young. Trimming or removing trees during this timeframe would also avoid impacts on nesting birds.

If tree removal or trimming cannot be conducted between September 1 and October 15, qualified biologists will examine trees for suitable bat roosting habitat before tree removal or trimming. High-quality habitat features (e.g., large tree cavities, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch) will be identified and the area around these features searched for bats and bat signs (e.g., guano, culled insect parts, staining). Riparian woodland and stands of mature broadleaf trees are considered potential habitat for solitary foliage-roosting bat species. Because signs of bat use are not easily found, and trees cannot be completely surveyed for bat roosts, the protective measures listed below will be implemented for trees containing high-quality habitat features.

- Removal or disturbance of trees providing bat roosting habitat will be avoided between April 1 and August 31 (the maternity period) to avoid effects on pregnant females and active maternity roosts (whether colonial or solitary).
- If a maternity roost is found, whether solitary or colonial, that roost will remain undisturbed until September 1 or until a qualified biologist has determined the roost is no longer active.
- Qualified biologists will monitor tree trimming/removal of the habitat. Trees should be trimmed or removed over two consecutive days. The first day (in the afternoon), limbs and branches should be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures should be avoided, and only branches or limbs without those features should be removed. On the second day, the entire tree should be removed. Biologists should search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW. The biologist will prepare a biological monitoring report, which will be provided to the County and CDFW.
- Habitat assessment and survey by a qualified bat biologist

- Examining all suitable habitats prior to project implementation (including tree removal, tree trimming, or other disturbance). BIO-15 should include also habitats in manmade structures (e.g. bridge, culvert, etc.)
- Including development of a Bat Avoidance and Minimization Plan (Bat Plan) in the event that bats are utilizing the Project area during Project activities. The Bat Plan should include 1) Project-specific measures to avoid and minimize impacts to roosting bats in and near the areas that will be disturbed by Project activities 2) monitoring by a qualified bat biologist to oversee bat behavior and the avoidance and minimizations measures designed to protect nesting/roosting bats 3) exclusion measures for the habitat that will be removed or made inaccessible by the Project and 4) discussion of available alternative habitat (both temporary and permanent).

All appropriate exclusionary measures should be implemented prior to the bridge construction during the period of March 1 to April 15 or August 31 to October 15. Potential avoidance efforts may include exclusionary blocking or filling potential roosting cavities with foam or steel wool, visual monitoring, and staging Project work to avoid bats. If bats are known to use manmade structures, exclusion netting should not be used to avoid entanglement. (FEIR/EA pp. 3-79 thru 3-81)

- i. **Impact BIO-9: Disturbance of nesting migratory birds. (Potentially Significant – All Build Alternatives)** The project has the potential to disturb nesting migratory birds through tree removal and trimming, clearing of ruderal and other ground vegetation, and disturbance or removal of the Alder Creek box culvert or other structures that would occur with construction of any of the build alternatives. Construction activities during February 1 through September 15 could result in the injury or mortality of nesting birds. Nest destruction could lead to the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment and violate the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF) Sections 3503 and 3503.5. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring and preconstruction surveys, provide for compensation, and avoid vegetation removal during breeding season would reduce impacts to less-than-significant levels. (FEIR/EA p. S-70)

Finding: Because direct impacts from the project could affect the local populations of migratory birds, including reduced reproductive potential, these impacts are considered potentially significant. Activities that result in removal or destruction of occupied nests or eggs would also violate the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF) Sections 3503 and 3503.5. With implementation of the measures below, the impacts on migratory birds would be reduced to a less-than-significant level and violations of the MBTA and CFGF Sections 3503 and 3503.5 would be avoided. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-81)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru BIO-3, MM BIO-7, MM BIO-8, MM BIO-11, MM BIO-12, MM BIO-14. (FEIR/EA pp. 3-81 thru 3-82)

- j. Impact BIO-10: Permanent loss of Fremont cottonwood-oak woodland. (Potentially Significant – All Build Alternatives)** All project build alternatives would result in 2.97 acres of permanent impacts and 0.19 acre of temporary impacts on Fremont cottonwood-oak woodland through tree removal. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring, and provide for compensation would reduce impacts to less-than-significant levels. (FEIR/EA p. S-71)

Finding: Because cottonwood-oak woodlands are important wildlife habitat for special-status wildlife species and Sacramento County General Plan policies protect oak woodlands, the impact of loss of Fremont cottonwood-oak woodland would be potentially significant. With implementation of the measures below, the temporary and permanent impacts on Fremont cottonwood-oak woodland would eventually be reduced to a less-than-significant level when the compensatory planted woodland reaches maturity. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-82 thru 3-83)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru BIO-3, MM BIO-11. (FEIR/EA p. 3-83)

- k. Impact BIO-11: Temporary and permanent loss of valley foothill riparian woodland. (Potentially Significant – All Build Alternatives)** All project build alternatives would result in 0.03 acre of permanent impacts and 0.17 acre of temporary impacts on valley foothill riparian woodland through tree removal. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring, provide for compensation (1:1 ratio), would reduce impacts to less-than-significant levels. (FEIR/EA p. S-71)

Finding: Because riparian woodlands are important wildlife habitat for special-status wildlife species and are protected under CFGC Section 1602 and Sacramento County General Plan policies, loss of valley foothill riparian woodland is considered potentially significant. With implementation of the measures below, the temporary and permanent impacts on valley foothill riparian woodland would eventually be reduced to a less-than-significant level when the compensatory planted woodland reaches maturity. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-83 thru 3-84)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru BIO-3, MM BIO-7. (FEIR/EA p. 3-84)

- l. Impact BIO-12: Permanent loss of and temporary impacts on emergent wetland, seasonal wetland, perennial drainage, and ephemeral drainage. (Potentially Significant – All Build Alternatives)** The project would result in permanent impacts under all of the build alternatives including 0.06 acre of emergent wetland, 0.02 acre of seasonal wetland, 0.10 acre of perennial drainage in Alder Creek, and 0.001 acre of ephemeral drainage. Temporary impacts under all of the alternatives would include 0.06 acre of emergent wetland, 0.18 acre of perennial drainage, and 0.0003 acre of ephemeral drainage. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring, and provide for compensation (1:1 ratio) would reduce impacts to less-than-significant levels. (FEIR/EA p. S-72)

Finding: Because emergent wetlands, seasonal wetlands, perennial drainage, and ephemeral drainage are waters of the United States and waters of the State and are regulated by USACE, the loss of these wetlands and drainages is considered potentially significant. With implementation of the measures below, the impacts on wetlands and drainages would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-85)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru BIO-3, MM BIO-8. (FEIR/EA p. 3-85)

- m. Impact BIO-13: Permanent impacts on roadside ditch. (Potentially Significant – All Build Alternatives)** The project would result in permanent impacts on 0.14 acres of roadside ditch and temporary impacts on 0.03 acre of ditch through modification of the ditch bank or channel, increased turbidity, and runoff of chemical substances. Construction of the new road would replace the ditch to maintain the drainage function, and the constructed roadside ditch provides minimal habitat for wildlife species; therefore, no additional compensatory mitigation would be necessary. Implementation of mitigation that educates construction personnel would further reduce this impact to less-than-significant levels. (FEIR/EA p. S-72)

Finding: Because the ditch is verified and regulated by USACE as a non-wetland water of the United States and it is a water of the State the impact of the loss of the ditch is considered potentially significant. Construction of the new road would

replace the ditch to maintain the drainage function, and the constructed roadside ditch provides minimal habitat for wildlife species; therefore, no additional compensatory mitigation would be necessary. With implementation of the measure below, the impacts on the ditch would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-86)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-2. (FEIR/EA p. 3-86)

n. Impact BIO-14: Removal of ordinance-protected native trees. (Potentially Significant – All Build Alternatives) Native trees that would be removed in the project area include valley oak, interior live oak, California black walnut, California sycamore, buckeye, and western redbud. Based on preliminary arborist survey data, the approximately 1,441 inches DBH of native trees would be removed for Alternative 1 and Alternative 1A (including oaks, sycamore, and walnut). The tree loss will be compensated for by planting in-kind native trees equivalent to the inches removed. Buckeye and western redbud will be compensated by planting one individual for each individual removed. Willows and cottonwoods will be replaced based on the loss of canopy and are included in Mitigation Measure BIO-18 along with non-native trees. Final compensation amounts will be determined based on final design, and mitigation requirements will be adjusted to compensate the actual amount removed or encroached. Implementation of mitigation measures to protect trees that will remain and compensate for tree loss would reduce impacts to less-than-significant levels. (FEIR/EA p. S-73)

Finding: The loss of native trees including oaks, walnuts and sycamores is considered **potentially significant**. Compensatory mitigation would be required for approximately 1,441 inches DBH of native trees (including oaks, sycamore and walnut) for Alternative 1. With implementation of the measures below, direct and indirect impacts on native trees and shrubs would be reduced to a less-than-significant level. (FEIR/EA p. 3-88)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-2. (FEIR/EA p. 3-88)

Mitigation Measure BIO-16: Protect Native Trees During Construction.

This measure applies to all native oaks, that have a DBH of at least 6 inches, or if it has multiple trunks of less than 6 inches each, a combined DBH of at least 10 inches.

With the exception of the removed trees that will be compensated for through measures below, all native trees in the project area, all portions of adjacent off-site

native trees that have driplines that extend onto the project area, and all off-site native trees that may be affected by utility installation and/or improvements associated with this project, will be preserved and protected based on the County's tree mitigation measures as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb will constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs that make up the dripline does not change the protected area.
2. Chain link fencing or a similar protective barrier will be installed 1 foot outside the driplines of the native trees prior to initiating project construction, in order to avoid damage to the trees and their root system.
3. No signs, ropes, cables (except cables that may be installed by a certified arborist to provide limb support) or any other items will be attached to the native trees.
4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities will be driven, parked, stockpiled or located within the driplines of the native trees.
5. Any soil disturbance (scraping, grading, trenching, and excavation) is to be avoided within the driplines of the native trees. Where this is necessary, an International Society of Arboriculture (ISA) Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines.
6. All underground utilities and drain or irrigation lines will be routed outside the driplines of native trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.
7. If temporary haul or access roads must pass within the driplines of oak trees, a roadbed of 6 inches of mulch or gravel will be created to protect the root zone. The roadbed will be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material will be replenished as necessary to maintain a 6-inch depth.
8. Drainage patterns on the site will not be modified so that water collects or stands within, or is diverted across, the dripline of oak trees.
9. No sprinkler or irrigation system will be installed in such a manner that it sprays water within the driplines of the oak trees.
10. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the

American National Standards Institute A300 pruning standards and the ISA “Tree Pruning Guidelines”.

11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials will be kept 2 feet away from the base of the trunk. The only plant species that will be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

12. Any fence/wall that will encroach into the dripline protection area of any protected tree will be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers will be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts on the trees.

13. For a project constructing during the months of June, July, August, and September, deep water trees by using a soaker hose (or a garden hose set to a trickle) that slowly applies water to the soil until water has penetrated at least 1 foot in depth. Sprinklers may be used to water deeply by watering until water begins to run off, then waiting at least an hour or two to resume watering (provided that the sprinkler is not wetting the tree’s trunk). Deep water every 2 weeks and suspend watering 2 weeks between rain events of 1 inch or more. (FEIR/EA pp. 3-89 thru 3-90)

Mitigation Measure BIO-17: Compensate for the Loss of Protected Trees

Native trees that would be removed in the project area include valley oak, interior live oak, California black walnut, California sycamore, buckeye, and western redbud. Based on preliminary arborist survey data, the removal of up to approximately 1,441 inches for Alternative 1 and Alternative 1 A and 1,846 inches for Alternative 2 DBH of native oak trees (including oaks, sycamore, and walnut) will be compensated for by planting in-kind native trees equivalent to the DBH inches lost, based on the ratios listed below. Buckeye and western redbud will be compensated by planting one individual for each individual removed. Willows and cottonwoods will be replaced based on the loss of canopy and are included in Mitigation Measure BIO-18 along with non-native trees. Final compensation amounts will be determined based on final design, and mitigation requirements will be adjusted to compensate the actual amount removed or encroached upon by over 50 percent of the dripline radius.

Equivalent compensation based on the following ratio is required:

- one 15-gallon tree = 1 inch DBH
- one 24-inch box tree = 2 inches DBH
- one 36-inch box tree = 3 inches DBH

A Replacement Tree Planting Plan will be prepared by a certified arborist or licensed landscape architect and will be submitted to the Environmental Coordinator for

approval. The Replacement Tree Planting Plan(s) will include the following minimum elements:

- Species, size and locations of all replacement plantings and < 6-inch DBH trees to be preserved
- Method of irrigation
- If planting in soils with a hardpan/duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot-deep boring hole to provide for adequate drainage
- Planting, irrigation, and maintenance schedules;
- Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period, and to replace any of the replacement trees that do not survive during that period.

No replacement tree will be planted within 15 feet of the driplines of existing native trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement native trees will be 15 feet on-center.

If tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation will be through payment into the County Tree Preservation Fund. Payment will be made at a rate of \$325.00 per DBH inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made. (FEIR/EA pp. 3-90 thru 3-91)

- o. Impact BIO-15: The Removal of non-drought tolerant native trees and non-native trees that provide shade and/or are considered landmark trees. (Potentially Significant – All Build Alternatives)** The project would result in removal of approximately 74 trees for Alternative 1. The loss of tree canopy is expected to be approximately 72,310 square feet. Mitigation is recommended to replace the loss of tree canopy within a 15-year growth period. Compliance with Biological Mitigation Measure 18 will reduce impacts to less-than-significant levels. (FEIR/EA p. S-77)

Finding: The project is expected to result in the removal of approximately 74 trees for Alternative 1, which would not be mitigated per biological measures 7, 11, or 16. These are primarily non-native landscape trees and some non-riparian/ non wetland cottonwoods and willows. The loss of tree canopy is expected to be approximately 72,310 square feet for Alternative 1. Mitigation is recommended to replace the loss of tree canopy within a 15-year growth period. Compliance with Biological Mitigation Measure 18 will reduce impacts. With mitigation impacts to landmark and/or shade trees are considered to be less than significant. (FEIR/EA p. 3-91)

Mitigation: The following mitigation measure have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure BIO-18: Replace Loss of Tree Canopy

Removal of non-native tree canopy for the selected alternative shall be mitigated by creation of new tree canopy equivalent to the acreage of non-native tree canopy removed. New tree canopy acreage shall be calculated using the Sacramento County Department of Transportation 15-year shade cover values for tree species. Preference is given to on-site mitigation, but if this is infeasible, then funding shall be contributed to the Sacramento Tree Foundation's Greenprint program in an amount proportional to the tree canopy lost (as determined by the 15-year shade cover calculations for the tree species to be planted through funding, with the cost to be determined by the Sacramento County Tree Foundation). (FEIR/EA pp. 3-91 thru 3-92)

p. Impact CUL-1: Adverse effect on an archaeological resource. (Potentially Significant – All Build Alternatives) Although no known prehistoric or historic archaeological resources were identified within the project area, the project has the potential to cause an adverse effect on a buried archaeological resource during ground-disturbing activities. Additionally, the UAIC considers the area culturally sensitive. These resources could be buried within the project boundary; therefore, mitigation to train construction personnel, avoid sensitive areas, monitor initial ground disturbance and implement avoidance and notification procedures in the event a cultural resource is discovered is recommended. Mitigation would reduce potential impacts to less-than-significant levels. (FEIR/EA p. S-77)

Finding: It is possible that previously unknown archaeological resources could be uncovered during ground-disturbing construction activities for any of the build alternatives. This impact could be considered a significant impact on those previously unknown cultural resources. This impact is considered potentially significant. With implementation of the measures below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-94 thru 3-95)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure CUL-1: Conduct Mandatory Cultural Resources Awareness Training for Construction Personnel

Before any ground-disturbing work occurs in the project area, a qualified archaeologist will be retained to conduct mandatory contractor/worker cultural resources awareness training for construction personnel. The awareness training will be provided to all construction personnel, including contractors and subcontractors, to brief them on the need to avoid effects on cultural resources adjacent to and within construction areas, their responsibility to report potential resources if observed, and the penalties for not complying with applicable State and Federal laws and permit requirements. (FEIR/EA p. 3-95)

Mitigation Measure CUL-2: Monitor for Archaeological Resources during Initial Ground Disturbance

A Native American monitor will be retained to monitor all initial ground disturbing activities (e.g., grading, excavation, tree removal). The purpose of the monitoring is to ensure that no unrecorded archaeological resources are affected by the project and to ensure that the project complies with all applicable permit requirements and agency conditions of approval. (FEIR/EA p. 3-95)

Mitigation Measure CUL-3: Implement Avoidance and Notification Procedures for Cultural Resources Discovered during Construction

If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find. All reasonable measures will be implemented to avoid, minimize, or mitigate further harm to the resource. If appropriate, the project proponent will notify Indian tribes or Native American groups that may attach religious or cultural significance to the affected resource.

If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County coroner will be contacted. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendent (MLD). The County will work with the MLD to avoid the remains, and if avoidance is not feasible, to determine the respectful treatment of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable. (FEIR/EA p. 3-95)

Mitigation Measure CUL-4: Install Orange Construction Fencing to Avoid Culturally Sensitive Areas

Construction-related staging, equipment, and worker parking will be kept within the approved APE boundary. The APE boundaries in the vicinity of areas identified as culturally sensitive by the UAIC as a result of consultation with the lead agencies will be delineated with orange construction fencing or other visible means to ensure complete avoidance. (FEIR/EA p. 3-96)

- q. Impact CUL-2: Disturb any human remains (Potentially Significant – All Build Alternatives)** Human remains are protected under Section 5097.94 of the PRC and Section 7050 of the California HSC to protect Native American burials. The project area is generally sensitive for archaeological deposits, including human remains, which could be impacted during ground-disturbing activities. Mitigation to train construction personnel, avoid sensitive areas, monitor initial ground disturbance and implement avoidance and notification procedures in the

event human remains are discovered would reduce impacts to less-than-significant levels. (FEIR/EA p. S-79)

Finding: The APE is generally sensitive for archaeological deposits, including human remains. Earth-disturbing excavation and grading construction activities could damage human remains if present in the project area. If human remains are inadvertently discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County coroner will be contacted. Pursuant to PRC Section 5097.98, if the remains are thought to be Native American, the coroner will notify the NAHC, which will then notify the MLD. The project proponent will work with the MLD to avoid the remains and, if avoidance is not feasible, to determine the respectful treatment of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable. This impact is considered potentially significant. With implementation of the measures below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-96)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure – See Mitigation Measure CR-1 thru CR-4. (FEIR p. 3-96)

- r. **Impact HZ-2: Release of, or exposure to hazardous materials during construction. (Potentially Significant – All Build Alternatives)** During ground-disturbing project activities, construction workers could be exposed to hazardous materials such as aerially deposited lead (ADL) along US 50; lead or chromium in yellow pavement striping; asbestos-containing material (ACM) in various bridge components; polychlorinated biphenyls in pole-mounted transformers; lead-based paint (LBP) in utility openings or on steel structures; and gasoline-contaminated soil. Implementation of mitigation measures to address worker health and safety, implement abatement plans, conduct sampling and testing, and dispose of contaminated soils would reduce impacts to less-than-significant levels. (FEIR/EA pp. S-79 thru S-80)

Finding: Soil testing for ADL indicate that higher concentrations of ADL were associated with the samples obtained from the shoulders of US 50, while lower concentrations and/or non-detect results were associated with Hazel Avenue, Folsom Boulevard, and the on- and off-ramp connections to US 50. Construction workers' health could be adversely affected if exposed to ADL during ground-disturbing activities such as grading along US 50. These impacts are considered potentially significant. With implementation of the measures below, the impacts on human health would be reduced to a less-than-significant level. The impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-99)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure HZ-1: Develop and Implement Plans to Address Worker Health and Safety

As required by Federal, State, and local regulations, prior to construction, the County will employ a Certified Industrial Hygienist who will prepare a Health and Safety Plan, Lead Compliance Plan, BMP and/or injury and illness prevention plan to address worker safety when working with potentially hazardous materials (e.g., levels of protective personal equipment, emergency action plan, procedures for encountering hazardous materials) including potential ACMs, LBPs, lead or chromium in traffic stripes, aerially deposited lead, and other construction-related materials within the ROW during any soil-disturbing activity. (FEIR/EA pp. 3-99 thru 3-100)

Mitigation Measure HZ-2: Conduct Site-Specific Assessments and Prepare and Implement a Work Plan

Prior to construction, the County will conduct additional assessments of soil, groundwater, and building materials within the proposed acquisition area of the parcels described below. In addition, prior to soil and groundwater testing, the County will prepare a work plan that detail testing locations and analytical methods. Testing locations will be similar to proposed excavation locations in order to characterize potentially excavated soils. The plan will incorporate the soil and groundwater data to ensure that soil and groundwater are stored, managed, and disposed of appropriately and in accordance with applicable laws and regulations.

Soil and Groundwater

Assess the Chevron Service Station (APN: 069-0160-012), Nimbus Winery (APN: 069-0050-013), Aerojet Facility (APN: 072-0231-125), and UPRR ROW for possible soil and groundwater contamination. The sampling and testing of surface soils and groundwater at these sites will be analyzed for total petroleum hydrocarbons such as diesel, heavy metals, petroleum hydrocarbons, PAHs, and chlorinated solvents. Drilling for soil and groundwater will be performed by OSHA-trained personnel with appropriate licenses (CFR 1910.120).

If soil and/or groundwater contamination is identified, the County will comply with Federal and State regulations and the Sacramento County CUPA regulatory requirements regarding the handling and disposal of hazardous wastes. These requirements include consultation with the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board and adherence to the SWPPP. The SWPPP requirement of BMPs designed to minimize the release of hazardous materials would help reduce potential impacts. Contaminated soils not reused on-site will be disposed of at a Class I landfill facility.

If groundwater is extracted as part of dewatering, the extracted groundwater will be stored in tanks, and tested for chlorinated solvents, and either sent off-site for

recycling or directed to the existing groundwater treatment system at the Aerojet facilities for disposal and treatment. This will be in addition to the pre-characterization of groundwater quality during preconstruction testing.

Asbestos-Containing Materials and Lead-Based Paint

The Cattlemen's Restaurant (APN: 069-0060-085) and Nimbus Winery (APN: 069-0050-013) buildings are likely to contain ACM and LBP in their construction materials. Various bridge components, such as the overpass, could also contain ACM. The County will conduct a hazardous materials survey prior to demolition or significant renovation of Cattlemen's Restaurant, Nimbus Winery, and bridge structures.

If lead or asbestos is found in these buildings or structures, prior to removal or renovation the County will prepare an abatement plan as part of the Task-Specific Safety Plan required under Section 12-1.01.C of the County Standard Construction Specifications. The abatement plan will provide for a California-certified asbestos consultant and California Department of Health Services–certified lead project designer to prepare hazardous materials specifications for abatement of the ACM and LBP. This specification will be the basis for selecting qualified contractors to perform the proposed asbestos and lead abatement work. The County will retain a California-licensed asbestos abatement contractor to perform the abatement of any asbestos-containing construction materials and LBP deemed potentially hazardous. Abatement of hazardous building materials will be completed prior to any work on these structures. (FEIR/EA pp. 3-100 thru 3-101)

Mitigation Measure HZ-3: Conduct Sampling, Testing, Removal, Storage, Transportation, and Disposal of Yellow Traffic Striping along Existing Roadways

The County will sample and test yellow traffic striping scheduled for removal to determine whether lead or chromium is present. All aspects of the project associated with removal, storage, transportation, and disposal will be conducted in strict accordance with appropriate regulations of the California Health and Safety Code Section 1532.1, and Section 13-2.09, Removal of Traffic Stripes and Pavement Markings of the County's Standard Construction Specifications (2017). Section 13-2.09 includes safety requirements such as shielding sandblasting equipment and using a vacuum to ensure grindings are contained. Traffic striping will be disposed of at a Class I disposal facility. The responsibility of implementing this measure will be outlined in the contract between the County and the construction contractor. (FEIR/EA p. 3-101)

Mitigation Measure HZ-4: Appropriately Dispose of Soils Contaminated with Aerially Deposited Lead

Soils in the project limits along the U.S. 50 corridor identified as having hazardous levels of ADL will be handled and disposed of in accordance with applicable Cal-OSHA requirements including a project-specific worker Health and Safety Plan and

Lead Compliance Plan. Cal-OSHA standards regarding lead apply to all construction work where an employee may be exposed to lead and include notification of lead testing results; providing protective clothing and equipment; hazardous materials training; and control measures to contain lead. (FEIR/EA p. 3-101)

- s. Impact HZ-4: Exposure to contaminated soil and groundwater during ground-disturbing activities at the Aerojet site. (Potentially Significant – All Build Alternatives)** The Aerojet facility is an 8,500-acre superfund site undergoing cleanup for soil and groundwater contamination. Construction workers could be exposed to contaminated soil and groundwater during ground-disturbing activities at the Aerojet site particularly during viaduct construction that may require drilled piles from 50–80 feet in depth. Implementation of mitigation measures to address worker health and safety and implement abatement plans would reduce impacts on construction workers' health to less-than-significant levels. (FEIR/EA p. S-83)

Finding: The Aerojet facility is an 8,500-acre superfund site undergoing cleanup located on the south side of Folsom Boulevard that has been identified in several hazardous materials databases. Soil and groundwater have been contaminated by past operating and disposal practices from industrial chemical manufacturing, pesticide manufacturing, and testing. The substrate of the site has also been affected by TCE and perchlorate from historical mining and dredging activities. Groundwater treatment for a variety of chlorinated solvents is ongoing. Exposure to contaminated soil and/or groundwater as a result of construction activities could occur. Viaduct construction may require drilled piles from 50–80 feet in depth and construction of a tunnel ramp under Alternative 1A would likely encounter groundwater. Approval of Alternative 1 would avoid some potential encounters with the groundwater associated with the Alternative 1A undercrossing. If contaminated soils and/or groundwater within the ROW is encountered, construction workers' health could be adversely affected. This impact is considered potentially significant. With implementation of the measures below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-102 thru 3-103)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM HZ-1 thru HZ-2. (FEIR p. 3-103)

- t. Impact: Cumulative Contribution (Potentially Significant – All Build Alternatives): Temporary contribution to cumulative increases in nighttime light.** All three build alternatives would temporarily contribute to increases in nighttime light during project construction. Evening and nighttime construction activities would require the use of extremely bright lights during an approximate 6-month period. Implementation of mitigation measures designed to reduce

fugitive light during construction, would reduce the project's temporary contribution to nighttime light to a less-than-cumulatively considerable level. (FEIR/EA p. S-85)

Finding: The project's cumulative impacts associated with the temporary contribution in nighttime light will be reduced to less than significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM AE-1. (FEIR p. S-85)

- u. Impact: Cumulative Contribution (Potentially Significant – All Build Alternatives): Contribution to cumulative impacts on air quality during construction.** During project construction, a cumulatively considerable temporary net increase of criteria pollutants was modeled to occur, exceeding SMAQMD thresholds. Implementation of SMAQMD's BMPs, use of newer model engines and use of clean diesel-powered equipment would reduce the project's contribution to less than cumulatively considerable levels. (FEIR/EA p. S-86)

Finding: The project's cumulative impacts associated with air quality during construction will be reduced to less than significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM AQ-1 thru MM AQ-3. (FEIR/EA p. S-86)

- v. Impact: Cumulative Contribution (Potentially Significant – All Build Alternatives): Contribution to the loss of Fremont cottonwood-oak woodland and valley foothill riparian woodland.** Construction of the proposed project would add to the cumulative loss of Fremont cottonwood-oak woodland and valley foothill riparian woodland which are considered natural communities of special concern. All build alternatives would result in the same permanent and temporary impacts on these natural communities. Implementation of compensatory mitigation for the loss of these communities would reduce the project's contribution to less than cumulatively considerable levels. (FEIR/EA p. S-87)

Finding: The project's cumulative impacts associated with contribution to the loss of Fremont cottonwood-oak woodland and valley foothill riparian woodland will be reduced to less than significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru MM BIO-3, MM BIO-7, MM BIO-11. (FEIR/EA p. S-87)

- w. Impact: Cumulative Contribution (Potentially Significant – All Build Alternatives): Contribution to the loss of wetlands and non-wetland waters.** The project would contribute to the loss of wetlands and non-wetland waters through direct impacts and permanent loss of up to 0.08 acre of wetland habitat and up to 0.24 acre of non-wetland waters habitat. Implementation of compensatory mitigation for the loss of wetlands and non-wetland waters would reduce the project's contribution to less than cumulatively considerable levels. (FEIR/EA p. S-88)

Finding: The project's cumulative impacts associated with contribution to the loss of wetlands and non-wetland waters will be reduced to less than significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-8. (FEIR/EA p. S-88)

- x. Impact: Cumulative Contribution (Potentially Significant – All Build Alternatives): Contribution to loss of habitat for Midvalley fairy shrimp, western pond turtle, white-tailed kite, yellow-breasted chat, tricolored blackbird, song sparrow, special-status bats, and migratory birds.** The project would contribute to the loss of habitat for special-status animal species through both temporary and permanent impacts on suitable habitat including temporary construction disturbances and permanent loss of aquatic and terrestrial habitats. Implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring and preconstruction surveys, maintain existing hydrology, provide for compensation (1:1 ratio), restore disturbed areas, avoid vegetation removal during breeding seasons, avoid and protect bats, and protect trees would reduce the project's contribution to cumulative impacts on special-status animal species to a less than cumulatively considerable level. (FEIR/EA p. S-88)

Finding: The project's cumulative impacts associated with contribution to the loss of habitat for Midvalley fairy shrimp, western pond turtle, white-tailed kite, yellow-breasted chat, tricolored blackbird, song sparrow, special-status bats, and migratory birds will be reduced to less than significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru MM BIO 4, MM BIO 7 thru MM BIO-15. (FEIR/EA pp. S-88 thru S-89)

- y. **Impact: Cumulative Contribution (Potentially Significant – All Build Alternatives): Contribution to loss of habitat for threatened and endangered Species (vernal pool fairy shrimp, valley elderberry longhorn beetle, and Swainson's hawk).** The project would contribute to direct and indirect impacts on four Federal or State-listed species (vernal pool fairy shrimp, valley elderberry longhorn beetle, Swainson's hawk, and tricolored blackbird) and their habitat. Indirect effects on habitat for vernal pool fairy shrimp, direct loss of habitat for valley elderberry longhorn beetle, and direct loss of nesting habitat for Swainson's hawk and tricolored blackbird would occur. Implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring, create appropriate water conveyance systems to maintain existing hydrology, conduct preconstruction surveys, restore disturbed areas, provide for compensation, and avoid vegetation removal during breeding season would reduce the project's contribution to impacts on threatened and endangered species to a less than cumulatively considerable level. (FEIR/EA p. S-90)

Finding: The project's cumulative impacts associated with contribution to the loss of habitat for threatened and endangered Species (vernal pool fairy shrimp, valley elderberry longhorn beetle, and Swainson's hawk) will be reduced to less than significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) – See MM BIO-1 thru MM BIO 8, MM BIO 10 thru MM BIO-12, MM BIO 14. (FEIR/EA pp. S-90 thru S-91)

IX. PROJECT ALTERNATIVES

The Project under Alternative 1 will cause environmental effects that are significant, but can be mitigated to a less than significant level for aesthetics, public services, noise, hydrology and water quality, geology and soils, biological resources, cultural resources and hazardous materials, each as discussed above. The Project under Alternative 1 also will result in unavoidable significant environmental effects to aesthetics as discussed above. Thus, the County must consider the feasibility of any environmentally superior alternatives to the Project, as proposed. The County must evaluate whether one or more of these alternatives could substantially lessen or avoid these unavoidable significant environmental effects. (*Citizens for Quality Growth v. City of Mount Shasta* (1988) 198 Cal. App. 3d 433, 443-45; see also Pub. Resources Code section 21002).

In seeking to effectuate the substantive policy of CEQA to substantially lessen or avoid significant environmental effects to the extent feasible, an agency, in adopting findings, need not necessarily address the feasibility of *both* mitigation measures and environmentally superior alternatives when contemplating approval of a proposed project with significant impacts. Where a significant impact can be mitigated to an “acceptable” level solely by the adoption of feasible mitigation measures, the agency in drafting its findings, has no obligation to even consider the feasibility of any environmentally superior alternative that could also substantially lessen or avoid the same impact—even if the alternative would render the impact less severe than would the proposed Project as mitigated. (*Laurel Hills Homeowners Association v. City Council* (1978) 83 Cal. App. 3d 515,521; see also *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal. App. 3d 692, 730-31; and *Laurel Heights Improvement Association v. Regents of the University of California* (“Laurel Heights I”) (1988) 47 Cal. 3d 376, 400-03).

The EIR/EA examined alternatives to the Project to determine whether each alternative could meet the Project’s objectives, while avoiding or substantially lessening the significant unavoidable impacts of the Project.

The EIR/EA considered, but rejected the following alternatives to the Project:

- L-7 with Collector
- L-7 without Collector
- Flyover-West
- Split Structure
- Braided Partial Cloverleaf “C”
- Diverging Diamond

Based on the traffic analysis, three alternatives were identified that provide acceptable traffic operations through the interchange and meet the need and purpose of the project. However, Caltrans subsequently rejected all 3 alternatives due to a high number of non-standard design features in each. The project development team then created two alternatives (and one subalternative) that provide acceptable traffic operations through the interchange and also met the need and purpose of the project. Caltrans agreed to study these alternatives further in the Project Approval and Environmental Document (PA&ED) phase; these alternatives were described in a Project Study Report (California Department of Transportation 2014c).

A standard type L-9 interchange was evaluated as a baseline concept with which to compare the proposed alternatives. However, it was determined through assessment of traffic operations, cost, and access/mobility needs that the standard type L-9 interchange does not satisfy the project’s need and purpose and therefore was not proposed as a viable alternative. As part of the Peer Review process, this project complied with Caltrans Policy Directive 13-02, “Intersection Control Evaluation.” A variety of intersection control types were considered for all of the viable interchange types. Roundabouts were not considered feasible due to traffic volumes, ROW constraints, and proximity to rail locations.

The EIR/EA examined in detail the following alternatives to the Project:

- No Project Alternative
- Alternative 1: L-9 Interchange with Viaduct Connector
- Alternative 1A: L-9 Interchange with Undercrossing Connector
- Direct Flyover to Hazel Avenue with Connector

(FEIR/EA pp. 1-23 thru 1-24)

The following objectives apply to the Project:

- Improve operations by removing the close intersection spacing between the eastbound ramps and Folsom Boulevard, and minimizing conflict with heavy and light rail.
 - Proposed alternatives accomplish this by grade-separating Hazel Avenue over Folsom Boulevard.
- Provide sufficient capacity in the ramps and roadways for future traffic volumes.
 - Proposed alternatives accomplish this by widening and/or lengthening the on- and off-ramps and Hazel Avenue as required by their respective traffic analyses.
- Maintain the Aerojet Road off-ramp connection to the approved development while improving the mainline operations.
 - Proposed alternatives accomplish this by removing the Aerojet Road exit from US 50 but still providing direct access to Aerojet Road through the eastbound Hazel Avenue off-ramp. (FEIR/EA pp. 1-1 thru 1-5)

A. No Build Alternative (No Action)

With respect to the analysis of the “No Project” Alternative, CEQA Guidelines section 15126.6(e)(2) provides:

The “no project” analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

The No Build Alternative, would not modify the Hazel Avenue/US 50 interchange, and would retain the existing configuration, ramps, and lanes. Traffic congestion would continue to increase as planned build-out is completed, operations would continue to deteriorate, and safety would not be improved. This alternative does not meet the purpose and need of the proposed project. (FEIR/EA p. 1-22)

B. Alternative 1A: L-9 Interchange with Undercrossing Connector

Alternative 1A is the same as Alternative 1, except that the eastbound off-ramp would split and introduce a direct tunnel ramp under Hazel Avenue to carry eastbound off-ramp traffic to Aerojet

Road and Folsom Boulevard (Figure 1-4). In addition to the common design features and the unique features of Alternative 1, Alternative 1A includes the following.

- Construction of undercrossing connection to Aerojet Road, crossing under Hazel Avenue and the ramps.

Because the tunnel would be below existing ground level and groundwater could be encountered, the tunnel may require the inclusion of waterproofing within the soldier pile wall and a thicker than standard concrete roadway. The waterproofing would prevent the possibility of groundwater, including potentially contaminated groundwater from the Aerojet facility, reaching the surface. The Preliminary Geotechnical Report (Parikh 2013) prepared for the project indicates that measured groundwater was found approximately 17.7 to 25.3 feet below existing ground. With Alternative 1A, ROW acquisitions would be similar to Alternative 1. However, the ROW needed at the Nimbus Winery property (APN 069-0050-013) would be larger than for Alternative 1 because acquisition would be required for the undercrossing, as opposed to an aerial easement. (FEIR/EA p. 1-20)

Under Alternative 1A, impacts would be greater than the Project. The underground design of this alternative would require more ground disturbance with greater potential to affect paleontological and cultural resources. Additionally, project construction would encompass greater potential to encounter hazardous materials associated with groundwater plumes in the project area.

Relationship to Project Objectives: Alternative 1A would meet all Project Objectives but may require a longer construction schedule due to extensive ground disturbance and underground work compared to Alternative 1.

Finding: The Board rejects this alternative because of the greater potential for environmental impacts associated with ground disturbance due to the Alternative 1A design compared to Environmentally Superior design of Alternative 1.

C. Alternative 2: Direct Flyover to Hazel Avenue with Connector

Alternative 2 consists of a modified type L-9 interchange configuration, with a flyover ramp carrying vehicles travelling from eastbound US 50 to northbound Hazel Avenue over the freeway to join with the westbound off-ramp. Alternative 2 includes the following improvements in addition to the common design features.

- Construction of eastbound off-ramp to northbound Hazel Avenue/Aerojet Road to cross underneath Hazel Avenue and the eastbound diagonal on-ramp. The off-ramp would cross under Hazel Avenue and over US 50.
- Provide a free-right connection for traffic onto southbound Hazel Avenue.
- Realignment of westbound off-ramp to merge with the eastbound off-ramp.

- Removal of concrete median on existing US 50 overcrossing. Re-striping of the overcrossing to accommodate three (3) northbound lanes and three (3) southbound lanes. No widening is proposed of the existing overcrossing structure.

The existing Aerojet Road off-ramp from US 50 would be removed. The eastbound off-ramp diverge from US 50 would be shifted approximately 680 feet to the east to provide decision sight distance. An auxiliary lane would precede the off-ramp. A retaining wall is proposed adjacent to the off-ramp to minimize ROW acquisition.

The eastbound off-ramp would split and introduce northbound and southbound Hazel Avenue ramps. The northbound ramp would also carry traffic headed for Aerojet Road/Folsom Boulevard. An overhead sign would direct vehicles heading to southbound Hazel Avenue into the right lane and direct vehicles destined for northbound Hazel Avenue, Aerojet Road or Folsom Boulevard to use either lane. Retaining walls are proposed for the ramp as it approaches the horizontal curve towards Folsom Boulevard, to accommodate the grade difference between the ramp and mainline and to minimize ROW acquisition at an apartment complex.

The northbound Hazel Avenue movement would cross under Hazel Avenue at the interchange, cross over US 50 on a two-lane flyover structure, and then merge with the westbound off-ramp and terminate at the Hazel Avenue/Tributary Point intersection. The westbound off-ramp would split so that the southbound and through movements would align to the left of the ramp, and the northbound movements would be to the right.

The southbound ramp would connect directly to Hazel Avenue; however, for Alternative 2 an intersection is not required at Hazel Avenue and the eastbound ramp. By eliminating an intersection at the eastbound ramp, and by removing the heavy eastbound-to-northbound movements from the Hazel Avenue overcrossing, the existing structure could remain without widening.

The two-lane westbound off-ramp would be reconstructed to provide decision sight distance between the divergence point from US 50 and a new ramp split that accommodates the flyover. The westbound off-ramp would split on either side of the flyover ramp, with one lane to the right carrying northbound Hazel Avenue traffic and the other crossing underneath the flyover ramp to join up on the left side of the flyover for the southbound Hazel Avenue movements. Alternative 2 would shorten the tangent length between the two ramp curves to increase the radius of the final curve nearest the Hazel Avenue intersection, reducing likelihood that a driver would depart from the roadway and hit objects. The radius is proposed to be increased from 185 feet to 290 feet. Warning signs and delineators would be used to communicate the curves ahead.

The profiles of the three ramps have been coordinated to match grade quickly to minimize retaining wall limits and enhance driver visibility. Overhead signage would direct drivers into the appropriate lanes for northbound and southbound Hazel Avenue traffic. Under Alternative 2, ROW acquisition is also anticipated from parcels in the southwest quadrant of the interchange. It is anticipated that 16 parcels would be affected by the improvements, including

full acquisition and demolition of structures at the Chevron gas station (APN 069-0160-012) and Cattleman's restaurant (APN 069-0060-085) and the Nimbus Winery property (APN 069-0050-013). (FEIR/EA pp. 1-20 thru 1-21)

Under Alternative 2, impacts would be greater than the Project. The full acquisition of the Nimbus Winery property would be a significant and unavoidable impact under aesthetics with significant changes to the visual character of the surrounding community.

Relationship to Project Objectives: Alternative 2 would meet all Project Objectives but would significantly impact the surrounding community due to the greater amount of right-of-way acquisition required for this alternative and the longer construction schedule of three years compared to two years for Alternatives 1 and 1A. Additionally, the full acquisition of the Nimbus Winery property would be a significant and unavoidable impact under aesthetics.

Finding: The Board rejects this alternative because of the significant and unavoidable impacts associated with aesthetics and impact to the community associated with the removal of the Nimbus Winery building and business.

X. STATEMENT OF OVERRIDING CONSIDERATIONS

As set forth in the preceding sections, the Board's approval of the Project under Alternative 1 will result in significant adverse environmental effects on aesthetics that cannot be avoided even with the adoption of all feasible mitigation measures. The aesthetic impact is associated with night time construction lighting. The impacts will be reduced to the greatest extent feasible; however, it is anticipated that this impact will still be significant to those traveling or occupying the area during the duration of night time construction. The impact could be avoided by avoiding nighttime construction; however, the alternative of no nighttime construction would have additional socioeconomic impacts associated with a longer construction period and increased traffic delays during construction.

Despite the occurrence of these effects, the Board chooses to approve the Project under Alternative 1 because, in the Board's view, the economic, social, environmental, and other benefits that the Project will produce render the significant effects acceptable.

The following statements identify the reasons why, in the Board's judgment, the benefits of the Project as approved outweigh its significant and unavoidable effect associated with night time construction lighting. Any one of these reasons is sufficient to justify approval of the Project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the Board would stand by its determination that each individual reason is sufficient. The substantial evidence supporting the various benefits can be found in the preceding Findings, which are incorporated by this reference into this Section X, and in the documents found in the Record of Proceedings, as defined in Section V.

The Board finds that the Project would have the following economic, social, and environmental benefits:

- A. The project will enhance the economic opportunities and benefits associated with the Easton development for the surrounding community and businesses by providing an improved and reconfigured interchange that will accommodate projected traffic demand.
- B. The project will improve the aesthetics and visual character of the existing interchange through quality design treatments that will integrate with adjacent properties.
- C. The long term value the project brings to the community in terms of safety, improved traffic service, accommodation for all modes of travel and compliance with ADA are reasons to approve the project although there are potential short-term impacts associated with nighttime construction lights (FEIR/EA p. 3-11).
- D. Alternative 1 is the Environmentally Superior Alternative for the project, due to avoidance and mitigation of environmental impacts compared to numerous other alternatives, which were considered.

ADOPTION OF FINDINGS

The Board hereby recognizes and adopts the Findings of Fact and Statement of Overriding Considerations for the Project.

DATE: September 22, 2020

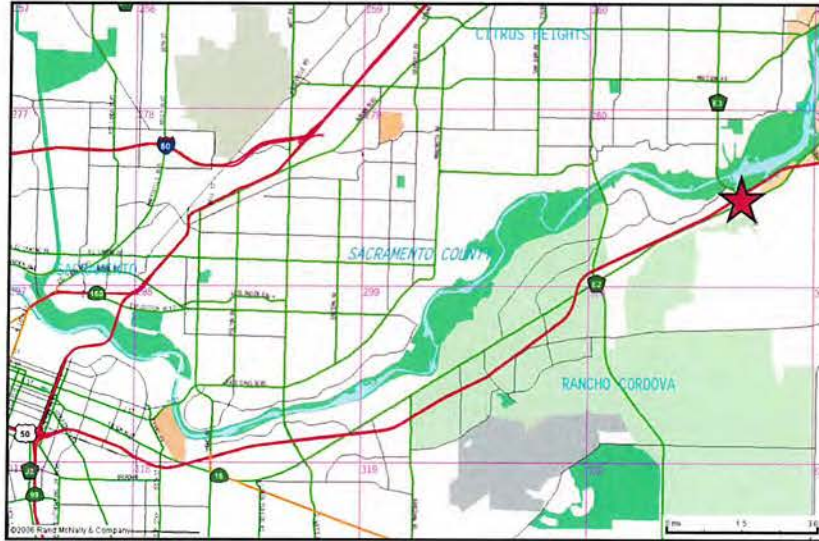
By:

**CHAIR, BOARD OF SUPERVISORS
COUNTY OF SACRAMENTO
STATE OF CALIFORNIA**

DATE: September 22, 2020 ATTEST:

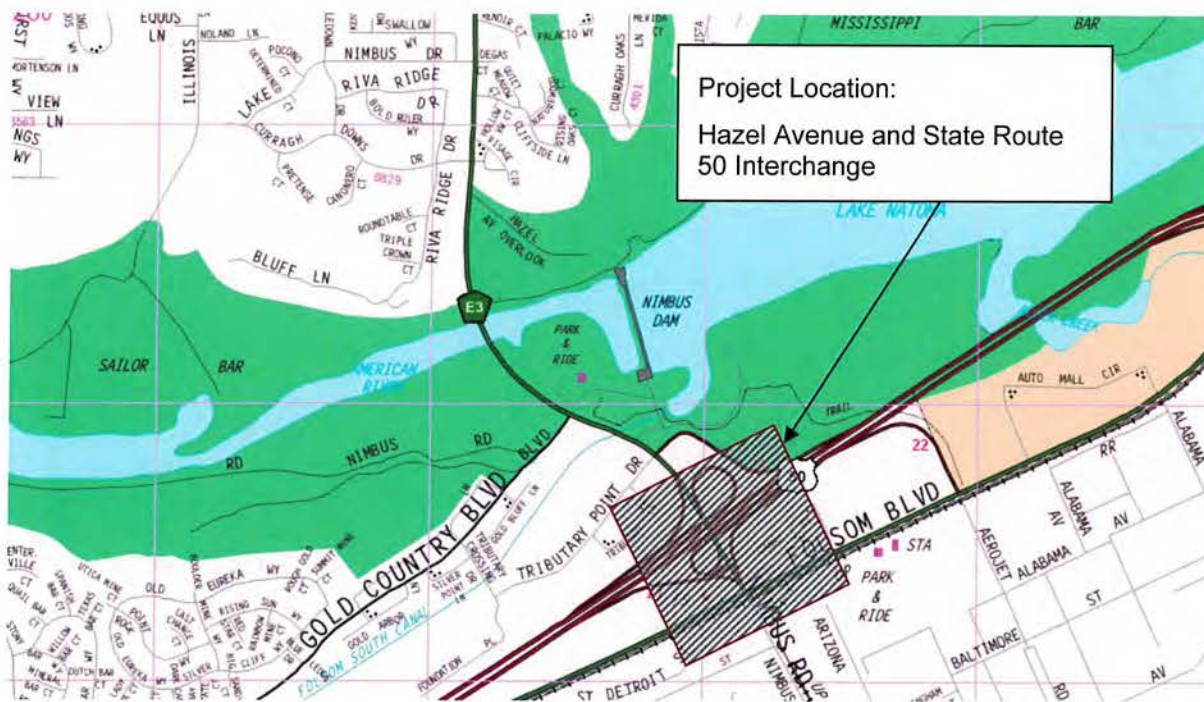
**CLERK, SACRAMENTO COUNTY
BOARD OF SUPERVISORS**

September 22, 2020



Vicinity Maps

Hazel Avenue and State
Route 50 Interchange Project



Summary of Draft EIR/EA Response to Comments for Hazel/50 Interchange Project

1.) *State Department of Toxics Substances Control (DTSC) – Letter Dated February 27, 2020*

- Standard comments related to Hazards and Hazardous Materials - Identification of Historic Activities with release of hazardous materials, prior mining activities, aerial deposited lead soil contamination, and asbestos removal with demolishing of buildings.

2.) *Wilton Rancheria – E-Mail Dated March 3, 2020*

- Requested mitigation measures for avoidance and inadvertent discoveries of tribal cultural resources, Native American Monitors, and Construction Worker Awareness Training.

3.) *Raja Kang – Comment Card from Public Meeting – March 9, 2020*

- General questions about project and potential relocation of business.

4.) *Buena Vista Rancheria – E-Mail Dated March 18, 2020*

- Requested funded tribal cultural monitors present during each phase of project construction, Review of burial management plan prior to start of construction, and notification for dates of construction so monitor's schedules are determined.

5.) *Peter Mrozik – E-mail Dated March 13, 2020*

- Concerns with project affecting business; question on purpose and need of project.

6.) *California Department of Fish and Wildlife (CDFW) – Letter dated March 17, 2020*

- Comments include the following in the Biological Resources Chapters of the Draft EIR/EA:
 - Relevant state laws and regulations list is incomplete
 - Impact conclusion describes incorrect implementation for white-tailed kite
 - List of BMPs for invasive plant species can be enhanced
 - Mitigation Measures do not disclose CDFW-approval of Riparian and Wetland Mitigation
 - Revision of mitigation measures for white-tailed kite, Swainson's Hawk, migratory birds, and bats to adequately impact to less than significant level
 - Potential impact to special status plants not disclosed or adequately mitigated to less than significant level
 - Project landscaping can be enhanced with native plants

7.) *United Auburn Indian Community of the Auburn Rancheria (UAIC) – E-mail Dated March 26, 2020*

- Requested separate chapter in DEIR/EA for Tribal Cultural Resources, avoidance and minimization measures for archaeological resources in

DEIR/EA must be changed to mitigation measures so they are enforceable, and separate mitigation measures are requested in the Tribal Cultural Resources Chapter.

8.) *Central Valley Regional Water Quality Control Board (CVRWQCB) – Letter Dated March 27, 2020*

- Standard template responses – no comments specific to Draft EIR/EA.

9.) *Sacramento Municipal Utility District (SMUD) – Letter Dated March 30, 2020*

- General comments related to draft EIR/EA addressing project impacts to utilities, line routing, and possible relocations, easements for transmission and distribution lines, energy efficiency, climate change, and electrical load/delivery; Request for SMUD Infrastructure to be incorporated into the project description.

10.) *Sacramento Metropolitan Air Quality Management District (SMAQMD) – Letter dated March 30, 2020*

- Requested enforcement mechanism for air quality mitigation measures are clarified and stated consistently between the NEPA and CEQA sections of the Draft EIR/EA; inclusion of off-site mitigation fee program as analyzed in the Air Quality Report; Road Construction Emissions Model runs not included in analysis and should be verified; incorporate permanent pedestrian lighting on Folsom Boulevard underneath the new extended and grade separated Hazel Avenue; two minor typographical errors in Air Quality Chapters.

11.) *California Department of Parks and Recreation; Gold Fields District – Letter dated March 30, 2020*

- State Parks requests the following:
 - Construction-Related Impacts: Direct involvement in the Transportation Management Plan to ensure impacts to the access of Nimbus Flat and the Aquatic Center are minimized.
 - Bicycle/Pedestrian Trail Connections: Work closely with the County to develop a logical connection to the South Lake Natoma Bike Path, which connects to the Jedediah Smith Memorial Bike Trail.
 - Existing Park and Ride Parking Lot: Work with the County and Caltrans on the potential relocation of the park and ride lot in the immediate vicinity of the Hazel/50 Interchange to minimize misuse of lot as free parking for visitors to the adjacent State Recreation Area.
 - Nimbus Flat Entrance: Work with the County to see if there is an opportunity as part of the project design to increase the stacking space capacity at the Nimbus Flat entrance station.
 - Visual/Aesthetic Quality: Requests better understanding of the proposed aesthetic treatments of the project and whether native vegetation screening is a possibility to minimize the project's visual impacts to recreation users along the existing South Lake Natoma Bike Path and elsewhere in the Nimbus Flat area.



Environmental Document: Final Environmental Impact Report for the Hazel Avenue/U.S. 50 Interchange Project

Project Name: Hazel Avenue/U.S. 50 Interchange Project

SCH# 2016022009

**CALIFORNIA TRANSPORTATION COMMISSION
FINDINGS OF FACT**

FOR

**HAZEL AVENUE/U.S. 50 INTERCHANGE PROJECT IN SACRAMENTO COUNTY,
THE CITY OF RANCHO CORDOVA, AND THE CITY OF FOLSOM**

The following information is presented to comply with State California Environmental Quality Act (CEQA) Guidelines, California Code of Regulations, Title 14, Sections 15091 and 15096 and also Title 21, Section 1501 et seq. Reference is made to the Final Environmental Impact Report (FEIR) for the Hazel Avenue/U.S. 50 Interchange Project (Project), which is the basic source of information.

The California Transportation Commission (Commission), in its independent judgment as a CEQA responsible agency, reviewed and considered the FEIR prepared by Sacramento County and finds that the FEIR contains a complete, objective, and substantiated reporting of the project's potential impacts.

The following effects have been identified in the FEIR as resulting from the project. Effects found not to be significant have not been included.

A. IMPACTS THAT ARE LESS THAN SIGNIFICANT WITH MITIGATION

The FEIR/Environmental Assessment (EA) identified some significant or potentially significant environmental effects (or "impacts") that the Project under Alternative 1 will or may cause. These significant effects can be fully avoided through the adoption of feasible mitigation measures. The Project under Alternative 1 would result in significant or potentially significant environmental effects with respect to the following issues or resources. Other effects cannot be substantially lessened or avoided by the adoption of feasible mitigation measures or alternatives and are, therefore, considered significant and unavoidable.



1. Public Services

Impact Public Services (PS)-2 (All Build Alternatives): Potential for temporary access delays and impacts at recreational facilities. (FEIR/EA p. S-34)

2. Air Quality

Impact Air Quality (AQ)-1 (All Build Alternatives): Cumulatively considerable temporary net increase of criteria pollutants. (FEIR/EA p. S-36)

Impact AQ-2 (All Build Alternatives). Expose sensitive receptors to pollutant concentrations in excess of standards. (FEIR/EA p. S-39)

3. Noise

Impact Noise (NO)-3 (All Build Alternatives): Temporary increase in noise levels during construction. (FEIR/EA p. S-41)

4. Hydrology and Water Quality

Impact Hydrology and Water Quality (HY)-2 (All Build Alternatives): Risk of flooding on- or off-site due to changes in drainage patterns and increased surface runoff. (FEIR/EA p. S-43)

Impact HY-7 (All Build Alternatives): Changes in runoff volumes that could exceed stormwater drainage system capacity. (FEIR/EA p. S-46)

Impact HY-8 (All Build Alternatives): Potential source of polluted runoff and degradation of groundwater or surface water quality. (FEIR/EA p. S-46)

5. Geology and Soils

Impact Geology and Soils (GS)-4 (All Build Alternatives): Potential for destruction of a unique paleontological resource or site. (FEIR/EA p. S-48)

6. Biological Resources

Impact Biological Resources (BIO)-1 (All Build Alternatives): Temporary disturbance of habitat for Vernal Pool Fairy Shrimp and Midvalley Fairy



Shrimp. (FEIR/EA p. S-50)

Impact BIO-2 (All Build Alternatives): Direct loss of habitat for Valley Elderberry Longhorn Beetle. (FEIR/EA p. S-53)

Impact BIO-3 (All Build Alternatives): Direct impacts on Western Pond Turtle habitat. (FEIR/EA p. S-55)

Impact BIO-4 (All Build Alternatives): Direct impacts on Swainson's Hawk and White-Tailed Kite nesting season and habitat. (FEIR/EA p. S-59)

Impact BIO-5 (All Build Alternatives): Direct impacts on Yellow-Breasted Chat nesting habitat. (FEIR/EA p. S-64)

Impact BIO-6 (All Build Alternatives): Direct impacts on Tricolored Blackbird nesting habitat. (FEIR/EA p. S-65)

Impact BIO-7 (All Build Alternatives): Direct impacts on Song Sparrow (Modesto population) nesting habitat. (FEIR/EA p. S-66)

Impact BIO-8 (All Build Alternatives): Removal or disturbance of special-status and non-special status bat roosting habitat or colonies. (FEIR/EA p. S-67)

Impact BIO-9 (All Build Alternatives): Disturbance of nesting migratory birds. (FEIR/EA p. S-70)

Impact BIO-10 (All Build Alternatives): Permanent loss of Premont cottonwood-oak woodland (FEIR/EA p. S-71)

Impact BIO-11 (All Build Alternatives): Temporary and permanent loss of valley foothill-riparian woodland. (FEIR/EA p. S-71)

Impact BIO-12 (All Build Alternatives): Permanent loss of and temporary impacts on emergent wetland, seasonal wetland, perennial drainage, and ephemeral drainage. (FEIR/EA p. S-72)

Impact BIO-13 (All Build Alternatives): Permanent impacts on roadside ditch (FEIR/EA p. S-72)



Impact BIO-14 (All Build Alternatives): Removal of ordinance-protected native trees. (FEIR/EA p. S-73)

Impact BIO-15 (All Build Alternatives): The Removal of non-drought tolerant native trees and non-native trees that provide shade and/or are considered landmark trees. (FEIR/EA p. S-77)

7. Cultural Resources

Impact Cultural Resources (CUL)-I (All Build Alternatives): Adverse effect on an archaeological resource. (FEIR/EA p. S-77)

Impact CUL-2 (All Build Alternatives): Disturb any human remains. (FEIR/EA p. S-79)

8. Hazardous Materials

Impact Hazards and Hazardous Materials (HZ)-2 (All Build Alternatives): Release of, or exposure to hazardous materials during construction. (FEIR/EA p. S-80)

Impact HZ-4 (All Build Alternatives): Exposure to contaminated soil and groundwater during ground-disturbing activities at the Aerojet site. (FEIR/EA p. S-83)

9. Cumulative Impacts

Cumulative Contribution (All Build Alternatives): Temporary contribution to cumulative increases in nighttime light. (FEIR/EA p. S-85)

Cumulative Contribution (All Build Alternatives): Contribution to cumulative impacts on air quality during construction. (FEIR/EA p. S-86)

Cumulative Contribution (All Build Alternatives): Contribution to the loss of Fremont cottonwood-oak woodland and valley foothill riparian woodland. (FEIR/EA p. S-87)

Cumulative Contribution (All Build Alternatives): Contribution to the loss of wetlands and non-wetland waters. (FEIR/EA p. S-88)



Cumulative Contribution (All Build Alternatives): Contribution to loss of habitat for Midvalley Fairy Shrimp, Western Pond Turtle, White-Tailed Kite, Yellow-Breasted Chat, Tricolored Blackbird, Song Sparrow, special-status bats, and migratory birds. (FEIR/EA p. S-88)

Cumulative Contribution (All Build Alternatives): Contribution to loss of habitat for threatened and endangered species (Vernal Pool Fairy Shrimp, Valley Elderberry Longhorn Beetle, and Swainson's Hawk). (FEIR/EA p. S-90)

The FEIR/EA identified mitigation measures to reduce these impacts to a less-than-significant level.

B. SIGNIFICANT AND UNAVOIDABLE IMPACTS

The Project would result in significant and unavoidable environmental effects with respect to the following impacts:

Aesthetics

Impact Aesthetics (AE)-4 (All Build Alternatives): Creation of a temporary new source of night-time light. (FEIR/EA p. S-33)

C. SUMMARY OF IMPACTS, FINDINGS, AND MITIGATION MEASURES

1. Aesthetics

- a. Impact AE-4: Creation of a temporary new source of nighttime light. (Significant and Unavoidable-All Build Alternatives)** New temporary sources of light, (e.g., bright lights used during construction), would negatively affect highway users and nighttime views of and from the work area. Implementation of mitigation to minimize fugitive light would reduce impacts, but it may not be possible to reduce all effects to less-than-significant levels. (FEIR/EA p. S-33)

Finding: Impacts related to light and glare would be the same or very similar under all build alternatives. Evening and nighttime construction activities would require the use of extremely bright lights, which would negatively affect highway users and nighttime views of and from the work



area. Construction is anticipated to last 2 years but during an approximate 6-month period work at night could periodically occur. This temporary impact is considered potentially significant.

With implementation of the measure below, the impact would be reduced. However, it may not be possible in all cases to reduce the effects of temporary lighting to levels considered less than significant. Therefore, after mitigation, this impact would remain significant and unavoidable. The long-term value the project brings to the community in terms of safety, improved traffic service, accommodation for all modes of travel and compliance with Americans with Disabilities Act (ADA) are reasons to approve the project although there are potential short-term impacts associated with nighttime construction lights (FEIR/EA p. 3-11).

Mitigation: The following mitigation measure has been incorporated into the Mitigation Monitoring and Reporting Program (MMRP) for this project to reduce this impact to the extent feasible:

Mitigation Measure AE-1: Minimize Fugitive Light from Portable Sources Used for Construction. At a minimum, the construction contractor will minimize project-related light and glare to the maximum extent feasible, given safety considerations. Color-corrected halide lights will be used. Portable lights will be operated at the lowest allowable wattage and height and will be raised to a height no greater than 20 feet. All lights will be screened and directed downward toward work activities and away from the night sky and roadway users and highway neighbors to the maximum extent possible. Lights will not be directed toward residential land uses after 10 p.m. The number of night-time lights used will be minimized to the greatest extent possible. (FEIR/EA p. 3-12)

2. Public Services

- a. **Impact PS-2: Potential for temporary access delays and impacts at recreational facilities. (Potentially Significant-All Build Alternatives)**
Project construction (e.g., lane closures, separated bicycle route construction, park-and-ride lot reconfiguration, equipment staging) could result in temporary, intermittent access delays to recreational areas at Lake Natoma or could affect park facilities. Implementation of mitigation to



prevent unauthorized use of State Park land would reduce impacts to less-than-significant levels. (FEIR/EA p. S-34)

Finding: California State Parks expressed a need to prevent unauthorized placement of construction equipment or staging outside of pre-determined areas of the project. Unauthorized placement of equipment or staging within park facilities could damage the park or its facilities. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-16)

Mitigation: The following mitigation measure has been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure PS-1: Prevent Unauthorized Use of State Parks Land Construction-related staging, equipment, and worker parking will be kept within the approved project limits. The project boundary adjacent to State Parks Land will be delineated with Environmentally Sensitive Area fencing or other visible means. No unauthorized use of State Parks land will be allowed. (FEIR/EA p. 3-16)

3. Air Quality

- a. **Impact AQ-1: Cumulatively considerable temporary net increase of criteria pollutants. (Potentially Significant- All Build Alternatives)** With implementation of the project, pollutant emissions would decrease for most pollutants except particulate matter. The project has the potential to result in a negligible change in ozone precursors (reactive organic gases, nitrogen oxides), carbon monoxide, and particulate matter (10 and 2.5 micrometers or smaller). During project construction, a cumulatively considerable temporary net increase of criteria pollutants was modeled to occur, exceeding Sacramento Metropolitan Air Quality Management District (SMAQMD) thresholds. Implementation of mitigation requiring use of SMAQMD's Best Management Practices (BMPs), use of newer model engines, and use of clean diesel-powered equipment would reduce impacts to less-than-significant levels. (FEIR/EA p. S-36)



Finding: Compared to the existing conditions, pollutant emissions would decrease for most pollutants, except particulate matter. Particulate matter emissions would increase in certain conditions due to re-entrained dust, brake wear, and tire wear emissions. These emissions are directly correlated to the growth in regional vehicle miles traveled (VMT). Implementation of the build alternatives would result in a negligible change compared to the No Build Alternative for O₃ precursors (Reactive Organic Gases [ROG], nitrogen oxides [NO_x]), carbon monoxide [CO], particulate matter at 10 micrometers or less [PM₁₀], and particulate matter at 2.5 micrometers or less [PM_{2.5}]. The reduction in emissions relative to the No Build Alternative is considered a long-term air quality benefit. All emission increases would be below SMAQMD thresholds. This impact would be less than significant. (FEIR/EA p. 3-25)

During construction of any of the build alternatives emissions of NO_x would exceed SMAQMD's threshold of significance, and during construction of Alternatives 1 and 1A PM₁₀ emissions would exceed SMAQMD's PM₁₀ threshold. These temporary increases in criteria pollutants would contribute to a cumulative net increase in pollutants during project construction. This impact is considered potentially significant. With implementation of the measures below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-26 through 3-27)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure AQ-1: Implement SMAQMD's Basic Construction Emission Control Practices (BMPs) Measures to control and reduce fugitive dust from SMAQMD's Basic Construction Emission Control Practices will be implemented to the extent practicable when the measures have not already been incorporated and do not conflict with requirements of Caltrans' Standard Specifications, Special Provisions, the National Pollutant Discharge Elimination System (NPDES) permit, and the Biological Opinions, Clean Water Act Section 404 permit, Clean Water Act Section 401 Certification, and other permits issued for the project. The project-proponent will implement SMAQMD's basic construction emission control practices, including but not limited to the following measures.



- Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.
- Cover or maintain at least 2 feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.
- Use wet power vacuum street sweepers to remove any visible trackout mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.
- Limit vehicle speeds on unpaved roads to 15 miles per hour.
- Pave all roadways, driveways, sidewalks, and parking lots as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.
- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes (required by California Code of Regulations, Title 13, Sections 2449(d)(3) and 2485). Provide clear signage that posts this requirement for workers at the entrances to the site.
- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determined to be running in proper condition before it is operated. (FEIR/EA pp. 3-27 through 3-28)

Mitigation Measure AQ-2: Utilize Model Year 2010 or Newer Engines to Reduce Construction-Related Exhaust Emissions from On-Road Vehicles

All on-road trucks will consist of model year 2010 or newer engines. Construction contractors will provide documentation to the County of efforts to secure such a fleet. The contractors will keep a written record of equipment usage during project construction for each piece of equipment and provide the County with annual reports documenting compliance. These reports will be submitted to SMAQMD. In the event Construction contractors cannot secure all 2010 engine model year or newer on-road trucks for the project, an off-site mitigation fee program, as analyzed in the



Air Quality Study Report (Volume 3 Technical Studies), or SMAQMD Off-site Construction Mitigation Fee Program shall be implemented.

The reporting plan shall follow SMAQMD's Enhanced On-site Exhaust Controls mitigation language. The plan will have at least two components: an initial report submitted before construction and a final report submitted at the completion of the job, phase or calendar year, as pre-arranged with SMAQMD staff and documented in the approval letter, to demonstrate continued project compliance. Additionally, the below requirements shall be met:

- Submit the initial report at least four (4) business days prior to construction activity using the SMAQMD's Construction Mitigation Tool (<http://www.airquality.org/businesses/ceqa-land-use-planning/mitigation>)
- Provide project information and construction company information
- Include the equipment type, horsepower rating, engine model year, projected hours of use, and the California Air Resources Board (CARB) equipment identification number for each piece of equipment in the plan. Incorporate all owned, leased and subcontracted equipment to be used. (FEIR/EA pp. 3-28 through 3-29)

Mitigation Measure AQ-3: Utilize Clean Diesel-Powered Equipment during Construction to Control Construction-Related Nox Emissions

The County will ensure that all off-road diesel-powered equipment used during construction is equipped with U.S. Environmental Protection Agency (EPA) Tier 4 Final engines. The County will submit to SMAQMD a comprehensive inventory of all off-road construction equipment, equal to or greater than 50 horsepower, that will be used in aggregate of 8 or more hours during any phase of the construction project. In the event Construction contractors cannot secure all 2010 engine model year or newer on-road trucks and all Tier 4 Final off-road equipment for this entire project, an off-site mitigation fee program, as analyzed in the Air Quality Study Report (Volume 3 Technical Studies), or SMAQMD Off-site Construction Mitigation Fee Program shall be implemented.





The inventory will include the following:

- CARB equipment identification number, equipment type, horsepower rating, engine model year (Tier 4 Final), and projected hours of use for each piece of off-road equipment.
- Current Certificate of Reported Compliance for CARB's In-Use Off-Road Regulation for each construction company working on the project.
- Anticipated construction timeline including start date, and name, phone number and email address of the project manager and on-site foreman.
- The construction inventory will be submitted to the SMAQMD at least 4 business days prior to the use of subject equipment. The reporting plan shall comply with the requirements as outlined in Mitigation Measure AQ-2. (FEIR/EA p. 3-29)

b. Impact AQ-2: Expose sensitive receptors to pollutant concentrations in excess of standards. (Potentially Significant-All Build Alternatives)

Construction of the project could expose workers to hazardous levels of lead and asbestos above Occupational Safety and Health Administration standards. Implementation mitigation requiring an abatement plan would reduce impacts to less-than-significant levels. (FEIR/EA p. S-39)

Finding: With respect to exposure to, or release of, structural asbestos and lead, there is the potential for these pollutants to be encountered during the demolition and removal of structures required as part of project construction. Exposure to, or release of, these pollutants could be hazardous to human health. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-34)

Mitigation: The following mitigation measure has been incorporated into the MMRP for this project to reduce this impact to a less than significant level.

Mitigation Measure AQ-4: Prepare and Implement a Lead and Asbestos Abatement Plan



Following the requirements of SMAQMD Rule 902 and Sacramento County Standard Construction Specification Section 12-1.01.C, Task Specific Safety Plan (TSSP), the County or its contractor will prepare a plan for the abatement of asbestos during demolition and removal of structures. The plan will also address abatement of structural lead. The contents of the plan will conform to Federal, State and local regulations regarding preventing environmental exposure and ensuring worker health and safety standards are implemented, including for the proper handling, removal, and disposal of the pollutants. (FEIR/EA p. 3-34)

4. NOISE

- a. **Impact NO-3: Temporary increase in noise levels during construction. (Potentially Significant-All Build Alternatives)** Project construction activities, such as impact and/or vibratory pile-driving, could result in a temporary substantial increase in ambient noise levels (95 A-weighted decibels (dBA) at 50 feet) at residential and recreational outdoor use areas exceeding relevant standards set by the Federal Transit Administration for daytime construction noise thresholds during daytime hours. Construction work done at night would exceed the County ordinance standard of 55 dBA. Implementation of mitigation to reduce and control construction noise would reduce impacts to less-than-significant levels. (FEIR/EA p. S-41)

Finding: Construction work done outside of County exempt hours would exceed the County ordinance standard of 55 dBA between the hours of 8:00 p.m. and 10:00 p.m. and 50 dBA between the hours of 10:00 p.m. and 6:00 a.m. at a distance of over 1,500 feet from construction sites. This impact is considered potentially significant. With implementation of mitigation measures, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. S-43)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure NO-2: Employ Noise-Reducing Construction Practices During Construction



During construction, the contractor will employ best practices to reduce construction noise at noise-sensitive land uses. Where possible, noise levels should not exceed 55 A-weighted decibels (dBA) during evening hours (8:00 p.m. to 10:00 p.m.) and 50 dBA during nighttime hours (10:00 p.m. to 6:00 a.m.)

Measures used to limit construction noise include the following.

- Limit noise-generating construction operations to daytime hours.
- Locate stationary equipment (e.g., generators, compressors, cement mixers, idling trucks) as far as possible from noise-sensitive land uses.
- Prevent excessive noise by shutting down idle vehicles or equipment.
- During use of pile drivers, include noise control measures such as pile cushions or noise shrouds.
- Require that all construction equipment powered by gasoline or diesel engines have sound-control devices that are at least as effective as those originally provided by the manufacturer and that all equipment be operated and maintained to minimize noise generation.
- Use noise-reducing enclosures around noise-generating equipment.
- Construct barriers to block sound transmission from construction equipment to noise-sensitive land uses. The barriers will be designed to obstruct the line of sight from the noise-sensitive land uses to on-site construction equipment. (FEIR/EA p. S-43)

Mitigation Measure NO-3: Initiate a Noise Control Plan for Mitigation of Construction Noise during Evening/Nighttime Hours

A construction noise control plan will be prepared by the County or its contractor that describes the specific methods the contractor will use to minimize construction equipment noise levels at nearby residences. The plan will include provisions for giving advance notification of construction activity schedules to occupants of potentially affected buildings.

Prior to construction, the contractor will make a construction schedule available to residents living in the vicinity of the construction areas and



designate a noise disturbance coordinator. The coordinator will be responsible for responding to complaints regarding construction noise, will determine the cause of the complaint, and will ensure that reasonable measures are implemented to correct the problem when feasible. A contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site fences and will be included in the notification of the construction schedule.

In the event of complaints by affected residents due to on-site construction noise generated during evening/nighttime hours, the contractor will monitor noise levels intermittently (between 8:00 p.m. and 6:00 a.m.) at or near the residence of the person lodging the complaint. If measured construction noise at the monitor location during night-time hours exceeds 55 dBA equivalent continuous sound level (Leq) between the hours of 8:00 p.m. to 10:00 p.m. or 50 dBA Leq during night-time hours (10:00 p.m. to 6:00 a.m.), the construction contractor will implement sound-attenuating mitigation measures where site conditions allow, such as limitations on use of noise-generating equipment or installation of additional temporary barriers or enclosures.

If these measures are ineffective in reducing noise to the identified levels, or site conditions prohibit implementation of the measures, the affected residents will be offered short-term relocation assistance for the duration of the time that nighttime noise levels are expected to exceed the specified levels. (FEIR/EA pp. S-43 through S-44)

5. Hydrology and Water Quality

- a. **Impact HY-2: Risk of flooding on- or off-site due to changes in drainage patterns and increased surface runoff. (Potentially Significant- All Build Alternatives)** The project would result in increased impervious areas that could reduce infiltration capacities thereby hindering recharge of the underlying aquifer. A total area of 8.4 acres, 8.6 acres, and 9.6 acres of new impervious surfaces would result from Alternatives 1, 1A, and 2, respectively.

If Alternative 1A is selected, construction dewatering would likely be needed during construction of the undercrossing connector ramp and could result in a temporary reduction in shallow groundwater volumes during



excavation activities.

Temporary in-water work for the new bridge structure on U.S. 50 and supports at Alder Creek would require excavation, mobilization, and grading within the creek and its banks, temporarily affecting drainage patterns. To prevent increased runoff or the possibility of flooding, the project would implement temporary diversion systems and dewatering operations, as appropriate. Once construction is completed, water flows would be restored, and drainage patterns would return to existing conditions.

Implementation of mitigation requiring BMPs, compliance with requirements of permitting agencies and the requirements of the Stormwater Quality Design Manual would reduce impacts to less-than-significant levels (FEIR/EA pp. S-43 through S-44)

- b. **Impact HY-7: Changes in runoff volumes that could exceed stormwater drainage system capacity. (Potentially Significant- All Build Alternatives)** Increased runoff volumes from the project's increase in impervious surfaces may not be contained by the existing drainage system. Low impact development concepts and post-construction stormwater runoff BMPs would promote infiltration. Each build alternative would be designed to direct and control stormwater flows such that the existing stormwater drainage system would not need modification. Implementation of mitigation requiring BMPs, compliance with requirements of permitting agencies and the requirements of the Stormwater Quality Design Manual would reduce impacts to less-than-significant levels. (FEIR/EA p. S-46)

- c. **Impact HY-8: Potential source of polluted runoff and degradation of groundwater or surface water quality. (Potentially Significant - All Build Alternatives)** During construction, discharges of sediments, oil, grease, and chemical pollutants into nearby storm drains or Alder Creek and runoff from impervious surfaces) could result in degradation of surface water quality.

Groundwater at the project area is affected by chlorinated solvents, including trichloroethene, tetrachloroethene, and perchlorate as a result of historical operations at the Aerojet facility and could be encountered during



excavation for construction of the proposed project, and especially during construction of the direct tunnel ramp under Hazel Avenue proposed as part of Alternative 1A. Waterproofing is included in the project design of Alternative 1A to prevent contaminated water from reaching the ground surface.

During operations, potential sources of pollutants from the roadway include total suspended sediments, nutrients, volatile and semi-volatile organics, pesticides, metals, and litter.

Implementation of mitigation requiring BMPs, compliance with requirements of permitting agencies and the requirements of the Stormwater Quality Design Manual would reduce impacts to less-than-significant levels. (FEIR/EA pp. S-46 through S-47)

Findings: Temporary in-water work for the new bridge structure and supports at Alder Creek would require excavation, mobilization, and grading within the creek and its banks, temporarily affecting drainage patterns. To prevent increased runoff or the possibility of flooding, the project would implement temporary diversion systems and dewatering operations, as appropriate. Once construction is completed, water flows would be restored, and drainage patterns would return to existing conditions.

This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-49)

The increase in impervious surfaces that would result from construction of the proposed project would increase the quantity of runoff from roadways. Each of the build alternatives would modify, remove/replace, or construct drainage features and would be designed to direct and control stormwater flows such that the existing stormwater drainage system would not need modification. Further, to comply with the Statewide Stormwater Management Plan (SWMP), the project would implement measures to ensure treatment, detention, and infiltration of the increased quantity of runoff from the added impervious area. The project design would also include low impact development concepts that promote infiltration and post-



construction stormwater runoff BMPs. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p S-53)

During construction, the potential for short-term discharges of sediments, oil, grease, and chemical pollutants into nearby storm drains or Alder Creek and runoff from impervious surfaces could result in a degradation of water quality. The potential for release of contaminated groundwater during construction and operation is greatest for Alternative 1A. Waterproofing is included in the project design of that alternative to prevent contaminated water from reaching the ground surface. Exposure to contaminated groundwater is also addressed under Impact HZ-4. All build alternatives have the potential to cause an increase in polluted runoff during construction and operation of the project that could result in a degradation of surface water quality. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-56)

Mitigation: The following mitigation measure has been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure HY-1: Implement Best Management Practices to Control Runoff and Discharge of Pollutants during Project Construction and Operation and Follow Requirements of Permitting Agencies and the Stormwater Quality Design Manual

As part of the final design process prior to project construction, the project engineers will develop and incorporate design features or BMPs into the project design. The features selected will comply with the Sacramento County Stormwater Quality Improvement Plan and the Sacramento Region Stormwater Quality Design Manual for project areas outside of Caltrans Right-of-Way (ROW), and Caltrans SWMP and Standard Specifications for project areas within Caltrans ROW. The features will be designed to meet all applicable water quality objectives for surface waters and groundwater contained in the Basin Plan.



For project areas outside of Caltrans ROW, the project engineers will follow the guidance in the Stormwater Quality Design Manual including selecting measures from Stormwater Quality Design Manual Table 3-3, Stormwater Quality Control Measure Selection Matrix, for street/road projects with new impervious areas larger than 5 acres. Measures that could be selected and implemented include source control, hydromodification control, treatment control, and low impact development measures such as vegetated swales, water quality detention basins, and bioretention planters.

The project engineers and construction contractor will ensure compliance with the requirements of Caltrans and County NPDES Municipal Separate Storm Water Sewer Systems (MS4) permits to control stormwater and non-stormwater discharges associated with project construction activities and discharges within the jurisdiction of each permit. Temporary diversion systems and dewatering operations will be implemented, as appropriate. The controls required by all applicable permits will be implemented to reduce the discharge of pollutants in stormwater discharges to the maximum extent possible, including management practices, control techniques, system design and engineering methods, and other measures as appropriate.

The project engineers and the construction contractor will ensure that the requirements of the County Stormwater Quality Improvement Plan will be followed to reduce the discharge of pollutants to the MS4. The project engineers and construction contractor will also ensure construction activities and project implementation complies with Section 401 (Water Quality Certification) from the Central Valley Regional Water Quality Control Board and the Section 404 Permit from the Sacramento District U.S. Army Corps of Engineers (USACE). (FEIR/EA pp. 3-49 through 3-50)

6. Geology and Soils

a. **Impact GS-4: Potential for destruction of a unique paleontological resource or site. (Potentially Significant-All Build Alternatives).**

Excavation and earthmoving activities in areas shown to be sensitive for paleontological resources could damage or destroy a unique paleontological resource. The geologic units immediately underlying the project area include the Pleistocene Riverbank and Modesto Formations, known to have vertebrate fossil content and as a result have high potential



or high sensitivity for paleontological resources, though past projects in the county have not unearthed important paleontological resources from these formations. Excavation for the project could range in depth from approximately 5 to 30 feet. Preparation of a plan to identify project locations that warrant monitoring during construction and specific measures to implement in the event of the discovery of a paleontological resource would reduce the impact to less-than-significant levels. (FEIR/EA p. S-48)

Finding: The geologic units immediately underlying the project area are Pleistocene Riverbank and Modesto Formations and disturbed areas underlain by dredge tailings. The Riverbank Formation and Modesto Formation are known to have vertebrate fossil content and as a result have a high potential or high sensitivity for paleontological resources, though past projects in the county have not unearthed important paleontological resources from these formations. Nevertheless, earth-disturbing activities proposed during construction could potentially damage paleontological resources if they exist at the project site. This impact is considered potentially significant. With implementation of the measure below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-60 through 3-61)

Mitigation: The following mitigation measure has been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure GS-1: Prepare and Implement a Paleontological Mitigation Plan

A non-standard special provision for paleontology mitigation will be included in the construction contract special provisions section to advise the construction contractor of the requirement to cooperate with paleontological salvage. The following items will be part of the provisions.

- A qualified principal paleontologist, as defined by the Caltrans Standard Environmental Reference, will be retained to prepare and implement a final Paleontological Mitigation Plan (PMP) prior to construction. If the qualified paleontologist is not a licensed



professional geologist in the State of California, then a licensed professional geologist will need to be retained to review and approve the PMP prior to construction. The preliminary PMP prepared for the project will be updated based on final engineering design and geotechnical information.

- The geotechnical investigation conducted to support final engineering design will identify the depth and location of sensitive areas and will be used by the qualified principal paleontologist to identify locations that warrant monitoring for paleontological resources during construction.
- The final PMP will list the proposed staff and professional qualifications.
- The qualified principal paleontologist will attend a task order meeting and conduct a site visit to review task order requirements; review plans, maps, initial site reports, and mitigation requirements; review site geology and paleontological sensitivity; prepare a mitigation work plan; and prepare a Code of Safe Practices.
- The qualified principal paleontologist will schedule coordination and supervision for paleontological monitors of any salvage. Monthly progress reports will be prepared for lead agency review and comment.
- The qualified principal paleontologist may designate a paleontological monitor to be present during earthmoving activities. According to preliminary engineering, excavations could occur throughout the proposed project area; therefore, paleontological monitoring is recommended during any earthmoving activities/excavations. The qualified principal paleontologist will identify locations that warrant monitoring during construction.
- The paleontological monitor will have a college degree in paleontology or geology and at least 2 years of paleontological monitoring experience or other qualifications described by the Society of Vertebrate Paleontology.
- The qualified principal paleontologist and paleontological monitor will be notified by the resident engineer or lead agency in advance of starting construction activity and will attend any safety training programs for the proposed project. Paleontological monitoring may be full-time during excavation for undercrossings, in-ground structural elements such as bridge substructures and culverts, and



any other project elements requiring deep excavation. If, after 50% of the grading/excavation is completed at a particular location for the proposed project, it can be demonstrated that the level of monitoring should be reduced for that site, the qualified principal paleontologist will amend the mitigation program. If pieces of heavy equipment are in use simultaneously at different locations, each location may be individually monitored.

- The qualified principal paleontologist will meet with the resident engineer and construction contractor at a preconstruction conference to develop an agreed-upon communication plan and to discuss provisions for worker safety. All project personnel will receive paleontological awareness training prior to commencement of work by the qualified principal paleontologist.
- If paleontological resources are discovered during earthmoving activities, the construction crew will immediately cease work within a 60-foot radius of the find and notify the resident engineer and the Sacramento County Office of Planning and Environmental Review. In the event paleontological resources are discovered, fossil specimens will be properly collected and sufficiently documented to be of scientific value.
- The collection and treatment actions described in the PMP will occur during the grading and construction process and after recovery of specimens if fossils are found, including sampling for microfossils, conducting paleomagnetic analysis, identifying and preparing fossils, arranging for a repository, and preparing a final report. (FEIR/EA pp. 3-61 through 3-62)

7. Biological Resources

a. **Impact BIO-1: Temporary disturbance of habitat for Vernal Pool Fairy Shrimp and Midvalley Fairy Shrimp. (Potentially Significant-All Build Alternatives)**

Construction of the project has the potential to temporarily disturb Vernal Pool Fairy Shrimp and Midvalley Fairy Shrimp habitat through changes in hydrology and increased contaminants. Implementation of mitigation measures designed to avoid sensitive areas, educate construction personnel, conduct biological monitoring, and create appropriate water



conveyance systems to maintain existing hydrology would reduce these impacts less-than-significant levels. (FEIR/EA p. S-50)

Finding: Potential habitat for Vernal Pool Fairy Shrimp (*Branchinecta lynchi*) and Midvalley Fairy Shrimp (*Branchinecta mesovallensis*) would not be removed or filled as a result of construction of any of the build alternatives; however, potential habitat could be temporarily disturbed during construction and potential indirect impacts could occur as a result of changes in hydrology and increased contaminants entering habitat. Because habitat for these species has declined substantially in the project region, these impacts are considered potentially significant. With implementation of the measures below, the impacts on Vernal Pool Fairy Shrimp and Midvalley Fairy Shrimp would be reduced to a less-than-significant level. The impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-64)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure BIO-1: Install Orange Construction Fencing between the Construction Area and Adjacent Sensitive Biological Resources

The County and/or their contractor will install orange construction fencing between the construction area and adjacent sensitive biological resource areas. Sensitive biological resources that occur adjacent to the construction area that could be directly affected by the project include natural communities of special concern; Fairy Shrimp, Valley Elderberry Longhorn Beetle and Western Pond Turtle habitats; nest sites of Swainson's Hawk, Yellow-Breasted Chat, Tricolored Blackbird, Song Sparrow, and other migratory birds; roosting bats; and protected trees to be avoided.

Barrier fencing around sensitive areas will be installed as one of the first orders of work and prior to equipment staging. Preliminary fencing locations are included in the draft project design drawings and labeled as Environmentally Sensitive Areas. The preliminary fencing locations area also shown on FEIR/EA Figure 3-1. The locations of the fencing will be



updated or confirmed as part of final design, prior to construction. Before construction begins, the construction contractor will work with the project engineer and a resource specialist to identify the locations for the orange construction fencing, and a resource specialist will place stakes around the sensitive resource sites to indicate these locations. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans and described in the specifications. Barrier fencing will be installed before construction activities are initiated, maintained throughout the construction period, and removed after completion of construction. (FEIR/EA pp. 3-64 through 3-65)

Mitigation Measure BIO-2: Conduct Environmental Awareness Training for Construction Employees

The County or their contractor will retain a qualified biologist to conduct environmental awareness training for construction crews before project implementation. The awareness training will be provided to all construction personnel and will brief them on the need to avoid effects on sensitive biological resources (e.g., native trees, natural communities of special concern, and special-status species habitats in and adjacent to the construction area). The education program will include a brief review of the special-status species with the potential to occur in the Biological Study Area (BSA) (including their life history, habitat requirements, and photographs of the species). The training will identify the portions of the BSA in which the species may occur, as well as their legal status and protection. The program will also cover the restrictions and guidelines that must be followed by all construction personnel to reduce or avoid effects on these species during project implementation. This will include the steps to be taken if sensitive species are found within the construction area (i.e., notifying the crew foreman, who will call a designated biologist). In addition, construction employees will be educated about the importance of controlling and preventing the spread of invasive plant infestations. An environmental awareness handout that describes and illustrates sensitive resources to be avoided during project construction and identifies all relevant permit conditions will be provided to each crew member. The crew foreman will be responsible for ensuring that crew members adhere to the guidelines and restrictions. Education programs will be conducted for appropriate new personnel as they are brought on the job during the construction period. (FEIR/EA p. 3-65)



Mitigation Measure BIO-3: Retain a Qualified Biologist to Conduct Monitoring during Construction in Sensitive Habitats

The County or their contractor will retain a qualified biologist to monitor all construction activities that involve ground disturbance (e.g., vegetation removal, grading, excavation, road construction) within or adjacent to environmentally sensitive areas (e.g., wetlands, streams, riparian vegetation, special-status species habitat, active bird nests, and adjacent areas within 250-feet or where indirect effects are possible). The purpose of the monitoring is to ensure that avoidance and minimization measures are properly implemented to protect sensitive biological resources and to ensure that the project complies with all applicable permit requirements and agency conditions of approval. The biologist will regularly inspect the fencing around environmentally sensitive areas (see FEIR/EA Figure 3-1) and will communicate any issues to the resident engineer or construction foreman. The contractor will be responsible for maintaining the fence during construction and ensuring that no construction personnel, equipment, or runoff/sediment from the construction area enters environmentally sensitive areas. The monitor will complete daily logs, and a final monitoring report will be prepared at the end of each construction season that will be submitted to the County and other overseeing agencies (i.e., California Department of Fish and Wildlife [CDFW], U.S. Fish and Wildlife Service [USFWS], and USACE), as appropriate. (FEIR/EA pp. 3-65 through 3-66)

Mitigation Measure BIO-4: Design and Implement Water Conveyance Systems that Maintain Hydrology of and Prevent Contaminants from Entering Suitable Vernal Pool Branchiopod Habitat

Concentrated flow conveyance systems identified for the proposed project may include roadside ditches, biofiltration swales, curb and gutters, dikes, overside drains, and culverts. Water conveyance systems surrounding suitable vernal pool branchiopod habitat in the project area will be evaluated, designed, and installed to maintain the existing hydrology of the four seasonal wetlands (see FEIR/EA Figure 2.16-1, Sheet 2) that provide potential habitat for vernal pool branchiopods. (FEIR/EA p. 3-66)

b. Impact BIO-2: Direct loss of habitat for Valley Elderberry Longhorn



Beetle (Potentially Significant - All Build Alternatives)

Construction of any of the build alternatives has the potential to reduce the local population size of Valley Elderberry Longhorn Beetle through direct mortality or habitat loss by removal of three Elderberry shrubs under Alternatives 1 and 1A and removal of four shrubs under Alternative 2. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring, and provide for compensation (1:1 ratio) would reduce impacts to less-than-significant levels. (FEIR/EA p. S-53)

Finding: Because the removal of Elderberry shrubs could reduce the local population size of a Federally listed species through direct mortality or habitat loss, this direct impact is considered potentially significant. The terms and conditions under which the project would proceed are determined by the USFWS Biological Opinion for the proposed project. Mitigation to reduce project impacts to a less-than-significant level is proposed below. With implementation of standardized measures and the measures below, the impacts on Valley Elderberry Longhorn Beetle would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-66 through 3-67)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM) - See MM BIO-2 and BIO-3. (FEIR/EA p. 3-67)

Mitigation Measure BIO-5: Fence Elderberry Shrubs to be Protected

Elderberry shrubs/clusters within 165 feet of the construction area that will not be removed will be protected during construction. A qualified biologist (i.e., with Elderberry/Valley Elderberry Longhorn Beetle experience) will mark the Elderberry shrubs and clusters that will be protected during construction. Orange construction barrier fencing will be placed at the edge of the buffer areas established for each shrub or cluster. The buffer area distances will be proposed by the biologist and approved by the USFWS. No construction activities will be permitted in the buffer zone other than



those activities necessary to erect the fencing. Signs will be posted along fencing for the duration of construction and will contain the following information.

This area is habitat of the Valley Elderberry Longhorn Beetle, a threatened species, and must not be disturbed. This species is protected by the Endangered Species Act of 1973, as amended. Violators are subject to prosecution, fines, and imprisonment.

Temporary fences around the Elderberry shrubs will be installed as the first order of work. Temporary fences will be furnished, constructed, maintained, and later removed, as shown on the plans, as specified in the special provisions, and as directed by the project engineer. Temporary fencing will be 4 feet high, commercial-quality woven polypropylene, and orange in color.

Buffer area fences around Elderberry shrubs will be inspected periodically by a qualified biologist until project construction is complete or until the fences are removed, as approved by the biological monitor and the resident engineer. The contractor will be responsible for maintaining the buffer area fences around Elderberry shrubs throughout construction. Biological inspection reports will be provided to the County and USFWS. (FEIR/EA p. 3-67)

Mitigation Measure BIO-6: Compensate for Direct Effects on Valley Elderberry Longhorn Beetle and Its Habitat

Before construction begins, the County will compensate for direct effects on Valley Elderberry Longhorn Beetle by transplanting shrubs that cannot be avoided to a USFWS-approved conservation bank. The County will also purchase credits at a USFWS-approved conservation bank in accordance with ratios shown in Table 3.15-2 for the alternative that is selected. Compensation ratios shown are for shrub-level impact compensation (U.S. Fish and Wildlife Service 2017).

Table 3.15-2. Compensation for Direct Effects on Elderberry Shrubs by Alternative



Alternative	Number of Elderberry Shrubs Affected	Compensation Ratio (non-riparian)	Number of Conservation Credits Required
1	3	1:1	3
1A	3	1:1	3
2	4	1:1	4

The relocation of the Elderberry shrubs will be conducted according to USFWS-approved procedures outlined in the Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle (USFWS 2017). Elderberry shrubs within the project construction area that cannot be avoided will be transplanted during the plant's dormant phase (November through the first 2 weeks of February). A qualified biological monitor will remain on-site while the shrubs are being transplanted. (FEIR/EA pp. 3-67 through 3-68)

c. Impact BIO-3: Direct impacts on Western Pond Turtle habitat. (Potentially Significant-All Build Alternatives)

Construction of the project would result in direct permanent and temporary impacts on Western Pond Turtle and its habitat by injury/mortality from being struck or crushed by construction equipment or becoming entrapped in open trenches. Release of contaminants into suitable aquatic habitat also has the potential to result in sickness/ mortality of Western Pond Turtle and degradation of habitat. The project would result in 0.34 acres of permanent impacts to habitat and 0.48 acres of temporary impacts to habitat. However, implementation of mitigation measures designed to, avoid sensitive areas (i.e., fencing), educate construction personnel, conduct biological monitoring, provide for compensation (1:1 ratio), and conduct preconstruction surveys would reduce impacts on Western Pond Turtle habitat to less-than-significant levels. (FEIR/EA p. S-55)

Finding: Loss of habitat and potential mortality of individuals as a result of the project could diminish the local population and lower reproductive potential. These impacts are potentially significant. With implementation of the measures below, the impacts on Western Pond Turtle would be reduced to a less-than-significant level. This impact would be less than



significant with mitigation incorporated. (FEIR/EA p. 3-68)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM) - See MM BIO-1 through BIO-3. (FEIR/EA p. 3-69)

Mitigation Measure BIO-7: Compensate for the Permanent and Temporary Loss of Valley Foothill Riparian Woodland

The County will compensate for the permanent and temporary loss of valley foothill riparian habitat (as show on FEIR/EA Figures 2.16-2 and 2.16-3, Sheet 4) by planting a minimum of 0.06 acre of valley foothill riparian woodland species (a minimum ratio of 1:1 [1 acre planted for every 1 acre permanently and temporarily affected]) on-site or off-site and/or purchasing mitigation bank credits equivalent to a minimum of 0.06 acre of valley foothill riparian habitat.

On-site compensation will be used to the maximum extent practicable, but off-site compensation and/or purchase of mitigation bank credits may be needed to achieve no net loss of existing in-kind riparian habitat. Each of these options is discussed below.

- Riparian habitat restoration and/or enhancement on-site or off-site should occur in the same year construction is completed. For on-site or off-site plantings, the County will prepare a mitigation planting plan, including a species list and number of each species, planting locations, and maintenance requirements. Plantings will consist of cuttings taken from local plants or plants grown from local material. Planted species for the mitigation plantings will be similar to those in, and adjacent to, the project area and will include native species, such as White Alder (*Alnus rhombifolia*), Fremont Cottonwood (*Populus fremontii* ssp. *fremontii*), Valley Oak (*Quercus lobata*), Black Walnut (*Juglans hindsii*), Oregon Ash (*Fraxinus latifolia*), Box Elder (*Acer negundo*), and Black Willow (*Salix gooddingii*). All plantings will be fitted with exclusion cages or other suitable protection from herbivory until plantings are established. Plantings



will be irrigated for up to 3 years or until established. Plantings will be monitored annually for 3 years or as required in the project permits. If 75% of the plants survive at the end of the monitoring period, the revegetation will be considered successful. If the survival criterion is not met at the end of the monitoring period, planting and monitoring will be repeated after mortality causes have been identified and corrected.

- The County will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The County will pay the cost of mitigation credits in effect at the time the credits are purchased. Replacement riparian habitat will include tree species that would support nesting Swainson's Hawk (*Buteo swainsoni*) (i.e., oak, cottonwood) and will occur within the range of nesting Swainson's Hawk within the Sacramento Valley.
- Approval of riparian mitigation activities is subject to notification that would require CDFW-approved compensatory mitigation to offset impacts.
- Likewise, to the extent offsite credits are utilized, the mitigation should occur at a CDFW-approved mitigation or conservation bank. (FEIR/EA pp. 3-69 through 3-70)

Mitigation Measure BIO-8: Compensate for Loss of Wetlands and Non-Wetland Waters of the United States/Waters of the State

The County will compensate for the permanent fill of waters of the United States/waters of the State (a direct impact associated with roadway and interchange construction) in two wetland habitat types—emergent wetland and seasonal wetland—and in two non-wetland waters types—perennial drainage and ephemeral drainage. The minimum wetland compensation ratio to ensure no net loss of wetland or drainage functions and values will be 1:1 (1 acre of habitat credit for every 1 acre of permanent impact). The final compensation ratio will be approved by USACE. The County will compensate for permanent loss of wetlands and non-wetland waters through one or more of the following mitigation options:

- Purchase habitat credits from a USACE-approved mitigation bank with service areas for Sacramento County, such as the Cosumnes



Floodplain Mitigation Bank or Elsie Gridley Mitigation Bank, and provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The County will pay the cost of mitigation credits in effect at the time the credits are purchased. The mitigation will be approved by USACE and may be modified during the permitting process.

- Pay into the National Fish and Wildlife Foundation Sacramento District In-Lieu Fee Program.

Temporarily disturbed wetlands and non-wetland waters will be returned to preconstruction conditions following construction. The County also will implement the conditions and requirements of State and Federal permits that will be obtained for the proposed project.

Approval of wetland mitigation activities is subject to notification that would require CDFW-approved compensatory mitigation to offset impacts. Likewise, to the extent offsite credits are utilized, the mitigation should occur at a CDFW-approved mitigation or conservation bank. (FEIR/EA p. 3-70)

Mitigation Measure BI0-9: Conduct Preconstruction Surveys for Western Pond Turtle and Monitor Initial In-Water Work

To avoid potential injury or mortality of Western Pond Turtles, the County will retain a qualified wildlife biologist who is CDFW-approved to capture and relocate turtles.

The biologist will conduct a preconstruction survey for Western Pond Turtles within 24 hours of the start of construction and will survey Alder Creek and the adjacent riparian and ruderal habitat within the construction area. If in-water work does not start immediately, the biologist will return to the construction site immediately prior to the start of in-water work (i.e., dewatering, vegetation removal, or any other activities in the creek) to conduct another preconstruction survey. The biologist will remain on-site until initial in-water work is complete. If a turtle becomes trapped during initial in-water work, the biologist will relocate the individual to suitable aquatic habitat upstream of the construction area (the area downstream of



the construction area is not accessible because of U.S. 50). For the remainder of construction, the biologist will remain on-call in case a turtle is discovered. The construction crew will be instructed to notify the crew foreman, who will contact the biologist if a turtle is found trapped within the construction area. Work in the area where the turtle is trapped will stop until the biologist arrives and removes and relocates the turtle. The biologist will report their activities to the County and CDFW within 1 day of relocating any turtle. (FEIR/EA pp. 3-70 through 3-71)

Mitigation Measure BIO-10: Restore Temporarily Disturbed Ruderal Habitat

Upon project completion, the County will restore all temporarily disturbed ruderal habitat (1.92 acres under all alternatives) (as shown on EIR/EA Figures 2.16-2 and 2.16-3) to pre-project or better conditions. To the extent feasible, native grasses and forbs will be used to reseed disturbed areas. (FEIR/EA p. 3-71)

d. Impact BIO-4: Direct impacts on Swainson's Hawk and White-Tailed Kite nesting season and habitat. (Potentially Significant - All Build Alternatives)

Construction of any of the build alternatives would result in disturbance (noise and/or activity) during the Swainson's Hawk and White-Tailed Kite nesting seasons and could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. Also, the project would remove trees, thereby reducing the amount of available nesting habitat for these species. The project would permanently impact 3.00 acres of habitat and temporarily impact 0.22 acres of habitat. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing), educate construction personnel; provide biological monitoring, preconstruction surveys, and focused surveys; provide for compensation (1:1 ratio); and avoid vegetation removal during breeding season would reduce impacts to less-than-significant levels. (FEIR/EA p. S-59)

Finding: Because direct impacts from the project could affect the local populations of these species, including reduced reproductive potentials,



these impacts are considered potentially significant. With implementation of the measures below, the impacts on Swainson's Hawk and White-Tailed Kite would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-71 through 3-72)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) - See MM BIO-I through BIO-3, MM BIO-7, MM BIO-IO. (FEIR/EA p. 3-72)

Mitigation Measure BIO-11: Compensate for the Permanent and Temporary Loss of Fremont Cottonwood-Oak Woodland

The County will compensate for the permanent loss of 2.97 acres and temporary loss of 0.19 acres of Fremont cottonwood-oak woodland at a minimum ratio of 1:1 (1 acre planted for every 1 acre permanently affected). The loss of most of the Fremont cottonwood-oak woodland habitat in the project area has been previously mitigated as part of Phase 2 of the Easton Project. Figures 2.16-2 and 2.16-3 show the area that has been previously mitigated for Phase 2 of the Easton Project. For the proposed project, compensation would only be required for 0.90 acre of the direct impacts (see Section 2.16, Natural Communities, for further details). As part of the woodland mitigation, compensation may include either compensation for the woodland habitat at a minimum ratio or 1:1 as indicated above and/or compliance with Mitigation Measure BIO-20 and/or Mitigation Measure BIO-21. (FEIR/EA p. 3-72)

Mitigation Measure BIO-12: Conduct Vegetation Removal during the Non-Breeding Season of Nesting Migratory Birds

To the maximum extent feasible, vegetation removal (trees, shrubs, and ground vegetation) will occur during the non-breeding season for most migratory birds (generally between September 16 and January 31). This timing is highly preferable because if an active nest is found during preconstruction surveys in a tree (or other vegetation) that would be removed by project construction, the tree (or other vegetation) cannot be



removed until the end of the nesting season, which could delay construction. If vegetation cannot be removed between October and January, or if ground cover re-establishes in areas where vegetation has been removed, the affected area must be surveyed for nesting birds, as discussed in Mitigation Measures BIO-13: Conduct Focused Survey for Nesting Swainson's Hawk and White-Tailed Kite Prior to Construction and BIO-14: Conduct Preconstruction Surveys for Nesting Migratory Birds. To minimize potential impacts on roosting bats, tree trimming and removal should be conducted from September 1 through October 15 (see Mitigation Measure BIO-15: Identify Suitable Roosting Habitat for Bats and Implement Avoidance and Protective Measures). Tree trimming and removal during this timeframe would avoid or minimize impacts on nesting birds and roosting bats. (FEIR/EA p. 3-73)

Mitigation Measure BIO-13a: Conduct Focused Surveys for Nesting White-Tailed Kite Prior to Construction

For each year in which construction, grading, or project-related improvements are to commence between February 1 and September 15, a focused survey for White-Tailed Kite nests on the site and within 0.25 mile of the site will be conducted by a qualified biologist no greater than 15 days prior to the start of construction work (including clearing and grubbing). If White-Tailed Kites are found, the qualified Biologist shall develop a species-specific avoidance plan for CDFW review and approval. Any measures approved in the plan will be implemented prior to the start of any ground-disturbing activities. If no active nests are found during the focused survey, nothing further will be required. If a lapse in project-related activities of 14 days or longer occurs, another focused survey is required before Project activities can be reinitiated.

If impacts are identified during the course of the project, project personnel shall fully avoid impacts to the species and immediately notify CDFW if White-Tailed Kite is detected during Project activities. (FEIR/EA p. 3-73)

Mitigation Measure BIO-13b: Conduct Focused Surveys for Nesting Swainson's Hawk prior to construction

If equipment staging, site preparation, grading, excavation or other project-related activities are scheduled during the Swainson's Hawk



nesting season (typically March 1 through September 15) surveys for active nests of such birds shall be conducted by a qualified biologist in accordance with the typical survey protocol: Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000). Surveys shall be conducted at the appropriate radius and time periods listed in the survey protocol. Since the project spans over multiple years, if there is a lapse of more than 15 days in construction, a new survey shall be conducted for each nesting season to capture any new Swainson's Hawk nests that may be established.

If an active Swainson's Hawk nest is found during project surveys, the qualified biologist shall consult with CDFW and demonstrate compliance with the California Endangered Species Act. If during consultation it is determined that implementation of the project as proposed may result in take of Swainson's Hawk, the project may seek related take authorization as provided by the Fish and Game Code. (FEIR/EA p. 3-74)

Mitigation Measure BIO-14: Conduct Preconstruction Surveys for Nesting Migratory Birds

In each year in which project activities would occur during the breeding season (generally February 1 through September 15), the County will retain a qualified wildlife biologist with knowledge of the relevant species to conduct nesting surveys 15 days or less before the start of construction. Surveys will include a search of all trees and shrubs, marsh, wetland, manmade structures, and ruderal vegetation that provide suitable nesting habitat in the project area, including staging and stockpile areas. The minimum survey radii surrounding the work area shall be the following:

i) 250 feet for passerines: ii) 500 feet for small raptors such as accipiters: iii) 1,000 feet for larger raptors such as buteos. If no active nests are detected during these surveys, no additional measures are required. If a lapse in project-related activities of 14 days or longer occurs, another focused survey will be required before project activities can be reinitiated.

If an active nest is found in the survey area, a no-disturbance buffer



will be established with fences or flags around the nest buffer area to avoid disturbance or destruction of the site until the end of the breeding season (September 15) or until after a qualified wildlife biologist determines that the young have fledged and moved out of the project area (this date varies by species). The extent of these buffers will be determined by the biologist in coordination with USFWS and CDFW and will depend on the level of noise or construction disturbance, line-of-sight between the nest and the disturbance, ambient levels of noise and other disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species. If nesting birds are showing signs of distress or disruptions to nesting behaviors or the buffer is otherwise not feasible, the qualified wildlife biologist, in coordination with USFWS and CDFW, shall determine the appropriate change in response (e.g. buffer increase, temporary construction stop,. etc.) until no further interruptions to breeding behavior are detectable. (FEIR/EA pp. 3-74 through 3-75)

e. Impact BIO-5: Direct impacts on Yellow-Breasted Chat nesting habitat. (Potentially Significant - All Build Alternatives)

Construction of any of the project build alternatives would result in impacts on suitable nesting habitat (valley foothill riparian woodland) for Yellow-Breasted Chat. Additionally, construction disturbance (noise and/or activity) during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. The project would permanently impact 0.03 acres of habitat and temporarily impact 0.03 acres of habitat. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing); educate construction personnel; provide biological monitoring and preconstruction surveys; provide for compensation (1:1 ratio); and avoid vegetation removal during breeding season would reduce impacts to less-than-significant levels. (FEIR/EA p. S-64)

Finding: Because direct impacts from the project could affect the local populations of this species, including reduced reproductive potential, these impacts are considered potentially significant. With implementation of the measures below, the impacts on Yellow-Breasted Chat would be reduced



to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-75)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM)- See MM BIO-I through BIO-3, MM BIO-7, MM BIO-12, MM BIO-14. (FEIR/EA pp. 3-75 through 3-76)

f. Impact BIO-6: Direct impacts on Tricolored Blackbird nesting habitat. (Potentially Significant - All Build Alternatives)

Construction of any of the project build alternatives would result in impacts on suitable nesting habitat (0.06 acres of emergent wetland) for Tricolored Blackbird. Additionally, construction disturbance (noise and/or activity) during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing); educate construction personnel; provide biological monitoring and preconstruction surveys; provide for compensation (1:1 ratio); restore disturbed areas; and avoid vegetation removal during breeding season would reduce impacts to less-than-significant levels. (FEIR/EA p. S-65)

Finding: Since direct impacts from the project could affect the local populations of this species, including reduced reproductive potential, these impacts are considered potentially significant. With implementation of the measures below, the impacts on Tricolored Blackbird would be reduced to a less-than-significant level.

This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-76)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM)- See MM BIO-I through BIO-3, MM BIO-8,



MM BIO-10, MM BIO-12, MM BIO-14. (FEIR/EA pp. 3-76 through 3-77)

g. Impact BIO-7: Direct impacts on Song Sparrow (Modesto population) nesting habitat. (Potentially Significant - All Build Alternatives)

Construction of any of the project build alternatives would result in impacts on suitable nesting habitat (0.09 acres valley foothill riparian and emergent wetland) for Song Sparrow (Modesto population). Additionally, construction disturbance (noise and/or activity) during the breeding season could result in the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing); educate construction personnel; provide biological monitoring and preconstruction surveys; provide for compensation (1:1 ratio); restore disturbed areas; and avoid vegetation removal during breeding season would reduce impacts to less-than-significant levels. (FEIR/EA p. S-66)

Finding: Because direct impacts from the project could affect the local populations of this species, including reduced reproductive potential, these impacts are considered potentially significant. With implementation of the measures below, the impacts on the Modesto population of Song Sparrow would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-77)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM)- See MM BIO-1 through BIO-3, MM BIO-7, MM BIO-8, MM BIO-12, MM BIO-14. (FEIR/EA p. 3-78)

h. Impact BIO-8: Removal or disturbance of special-status and non-special-status bat roosting habitat or colonies. (Potentially Significant - All Build Alternatives)

Construction during the bat maternity season would result in the removal or disturbance of trees that may provide suitable roosting habitat for special-status bats. Removal or disturbance of suitable roosting habitat could result in the injury or mortality of roosting bats. Removal of occupied roost habitat



would also displace bats, causing them to relocate to another roost site and potentially compete with other bats for the roost site. Additional disturbance (i.e., vibrations, noise) would occur during widening of the Hazel Avenue bridge under Alternatives 1 and 1A. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing); educate construction personnel; provide biological monitoring; provide for compensation; and avoid and protect bats would reduce impacts to less-than-significant levels. (FEIR/EA p. S-67)

Finding: Because direct impacts from the project could affect the local populations of special-status and non-special-status bats, including reduced reproductive potential, these impacts are considered potentially significant. With implementation of the measures below, the impacts on special-status bats and roosting colonies of non-special-status bats would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-79)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM) - See MM BIO-1 through BIO-3, MM BIO-7, MM BIO-11. (FEIR/EA p. 3-79)

Mitigation Measure BIO-15: Identify Suitable Roosting Habitat for Bats and Implement Avoidance and Protective Measures

To minimize potential impacts on tree-roosting bats, tree trimming and removal should be conducted between September 1 and October 15, which corresponds to a time period when bats have not yet entered torpor or be caring for nonvolant (non-flying) young. Trimming or removing trees during this timeframe would also avoid impacts on nesting birds.

If tree removal or trimming cannot be conducted between September 1 and October 15, qualified biologists will examine trees for suitable bat roosting habitat before tree removal or trimming. High-quality habitat features (e.g., large tree cavities, basal hollows, loose or peeling bark, larger snags, palm trees with intact thatch) will be identified and the area around these features searched for bats and bat signs (e.g., guano, culled insect parts,



staining). Riparian woodland and stands of mature broadleaf trees are considered potential habitat for solitary foliage-roosting bat species. Because signs of bat use are not easily found, and trees cannot be completely surveyed for bat roosts, the protective measures listed below will be implemented for trees containing high-quality habitat features.

- Removal or disturbance of trees providing bat roosting habitat will be avoided between April 1 and August 31 (the maternity period) to avoid effects on pregnant females and active maternity roosts (whether colonial or solitary).
- If a maternity roost is found, whether solitary or colonial, that roost will remain undisturbed until September 1 or until a qualified biologist has determined the roost is no longer active.
- Qualified biologists will monitor tree trimming/removal of the habitat. Trees should be trimmed or removed over two consecutive days. The first day (in the afternoon), limbs and branches should be removed by a tree cutter using chainsaws only. Limbs with cavities, crevices or deep bark fissures should be avoided, and only branches or limbs without those features should be removed. On the second day, the entire tree should be removed. Biologists should search downed vegetation for dead and injured bats. The presence of dead or injured bats that are species of special concern will be reported to CDFW. The biologist will prepare a biological monitoring report, which will be provided to the County and CDFW.
- Habitat assessment and survey by a qualified bat biologist
- Examining all suitable habitats prior to project implementation (including tree removal, tree trimming, or other disturbance). BIO-15 should also include habitats in manmade structures (e.g. bridge, culvert, etc.)
- Including development of a Bat Avoidance and Minimization Plan (Bat Plan) in the event that bats are utilizing the Project area during Project activities. The Bat Plan should include, 1) Project-specific measures to avoid and minimize impacts to roosting bats in and near the areas that will be disturbed by Project activities, 2) monitoring by a qualified bat biologist to oversee bat behavior and the avoidance and minimizations measures designed to protect nesting/roosting bats, 3) exclusion measures for the habitat that will



be removed or made inaccessible by the Project, and 4) discussion of available alternative habitat (both temporary and permanent).

All appropriate exclusionary measures should be implemented prior to the bridge construction during the period of March 1 to April 15 or August 31 to October 15. Potential avoidance efforts may include exclusionary blocking or filling potential roosting cavities with foam or steel wool, visual monitoring, and staging Project work to avoid bats. If bats are known to use manmade structures, exclusion netting should not be used to avoid entanglement. (FEIR/EA pp. 3-79 through 3-81)

- i. **Impact BIO-9: Disturbance of nesting migratory birds. (Potentially Significant- All Build Alternatives)** The project has the potential to disturb nesting migratory birds through tree removal and trimming, clearing of ruderal and other ground vegetation, and disturbance or removal of the Alder Creek box culvert or other structures that would occur with construction of any of the build alternatives. Construction activities during February 1 through September 15 could result in the injury or mortality of nesting birds. Nest destruction could lead to the incidental loss of fertile eggs or nestlings or otherwise lead to nest abandonment and violate the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code (CFGF) Sections 3503 and 3503.5. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing); educate construction personnel; provide biological monitoring and preconstruction surveys; provide for compensation; and avoid vegetation removal during breeding season would reduce impacts to less-than-significant levels. (FEIR/EA p. S-70)

Finding: Because direct impacts from the project could affect the local populations of migratory birds, including reduced reproductive potential, these impacts are considered potentially significant. Activities that result in removal or destruction of occupied nests or eggs would also violate the MBTA and CFGF Sections 3503 and 3503.5. With implementation of the measures below, the impacts on migratory birds would be reduced to a less-than-significant level and violations of the MBTA and CFGF Sections 3503 and 3503.5 would be avoided. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-81)

Mitigation: The following mitigation measures have been incorporated into



the MMRP for this project to reduce this impact to a less than significant level:

Mitigation Measure (MM) - See MM BIO-1 through BIO-3, MM BIO-7, MM BIO-8, MM BIO-11, MM BIO-12, MM BIO-14. (FEIR/EA pp. 3-81 through 3-82)

- j. **Impact BIO-10: Permanent loss of Fremont cottonwood-oak woodland. (Potentially Significant-All Build Alternatives)** All project build alternatives would result in 2.97 acres of permanent impacts and 0.19 acre of temporary impacts on Fremont cottonwood-oak woodland through tree removal. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing); educate construction personnel; provide biological monitoring; and provide for compensation would reduce impacts to less-than-significant levels. (FEIR/EA p. S-71)

Finding: Because cottonwood-oak woodlands are important wildlife habitat for special-status wildlife species and Sacramento County General Plan policies protect oak woodlands, the impact of loss of Fremont cottonwood-oak woodland would be potentially significant. With implementation of the measures below, the temporary and permanent impacts on Fremont cottonwood-oak woodland would eventually be reduced to a less-than-significant level when the compensatory planted woodland reaches maturity. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-82 through 3-83)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM)- See MM BIO-1 through BIO-3, MM BIO-11. (FEIR/EA p. 3-83)

- k. **Impact BIO-11: Temporary and permanent loss of valley foothill riparian woodland. (Potentially Significant- All Build Alternatives)**

All project build alternatives would result in 0.03 acre of permanent impacts and 0.17 acre of temporary impacts on valley foothill riparian woodland through tree removal. However, implementation of mitigation measures



designed to avoid sensitive areas (i.e., fencing); educate construction personnel; provide biological monitoring; and provide for compensation (1:1 ratio) would reduce impacts to less-than-significant levels. (FEIR/EA p. S-71)

Finding: Because riparian woodlands are important wildlife habitat for special-status wildlife species and are protected under CFGC Section 1602 and Sacramento County General Plan policies, loss of valley foothill riparian woodland is considered potentially significant. With implementation of the measures below, the temporary and permanent impacts on valley foothill riparian woodland would eventually be reduced to a less-than-significant level when the compensatory planted woodland reaches maturity. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-83 through 3-84)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM)- See MM BIO-1 through BIO-3, MM BIO-7. (FEIR/EA p. 3-84)

I. Impact BIO-12: Permanent loss of and temporary impacts on emergent wetland, seasonal wetland, perennial drainage, and ephemeral drainage. (Potentially Significant- All Build Alternatives)

The project would result in permanent impacts under all of the build alternatives including 0.06 acre of emergent wetland, 0.02 acre of seasonal wetland, 0.10 acre of perennial drainage in Alder Creek, and 0.001 acre of ephemeral drainage. Temporary impacts under all of the alternatives would include 0.06 acre of emergent wetland, 0.18 acre of perennial drainage, and 0.0003 acre of ephemeral drainage. However, implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing); educate construction personnel; provide biological monitoring; and provide for compensation (1:1 ratio) would reduce impacts to less-than-significant levels. (FEIR/EA p. S-72)

Finding: Because emergent wetlands, seasonal wetlands, perennial drainage, and ephemeral drainage are waters of the United States and



waters of the State and are regulated by USACE, the loss of these wetlands and drainages is considered potentially significant. With implementation of the measures below, the impacts on wetlands and drainages would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-85)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM)- See MM BIO-1 through BIO-3, MM BIO-8. (FEIR/EA p. 3-85)

- m. Impact BIO-13: Permanent impacts on roadside ditch. (Potentially Significant- All Build Alternatives)** The project would result in permanent impacts on 0.14 acres of roadside ditch and temporary impacts on 0.03 acre of ditch through modification of the ditch bank or channel, increased turbidity, and runoff of chemical substances. Construction of the new road would replace the ditch to maintain the drainage function, and the constructed roadside ditch provides minimal habitat for wildlife species; therefore, no additional compensatory mitigation would be necessary. Implementation of mitigation that educates construction personnel would further reduce this impact to less-than-significant levels. (FEIR/EA p. S-72)

Finding: Because the ditch is verified and regulated by USACE as a non-wetland water of the United States and it is a water of the State, the impact of the loss of the ditch is considered potentially significant. Construction of the new road would replace the ditch to maintain the drainage function, and the constructed roadside ditch provides minimal habitat for wildlife species; therefore, no additional compensatory mitigation would be necessary. With implementation of the measure below, the impacts on the ditch would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-86)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:



Mitigation Measure (MM) - See MM BIO-2. (FEIR/EA p. 3-86)

n. Impact BIO-14: Removal of ordinance-protected native trees.

(Potentially Significant - All Build Alternatives) Native trees that would be removed in the project area include Valley Oak, Interior Live Oak, California Black Walnut, California Sycamore, Buckeye, and Western Redbud. Based on preliminary arborist survey data, the approximately 1,441 inches diameter breast height (DBH) of native trees would be removed for Alternative 1 and Alternative 1A (including Oaks, Sycamore, and Walnut). The tree loss will be compensated for by planting in-kind native trees equivalent to the inches removed. Buckeye and Western Redbud will be compensated by planting one individual for each individual removed. Willows and Cottonwoods will be replaced based on the loss of canopy and are included in Mitigation Measure BIO-18 along with non-native trees. Final compensation amounts will be determined based on final design, and mitigation requirements will be adjusted to compensate the actual amount removed or encroached. Implementation of mitigation measures to protect trees that will remain and compensate for tree loss would reduce impacts to less-than-significant levels. (FEIR/EA p. S-73)

Finding: The loss of native trees including Oaks, Walnuts, and Sycamores is considered potentially significant. Compensatory mitigation would be required for approximately 1,441 inches DBH of native trees (including Oaks, Sycamore, and Walnut) for Alternative 1. With implementation of the measures below, direct and indirect impacts on native trees and shrubs would be reduced to a less-than-significant level. (FEIR/EA p. 3-88)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM) - See MM BIO-2. (FEIR/EA p. 3-88)

Mitigation Measure BIO-16: Protect Native Trees During Construction.

This measure applies to all native oaks that have a DBH of at least 6 inches, or if it has multiple trunks of less than 6 inches each, a combined DBH of at least 10 inches.



With the exception of the removed trees that will be compensated for through measures below, all native trees in the project area, all portions of adjacent off-site native trees that have driplines that extend onto the project area, and all off-site native trees that may be affected by utility installation and/or improvements associated with this project, will be preserved and protected based on the County's tree mitigation measures as follows:

1. A circle with a radius measurement from the trunk of the tree to the tip of its longest limb will constitute the dripline protection area of the tree. Limbs must not be cut back in order to change the dripline. The area beneath the dripline is a critical portion of the root zone and defines the minimum protected area of the tree. Removing limbs that make up the dripline does not change the protected area.
2. Chain link fencing or a similar protective barrier will be installed 1 foot outside the driplines of the native trees prior to initiating project construction in order to avoid damage to the trees and their root system.
3. No signs, ropes, cables (except cables that may be installed by a certified arborist to provide limb support) or any other items will be attached to the native trees.
4. No vehicles, construction equipment, mobile home/office, supplies, materials or facilities will be driven, parked, stockpiled or located within the driplines of the native trees.
5. Any soil disturbance (scrapping, grading, trenching, and excavation) is to be avoided within the driplines of the native trees. Where this is necessary, an International Society of Arboriculture (ISA) Certified Arborist will provide specifications for this work, including methods for root pruning, backfill specifications and irrigation management guidelines.
6. All underground utilities and drain or irrigation lines will be routed outside the driplines of native trees. Trenching within protected tree driplines is not permitted. If utility or irrigation lines must encroach upon the dripline, they should be tunneled or bored under the tree under the supervision of an ISA Certified Arborist.
7. If temporary haul or access roads must pass within the driplines of oak



trees, a roadbed of 6 inches of mulch or gravel will be created to protect the root zone. The roadbed will be installed from outside of the dripline and while the soil is in a dry condition, if possible. The roadbed material will be replenished as necessary to maintain a 6-inch depth.

8. Drainage patterns on the site will not be modified so that water collects or stands within or is diverted across the dripline of oak trees.

9. No sprinkler or irrigation system will be installed in such a manner that it sprays water within the driplines of the oak trees.

10. Tree pruning that may be required for clearance during construction must be performed by an ISA Certified Arborist or Tree Worker and in accordance with the American National Standards Institute A300 pruning standards and the ISA "Tree Pruning Guidelines".

11. Landscaping beneath the oak trees may include non-plant materials such as boulders, decorative rock, wood chips, organic mulch, non-compacted decomposed granite, etc. Landscape materials will be kept 2 feet away from the base of the trunk. The only plant species that will be planted within the driplines of the oak trees are those which are tolerant of the natural semi-arid environs of the trees. Limited drip irrigation approximately twice per summer is recommended for the understory plants.

12. Any fence/wall that will encroach into the dripline protection area of any protected tree will be constructed using grade beam wall panels and posts or piers set no closer than 10 feet on center. Posts or piers will be spaced in such a manner as to maximize the separation between the tree trunks and the posts or piers in order to reduce impacts on the trees.

13. For a project constructing during the months of June, July, August, and September, deep water trees by using a soaker hose (or a garden hose set to a trickle) that slowly applies water to the soil until water has penetrated at least 1 foot in depth. Sprinklers may be used to water deeply by watering until water begins to run off, then waiting at least an hour or two to resume watering (provided that the sprinkler is not wetting the tree's trunk). Deep water every 2 weeks and suspend watering 2 weeks between rain events of 1 inch or more. (FEIR/EA pp. 3-89 through 3-90)



Mitigation Measure BIO-17: Compensate for the Loss of Protected Trees

Native trees that would be removed in the project area include Valley Oak, Interior Live Oak, California Black Walnut, California Sycamore, Buckeye, and Western Redbud.

Based on preliminary arborist survey data, the removal of up to approximately 1,441 inches for Alternative 1 and Alternative 1 A and 1,846 inches for Alternative 2 DBH of native Oak trees (including Oaks, Sycamore, and Walnut) will be compensated for by planting in-kind native trees equivalent to the DBH inches lost, based on the ratios listed below. Buckeye and Western Redbud will be compensated by planting one individual for each individual removed. Willows and Cottonwoods will be replaced based on the loss of canopy and are included in Mitigation Measure BIO-18 along with non-native trees. Final compensation amounts will be determined based on final design and mitigation requirements will be adjusted to compensate the actual amount removed or encroached upon by over 50 percent of the dripline radius.

Equivalent compensation based on the following ratio is required:

- one 15-gallon tree = 1 inch DBH
- one 24-inch box tree = 2 inches DBH
- one 36-inch box tree = 3 inches DBH

A Replacement Tree Planting Plan will be prepared by a certified arborist or licensed landscape architect and will be submitted to the Environmental Coordinator for approval. The Replacement Tree Planting Plan(s) will include the following minimum elements:

- Species, size and locations of all replacement plantings and < 6-inch DBH trees to be preserved
- Method of irrigation
- If planting in soils with a hardpan/duripan or claypan layer, include the Sacramento County Standard Tree Planting Detail L-1, including the 10-foot-deep boring hole to provide for adequate



drainage

- Planting, irrigation, and maintenance schedules;
- Identification of the maintenance entity and a written agreement with that entity to provide care and irrigation of the trees for a 3-year establishment period and to replace any of the replacement trees that do not survive during that period.

No replacement tree will be planted within 15 feet of the driplines of existing native trees or landmark size trees that are retained on-site, or within 15 feet of a building foundation or swimming pool excavation. The minimum spacing for replacement native trees will be 15 feet on-center.

If tree replacement plantings are demonstrated to the satisfaction of the Environmental Coordinator to be infeasible for any or all trees removed, then compensation will be through payment into the County Tree Preservation Fund. Payment will be made at a rate of \$325.00 per DBH inch removed but not otherwise compensated, or at the prevailing rate at the time payment into the fund is made. (FEIR/EA pp. 3-90 through 3-91)

- o. Impact BIO-15: The removal of non-drought tolerant native trees and non-native trees that provide shade and/or are considered landmark trees. (Potentially Significant- All Build Alternatives)** The project would result in removal of approximately 74 trees for Alternative 1. The loss of tree canopy is expected to be approximately 72,310 square feet. Mitigation is recommended to replace the loss of tree canopy within a 15-year growth period. Compliance with Biological Mitigation Measure 18 will reduce impacts to less-than-significant levels. (FEIR/EA p. S-77)

Finding: The project is expected to result in the removal of approximately 74 trees for Alternative 1, which would not be mitigated per biological measures 7, 11, or 16. These are primarily non-native landscape trees and some non-riparian/ non wetland cottonwoods and willows. The loss of tree canopy is expected to be approximately 72,310 square feet for Alternative 1. Mitigation is recommended to replace the loss of tree canopy within a 15-year growth period. Compliance with Biological Mitigation Measure 18 will reduce impacts. With mitigation impacts to landmark and/or shade trees are considered to be less than significant. (FEIR/EA p. 3-91)

Mitigation: The following mitigation measure have been incorporated into



the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure BIO-18: Replace Loss of Tree Canopy

Removal of non-native tree canopy for the selected alternative shall be mitigated by creation of new tree canopy equivalent to the acreage of non-native tree canopy removed. New tree canopy acreage shall be calculated using the Sacramento County Department of Transportation 15-year shade cover values for tree species. Preference is given to on-site mitigation, but if this is infeasible, then funding shall be contributed to the Sacramento Tree Foundation's Greenprint program in an amount proportional to the tree canopy lost (as determined by the 15-year shade cover calculations for the tree species to be planted through funding, with the cost to be determined by the Sacramento County Tree Foundation). (FEIR/EA pp. 3-91 through 3-92)

- p. Impact CUL-1: Adverse effect on an archaeological resource. (Potentially Significant-All Build Alternatives)** Although no known prehistoric or historic archaeological resources were identified within the project area, the project has the potential to cause an adverse effect on a buried archaeological resource during ground-disturbing activities. Additionally, the United Auburn Indian Community considers the area culturally sensitive. These resources could be buried within the project boundary, therefore, mitigation to train construction personnel, avoid sensitive areas, monitor initial ground disturbance, and implement avoidance and notification procedures in the event a cultural resource is discovered is recommended. Mitigation would reduce potential impacts to less-than-significant levels. (FEIR/EA p. S-77)

Finding: It is possible that previously unknown archaeological resources could be uncovered during ground-disturbing construction activities for any of the build alternatives. This impact could be considered a significant impact on those previously unknown cultural resources. This impact is considered potentially significant. With implementation of the measures below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA pp. 3-94 through 3-95)



Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure CUL-1: Conduct Mandatory Cultural Resources Awareness Training for Construction Personnel

Before any ground-disturbing work occurs in the project area, a qualified archaeologist will be retained to conduct mandatory contractor/worker cultural resources awareness training for construction personnel. The awareness training will be provided to all construction personnel, including contractors and subcontractors, to brief them on the need to avoid effects on cultural resources adjacent to and within construction areas, their responsibility to report potential resources if observed, and the penalties for not complying with applicable State and Federal laws and permit requirements. (FEIR/EA p. 3-95)

Mitigation Measure CUL-2: Monitor for Archaeological Resources during Initial Ground Disturbance

A Native American monitor will be retained to monitor all initial ground disturbing activities (e.g., grading, excavation, tree removal). The purpose of the monitoring is to ensure that no unrecorded archaeological resources are affected by the project and to ensure that the project complies with all applicable permit requirements and agency conditions of approval. (FEIR/EA p. 3-95)

Mitigation Measure CUL-3: Implement Avoidance and Notification Procedures for Cultural Resources Discovered during Construction

If cultural materials are discovered during construction, all earthmoving activity within and around the immediate discovery area will be diverted until a qualified archaeologist can assess the nature and significance of the find. All reasonable measures will be implemented to avoid, minimize, or mitigate further harm to the resource. If appropriate, the project proponent will notify Indian tribes or Native American groups that may attach religious or cultural significance to the affected resource.



If human remains are discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County coroner will be contacted. Pursuant to Public Resources Code (PRC) Section 5097.98, if the remains are thought to be Native American, the coroner will notify the Native American Heritage Commission (NAHC), which will then notify the Most Likely Descendent (MLD). The County will work with the MLD to avoid the remains, and if avoidance is not feasible, to determine the respectful treatment of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable. (FEIR/EA p. 3-95)

Mitigation Measure CUL-4: Install Orange Construction Fencing to Avoid Culturally Sensitive Areas

Construction-related staging, equipment, and worker parking will be kept within the approved Area of Potential Effect (APE) boundary. The APE boundaries in the vicinity of areas identified as culturally sensitive by the United Auburn Indian Community as a result of consultation with the lead agencies will be delineated with orange construction fencing or other visible means to ensure complete avoidance. (FEIR/EA p. 3-96)

- q. Impact CUL-2: Disturb any human remains (Potentially Significant - All Build Alternatives)** Human remains are protected under Section 5097.94 of the PRC and Section 7050 of the California Health and Safety Code to protect Native American burials. The project area is generally sensitive for archaeological deposits, including human remains, which could be impacted during ground-disturbing activities. Mitigation to train construction personnel, avoid sensitive areas, monitor initial ground disturbance, and implement avoidance and notification procedures in the event human remains are discovered would reduce impacts to less-than-significant levels. (FEIR/EA p. S-79)

Finding: The APE is generally sensitive for archaeological deposits, including human remains. Earth-disturbing excavation and grading construction activities could damage human remains if present in the project area. If human remains are inadvertently discovered, State Health and Safety Code Section 7050.5 states that further disturbances and activities will cease in any area or nearby area suspected to overlie remains, and the County coroner will be contacted. Pursuant to PRC



Section 5097.98, if the remains are thought to be Native American, the coroner will notify the NAHC, which will then notify the MLD. The project proponent will work with the MLD to avoid the remains and, if avoidance is not feasible, to determine the respectful treatment of the remains. Further provisions of PRC Section 5097.98 are to be followed as applicable. This impact is considered potentially significant. With implementation of the measures below, the impact would be reduced to a less-than-significant level. This impact would be less than significant with mitigation incorporated. (FEIR/EA p. 3-96)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure - See Mitigation Measure CR-1 through CR-4. (FEIR p. 3-96)

- r. **Impact HZ-2: Release of, or exposure to, hazardous materials during construction. (Potentially Significant-All Build Alternatives)** During ground-disturbing project activities, construction workers could be exposed to hazardous materials such as aerially deposited lead (ADL) along U.S. 50; lead or chromium in yellow pavement striping; asbestos-containing material (ACM) in various bridge components; polychlorinated biphenyls in pole-mounted transformers; lead-based paint (LBP) in utility openings or on steel structures; and gasoline-contaminated soil. Implementation of mitigation measures to address worker health and safety, implement abatement plans, conduct sampling and testing, and dispose of contaminated soils would reduce impacts to less-than-significant levels. (FEIR/EA pp. S-79 through S-80)

Finding: Soil testing for ADL indicated that higher concentrations of ADL were associated with the samples obtained from the shoulders of U.S. 50, while lower concentrations and/or non-detect results were associated with Hazel Avenue, Folsom Boulevard, and the on- and off-ramp connections to U.S. 50. Construction workers' health could be adversely affected if exposed to ADL during ground-disturbing activities such as grading along U.S. 50. These impacts are considered potentially significant. With implementation of the measures below, the impacts on human health would be reduced to a less-than-significant level. The impact would be less



than significant with mitigation incorporated. (FEIR/EA pp. 3-99)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure HZ-1: Develop and Implement Plans to Address Worker Health and Safety

As required by Federal, State, and local regulations, prior to construction, the County will employ a Certified Industrial Hygienist who will prepare a Health and Safety Plan, Lead Compliance Plan, and BMP and/or injury and illness prevention plan to address worker safety when working with potentially hazardous materials (e.g., levels of protective personal equipment, emergency action plan, procedures for encountering hazardous materials) including potential asbestos-containing materials, lead-based paints, lead or chromium in traffic stripes, aerially deposited lead, and other construction-related materials within the ROW during any soil-disturbing activity. (FEIR/EA pp. 3-99 through 3-100)

Mitigation Measure HZ-2: Conduct Site-Specific Assessments and Prepare and Implement a Work Plan

Prior to construction, the County will conduct additional assessments of soil, groundwater, and building materials within the proposed acquisition area of the parcels described below. In addition, prior to soil and groundwater testing, the County will prepare a work plan that details testing locations and analytical methods. Testing locations will be similar to proposed excavation locations in order to characterize potentially excavated soils. The plan will incorporate the soil and groundwater data to ensure that soil and groundwater are stored, managed, and disposed of appropriately and in accordance with applicable laws and regulations.

Soil and Groundwater

Assess the Chevron Service Station (APN: 069-0160-012), Nimbus Winery (APN: 069-0050-013), Aerojet Facility (APN: 072-0231-125), and Union Pacific Railroad ROW for possible soil and groundwater contamination. The sampling and testing of surface soils and groundwater at these sites will be



analyzed for total petroleum hydrocarbons such as diesel, heavy metals, petroleum hydrocarbons, polycyclic aromatic hydrocarbons, and chlorinated solvents.

Drilling for soil and groundwater will be performed by Occupational Safety and Health Administration (OSHA)-trained personnel with appropriate licenses (Code of Federal Regulations 1910.120).

If soil and/or groundwater contamination is identified, the County will comply with Federal and State regulations and the Sacramento County Certified Unified Program Agency regulatory requirements regarding the handling and disposal of hazardous wastes. These requirements include consultation with the Department of Toxic Substances Control (DTSC) and State Water Resources Control Board and adherence to the Stormwater Pollution Prevention Plan. The Stormwater Pollution Prevention Plan requirement of BMPs designed to minimize the release of hazardous materials would help reduce potential impacts. Contaminated soils not reused on-site will be disposed of at a Class I landfill facility.

If groundwater is extracted as part of dewatering, the extracted groundwater will be stored in tanks and tested for chlorinated solvents and either sent off-site for recycling or directed to the existing groundwater treatment system at the Aerojet facilities for disposal and treatment. This will be in addition to the pre-characterization of groundwater quality during pre-construction testing.

Asbestos-Containing Materials and Lead-Based Paint

The Cattlemen's Restaurant (APN: 069-0060-085) and Nimbus Winery (APN: 069-0050-013) buildings are likely to contain asbestos-containing materials and lead-based paint in their construction materials. Various bridge components, such as the overpass, could also contain asbestos-containing material. The County will conduct a hazardous materials survey prior to demolition or significant renovation of Cattlemen's Restaurant, Nimbus Winery, and bridge structures.

If lead or asbestos is found in these buildings or structures, prior to removal or renovation the County will prepare an abatement plan as part of the Task-Specific Safety Plan required under Section 12-1.0 I.C of the County



Standard Construction Specifications. The abatement plan will provide for a California-certified asbestos consultant and California Department of Health Services-certified lead project designer to prepare hazardous materials specifications for abatement of asbestos-containing materials and lead-based paint.

This specification will be the basis for selecting qualified contractors to perform the proposed asbestos and lead abatement work. The County will retain a California-licensed asbestos abatement contractor to perform the abatement of any asbestos-containing construction materials and lead-based paint deemed potentially hazardous.

Abatement of hazardous building materials will be completed prior to any work on these structures. (FEIR/EA pp. 3-100 through 3-101)

Mitigation Measure HZ-3: Conduct Sampling, Testing, Removal, Storage, Transportation, and Disposal of Yellow Traffic Striping along Existing Roadways

The County will sample and test yellow traffic striping scheduled for removal to determine whether lead or chromium is present. All aspects of the project associated with removal, storage, transportation, and disposal will be conducted in strict accordance with appropriate regulations of the California Health and Safety Code Section 1532.1, and Section 13-2.09, Removal of Traffic Stripes and Pavement Markings of the County's Standard Construction Specifications (2017). Section 13-2.09 includes safety requirements such as shielding sandblasting equipment and using a vacuum to ensure grindings are contained. Traffic striping will be disposed of at a Class I disposal facility. The responsibility of implementing this measure will be outlined in the contract between the County and the construction contractor. (FEIR/EA p. 3-101)

Mitigation Measure HZ-4: Appropriately Dispose of Soils Contaminated with Aerially Deposited Lead

Soils in the project limits along the U.S. 50 corridor identified as having hazardous levels of ADL will be handled and disposed of in accordance with applicable State of California Department of Industrial Relations, Division of Occupational Safety and Health (Cal/OSHA) requirements



including a project-specific worker Health and Safety Plan and Lead Compliance Plan. Cal/OSHA standards regarding lead apply to all construction work where an employee may be exposed to lead and include notification of lead testing results; providing protective clothing and equipment; hazardous materials training; and control measures to contain lead. (FEIR/EA p. 3-101)

- s. **Impact HZ-4: Exposure to contaminated soil and groundwater during ground-disturbing activities at the Aerojet site. (Potentially Significant - All Build Alternatives)** The Aerojet facility is an 8,500-acre superfund site undergoing cleanup for soil and groundwater contamination. Construction workers could be exposed to contaminated soil and groundwater during ground-disturbing activities at the Aerojet site particularly during viaduct construction that may require drilled piles from 50-80 feet in depth. Implementation of mitigation measures to address worker health and safety and implement abatement plans would reduce impacts on construction workers' health to less-than-significant levels. (FEIR/EA p. S-83)

Finding: The Aerojet facility is an 8,500-acre superfund site undergoing cleanup located on the south side of Folsom Boulevard that has been identified in several hazardous materials databases. Soil and groundwater have been contaminated by past operating and disposal practices from industrial chemical manufacturing, pesticide manufacturing, and testing. The substrate of the site has also been affected by trichloroethylene and perchlorate from historical mining and dredging activities. Groundwater treatment for a variety of chlorinated solvents is ongoing. Exposure to contaminated soil and/or groundwater as a result of construction activities could occur. Viaduct construction may require drilled piles from 50-80 feet in depth and construction of a tunnel ramp under Alternative 1A would likely encounter groundwater. Approval of Alternative 1 would avoid some potential encounters with the groundwater associated with the Alternative 1A undercrossing. If contaminated soils and/or groundwater within the ROW is encountered, construction workers' health could be adversely affected. This impact is considered potentially significant. With implementation of the measures below, the impact would be reduced to a less-than-significant level.

This impact would be less than significant with mitigation incorporated.



(FEIR/EA pp. 3-102 through 3-103)

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM)- See MM HZ-1 through HZ-2. (FEIR p. 3-103)

- t. **Impact: Cumulative Contribution (Potentially Significant - All Build Alternatives): Temporary contribution to cumulative increases in nighttime light.** All three build alternatives would temporarily contribute to increases in nighttime light during project construction. Evening and nighttime construction activities would require the use of extremely bright lights during an approximate 6-month period. Implementation of mitigation measures designed to reduce fugitive light during construction would reduce the project's temporary contribution to nighttime light to a less-than-cumulatively considerable level. (FEIR/EA p. S-85)

Finding: The project's cumulative impacts associated with the temporary contribution in nighttime light will be reduced to less-than-significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM) - See MM AE-1. (FEIR p. S-85)

- u. **Impact: Cumulative Contribution (Potentially Significant - All Build Alternatives): Contribution to cumulative impacts on air quality during construction.** During project construction, a cumulatively considerable temporary net increase of criteria pollutants was modeled to occur, exceeding SMAQMD thresholds. Implementation of SMAQMD's BMPs, use of newer model engines and use of clean diesel-powered equipment would reduce the project's contribution to less-than-cumulatively-considerable levels. (FEIR/EA p. S-86)

Finding: The project's cumulative impacts associated with air quality during



construction will be reduced to less-than-significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM)- See MM AQ-1 through MM AQ-3. (FEIR/EA p. S-86)

- v. **Impact: Cumulative Contribution (Potentially Significant - All Build Alternatives): Contribution to the loss of Fremont cottonwood-oak woodland and valley foothill riparian woodland.** Construction of the proposed project would add to the cumulative loss of Fremont cottonwood-oak woodland and valley foothill riparian woodland which are considered natural communities of special concern. All build alternatives would result in the same permanent and temporary impacts on these natural communities. Implementation of compensatory mitigation for the loss of these communities would reduce the project's contribution to less-than-cumulatively-considerable levels. (FEIR/EA p. S-87)

Finding: The project's cumulative impacts associated with contribution to the loss of Fremont cottonwood-oak woodland and valley foothill riparian woodland will be reduced to less-than-significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM)- See MM BIO-I through MM BIO-3, MM BIO-7, MM BIO-I 1. (FEIR/EA p. S-87)

- w. **Impact: Cumulative Contribution (Potentially Significant - All Build Alternatives): Contribution to the loss of wetlands and non-wetland waters.** The project would contribute to the loss of wetlands and non-wetland waters through direct impacts and permanent loss of up to 0.08 acre of wetland habitat and up to 0.24 acre of non-wetland waters habitat. Implementation of compensatory mitigation for the loss of wetlands and



non-wetland waters would reduce the project's contribution to less-than-cumulatively-considerable levels. (FEIR/EA p. S-88)

Finding: The project's cumulative impacts associated with contribution to the loss of wetlands and non-wetland waters will be reduced to less-than-significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:

Mitigation Measure (MM) - See MM BIO-8. (FEIR/EA p. S-88)

- x. **Impact: Cumulative Contribution (Potentially Significant - All Build Alternatives): Contribution to loss of habitat for Midvalley Fairy Shrimp, Western Pond Turtle, White-Tailed Kite, Yellow-Breasted Chat, Tricolored Blackbird, Song Sparrow, special-status bats, and migratory birds.** The project would contribute to the loss of habitat for special-status animal species through both temporary and permanent impacts on suitable habitat including temporary construction disturbances and permanent loss of aquatic and terrestrial habitats. Implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing); educate construction personnel; provide biological monitoring and preconstruction surveys; maintain existing hydrology; provide for compensation (1:1 ratio); restore disturbed areas; avoid vegetation removal during breeding seasons; avoid and protect bats; and protect trees would reduce the project's contribution to cumulative impacts on special-status animal species to a less-than-cumulatively-considerable level. (FEIR/EA p. S-88)

Finding: The project's cumulative impacts associated with contribution to the loss of habitat for Midvalley Fairy Shrimp, Western Pond Turtle, White-Tailed Kite, Yellow-Breasted Chat, Tricolored Blackbird, Song Sparrow, special-status bats, and migratory birds will be reduced to less-than-significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:



Mitigation Measure (MM) - See MM BIO-1 through MM BIO 4, MM BIO 7 through MM BIO-15. (FEIR/EA pp. S-88 through S-89)

- y. **Impact: Cumulative Contribution (Potentially Significant - All Build Alternatives): Contribution to loss of habitat for threatened and endangered Species (Vernal Pool Fairy Shrimp, Valley Elderberry Longhorn Beetle, and Swainson's Hawk).** The project would contribute to direct and indirect impacts on four Federal or State-listed species (Vernal Pool Fairy Shrimp, Valley Elderberry Longhorn Beetle, Swainson's Hawk, and Tricolored Blackbird) and their habitat. Indirect effects on habitat for Vernal Pool Fairy Shrimp, direct loss of habitat for Valley Elderberry Longhorn Beetle, and direct loss of nesting habitat for Swainson's Hawk and Tricolored Blackbird would occur. Implementation of mitigation measures designed to avoid sensitive areas (i.e., fencing); educate construction personnel; provide biological monitoring; create appropriate water conveyance systems to maintain existing hydrology; provide preconstruction surveys; restore disturbed areas; provide for compensation; and avoid vegetation removal during breeding season would reduce the project's contribution to impacts on threatened and endangered species to a less-than-cumulatively-considerable level. (FEIR/EA p. S-90)

Finding: The project's cumulative impacts associated with contribution to the loss of habitat for threatened and endangered Species (Vernal Pool Fairy Shrimp, Valley Elderberry Longhorn Beetle, and Swainson's Hawk) will be reduced to less-than-significant levels with mitigation incorporated.

Mitigation: The following mitigation measures have been incorporated into the MMRP for this project to reduce this impact to a less-than-significant level:



Mitigation Measure (MM) - See MM BIO-1 through MM BIO 8, MM BIO 10 through MM BIO-12, MM BIO 14. (FEIR/EA pp. S-90 through S-91)

Documents or other material which constitute the record of the proceedings upon which the California Transportation Commission's decision is based are available at the City of Sacramento, Community Development Department, 300 Richards Boulevard, Third Floor, Sacramento, CA 95811.

Tanisha Taylor

Executive Director

Signature

Date



Environmental Document: Final Environmental Impact Report for the Hazel Avenue/U.S. 50 Interchange Project

Project Name: Hazel Avenue/U.S. 50 Interchange Project

SCH# 2016022009

**CALIFORNIA TRANSPORTATION COMMISSION
STATEMENT OF OVERRIDING CONSIDERATIONS**

FOR

**HAZEL AVENUE/U.S. 50 INTERCHANGE PROJECT IN SACRAMENTO COUNTY, THE
CITY OF RANCHO CORDOVA, AND THE CITY OF FOLSOM**

The following information is presented to comply with California Environmental Quality Act (CEQA) Guidelines, California Code of Regulations, Title 14, Sections 15091 and 15096 and also Title 21, Section 1501 et seq. Reference is made to the Final Environmental Impact Report (FEIR) for the Hazel Avenue/U.S. 50 Interchange Project (Project), which is the basic source of information.

The California Transportation Commission (Commission), in its independent judgment as a CEQA responsible agency, reviewed and considered the FEIR prepared by Sacramento County and finds that the FEIR contains a complete, objective, and substantiated reporting of the project's potential impacts.

The following impacts have been identified as significant and not fully mitigable:

- **Aesthetics:**

Impact Aesthetics (AE)-4: Creation of a temporary new source of nighttime light. (Significant and Unavoidable-All Build Alternatives) New temporary sources of light, (e.g., bright lights used during construction), would negatively affect highway users and nighttime views of and from the work area. Implementation of mitigation to minimize fugitive light would reduce impacts, but it may not be possible to reduce all effects to less-than-significant levels. (FEIR/EA p. S-33)



The Commission's approval of the Project under Alternative 1 will result in significant adverse environmental effects on aesthetics that cannot be avoided even with the adoption of all feasible mitigation measures. The aesthetic impact is associated with night-time construction lighting. The impacts will be reduced to the greatest extent feasible; however, it is anticipated that this impact will still be significant to those traveling or occupying the area during the duration of night-time construction. The impact could be avoided by avoiding night-time construction; however, the alternative of no nighttime construction would have additional socioeconomic impacts associated with a longer construction period and increased traffic delays during construction.

Despite the occurrence of these effects, the Commission chooses to approve the Project under Alternative 1 because, in the Commission's view, the economic, social, environmental, and other benefits that the Project will produce render the significant effects acceptable.

The following statements identify the reasons why the benefits of the Project as approved outweigh its significant and unavoidable effect associated with night-time construction lighting. Any one of these reasons is sufficient to justify approval of the Project. Thus, even if a court were to conclude that not every reason is supported by substantial evidence, the Commission would stand by its determination that each individual reason is sufficient.

Overriding considerations that support approval of this recommended project are as follows:

- The project will enhance the economic opportunities and benefits associated with the Easton development for the surrounding community and businesses by providing an improved and reconfigured interchange that will accommodate projected traffic demand.
- The project will improve the aesthetics and visual character of the existing interchange through quality design treatments that will integrate with adjacent properties.
- The long-term value the project brings to the community in terms of safety, improved traffic service, accommodation for all modes of travel and compliance with Americans with Disabilities Act (ADA) are reasons to approve the project although there are potential short-term impacts associated with nighttime construction lights (FEIR/EA p. 3-11).
- Alternative 1 is the Environmentally Superior Alternative for the project, due to avoidance and mitigation of environmental impacts compared to numerous other alternatives, which were considered.



Having considered the benefits outlined above, the Commission finds that benefits of approving the project outweigh and override the unavoidable adverse environmental effects associated with the project, and therefore, the project's unavoidable adverse environmental effects are acceptable.

Tanisha Taylor

Executive Director

Signature

Date

NOTICE OF DETERMINATION

To: Office of Land Use and Climate Innovation
1400 Tenth Street, Room 121
Sacramento, CA 95814

From: California Transportation Commission
Attn: Brigitte Driller
1120 N Street, MS 52
Sacramento, CA 95814
(916) 654-4245

Subject: Filing of Notice of Determination in compliance with Section 21108 of the Public Resources Code.

Project Title: Hazel Avenue/U.S. 50 Interchange Project

2016022009	Anastasia Shippey	(916) 874-3125
State Clearinghouse Number	Lead Agency Contact Person	Area Code/Telephone

Project Location (include county): The project is located at the existing Hazel Avenue/U.S. 50 Interchange within Sacramento County, the City of Rancho Cordova, and the City of Folsom.

Project Description: The project would modify the existing interchange and extend and grade-separate Hazel Avenue over Folsom Boulevard and the Sacramento Placerville Transportation Corridor - Joint Powers Authority rail corridor. Hazel Avenue would be extended south to a proposed intersection with the future Atlanta Street. The project includes roadway and pedestrian improvements along 2,300 feet of Folsom Boulevard.

This is to advise that the California Transportation Commission has approved the above-described
(☐ Lead Agency/ ☒ Responsible Agency)

project on December 4-5, 2025, and has made the following determinations regarding the above-described project:

1. The project (☒ will/ ☐ will not) have a significant effect on the environment.
2. ☒ A Final Environmental Impact Report was prepared for this project pursuant to the provisions of CEQA.
☐ A Mitigated Negative Declaration was prepared for this project pursuant to the provisions of CEQA.
3. Mitigation measures (☒ were/ ☐ were not) made a condition of the approval of the project.
4. Mitigation reporting or monitoring plan (☒ was / ☐ was not) adopted for this project.
5. A Statement of Overriding Considerations (☒ was / ☐ was not) adopted for this project.
6. Findings (☒ were/ ☐ were not) made pursuant to the provisions of CEQA.

The above identified document with comments and responses and record of project approval is available to the General Public at: Sacramento County Department of Transportation (SACDOT), 4111 Branch Center Road, Sacramento, CA 95827.

TANISHA TAYLOR

Signature (Public Agency)

Date

Executive Director
California Transportation Commission

Title

Date received for filing at OPR:

Project Location Map

Hazel Avenue/U.S. 50 Interchange, Sacramento County, City of Rancho Cordova, City of Folsom

