

Staff Report 26

APPLICANT:

California Department of Transportation

PROPOSED ACTION:

Termination of existing Public Agency Permit and Right-of-Way Map and Approval of a Right-of-Way Map and a Public Agency Permit, including two Temporary Construction Areas, pursuant to Section 101.5 of the Streets and Highways Code and Section 6210.3 of the Public Resources Code

AREA, LAND TYPE, AND LOCATION:

Sovereign land in the American River, near Cal Expo, Sacramento, Sacramento County.

AUTHORIZED USE:

Use of a 190-foot-wide right-of-way for a bridge crossing, bridge improvements, bridge widening, two temporary construction areas, steel sheet pilings, and dredging.

TERM:

Public Agency Permit: Continuous use, plus one year, beginning April 26, 2022.

Two Temporary Construction Areas: expiring December 31, 2025.

CONSIDERATION:

Public Agency Permit: Reasonable value of the right-of-way to be deposited into the State Parks and Recreation Fund.

Temporary Construction Areas: The public use and benefit; with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

STAFF ANALYSIS AND RECOMMENDATION:

AUTHORITY:

Public Resources Code sections 6005, 6210.3, 6216, 6221, and 6301; Streets and Highways Code section 101.5.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

On December 18, 1950, the Commission authorized a right-of-way easement to the State Division of Highways for a bridge, commonly referred to as the "Elvas Bridge," crossing the American River in Sacramento County ([Item 5, December 18, 1950](#)). The California Department of Transportation (Caltrans) is applying for a Public Agency Permit and approval of its right-of-way map (Exhibit B), pursuant to section 101.5 of the Streets and Highways Code and as authorized by section 6210.3 of the Public Resources Code and two temporary construction areas (Exhibit A), for an expanded right-of-way to complete the American River (River) Bridge (Bridge) Widening and Deck Replacement Project (Project).

Pursuant to section 101.5 of the Streets and Highways Code, Caltrans has determined a reasonable value for the additional Right-of-Way in an amount no less than \$2,100 to be deposited in the State Parks and Recreation Fund.

The Project will occupy the entire width of the River. Construction will require prohibition of the public's use within the right-of-way for approximately two years. The Project includes widening the Bridge from 160-feet to 190-feet including the addition of a 14-foot-wide bicycle and pedestrian lane on the upstream side of the Bridge to connect the south levee bike trail to the north levee bike trail within the American River Parkway (Parkway); installing temporary pilings and access piers; dredging the River to accommodate construction barges and equipment; constructing and dewatering a cofferdam to construct new bridge piers; and installation of steel sheet pilings around the new and existing bridge piers for scour protection.

The Project will be constructed using barges. Use of the barges eliminates the need for installation and removal of pilings for a trestle bridge along the entire width of the River. The barges generally require two feet of clearance between the bottom of the barge and the riverbed for safe operation. Based on a recent bathymetric survey, approximately 23,800 cubic yards of material would be dredged in the work zone (225' from the extents of the bridge widening both upstream and downstream) to create adequate vertical clearance. Dredging activities would take place from the temporary access piers located on the uplands and barges using an excavator. Assuming use of a single excavator, approximately 600 cubic

yards of material would be dredged per day. With the use of small boats, barges would transport the dredged material to the access pier, where it would be directly loaded into trucks, using an excavator located on the pier, and hauled either off-site or to a temporary storage location within the project limits.

In response to Commission and Central Valley Regional Water Quality Control Board concerns regarding potentially contaminated dredged material in the water column and upland areas, the Caltrans prepared a Sample Analysis Plan followed by a Sample Analysis Report. These documents were reviewed and approved by the Central Valley Regional Water Quality Control Board, which issued a Clean Water Act Section 401 permit on March 15, 2022, determining that 1) the dredged material did not require additional permit conditions to address contaminants, and 2) the dredged material would be suitable for reuse as engineered freeway embankment, after drying at a temporary storage location determined in coordination with the regulatory agencies. The Project may require periodic maintenance dredging in subsequent seasons to maintain adequate clearance until construction is complete. Dredged material may not be sold.

Presently, the Sacramento County General Plan land use designation on the right bank of the River is intensive agriculture and zoned AE-40; the right bank of the River north of the bridge is industrial and zoned M; and the area south of the Bridge on the left bank is zoned AE-40. Free navigation of California's navigable waters is a mandate of the California Constitution (article X, section 4), a condition of statehood in the Act of Admission of the State of California into the Union (9 Stat. 452, Sept. 9, 1850), and a responsibility of all involved public agencies pursuant to the common law Public Trust Doctrine. Often the most logical location for access to a waterway is where a bridge crosses it. The Legislature adopted three code sections in 1972 to determine the feasibility of providing public access around bridges (Sts. & Hy. Code, §§ 84.5, 991, and 1809). All state or county highway projects and all city street projects that propose construction of a new bridge over a navigable waterway must consider, and report on, the feasibility of providing public access for recreational purposes to the waterway before the bridge is constructed. These code provisions apply to state local governments that approve bridge construction projects.

The existing right-of-way, controlled by Caltrans, is for the existing Bridge structures. Access to the River from the upland highway right-of way is unsafe and inaccessible through the adjacent landowners' properties. Caltrans has evaluated and determined that adding a 14-foot-wide bicycle and pedestrian lane to the Bridge will connect the bicycle and pedestrian paths on top of each levee. The levee paths provide access to the Parkway and River.

The project will span the entire width of the river and prohibit public access to the lease premises during construction for safety. The permit does not alienate the State's fee simple interest, however, it does grant Caltrans exclusive rights to the right-of-way. Furthermore, the Bridge is vital infrastructure that is necessary to facilitate the movement of goods, people, and services throughout the State. Staff believes this use of State land, by a public agency, for a public benefit is in the best interests of the State.

CLIMATE CHANGE:

Climate change impacts, including sea level rise, more frequent and intense storm events, and increased flooding and erosion, affect both open coastal areas and inland waterways in California. The subject facilities are located on the American River in a tidally influenced site vulnerable to flooding at current sea levels and at a higher risk of flood exposure given projected scenarios of sea level rise.

The California Ocean Protection Council updated the State of California Sea-Level Rise Guidance in 2018 to provide a synthesis of the best available science on sea level rise projections and rates. Commission staff evaluated the "high emissions," "medium-high risk aversion" scenario to apply a conservative approach based on both current emission trajectories and the easement location and structures. The San Francisco tide gauge was used for the projected sea level rise scenario for the easement area/region as listed in Table 1.

Table 1. Projected Sea Level Rise for San Francisco

Year	Projection (feet)
2030	0.8
2040	1.3
2050	1.9
2100	7

Source: Table 13, State of California Sea-Level Rise Guidance: 2018 Update

Note: Projections are with respect to a 1991 to 2009 baseline.

This effect could increase the American River's inundation levels within the easement area, and this risk of flood exposure is likely to increase with time. In addition, as stated in *Safeguarding California Plan: 2018 Update* (California Natural Resources Agency 2018), climate change is projected to increase the frequency and severity of natural disasters related to flooding, fire, drought, extreme heat, and storms (especially when coupled with sea level rise). In rivers and tidally

influenced waterways, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris as well as decreased bank stability and structure. Climate change and sea level rise will further influence riverine areas by changing erosion and sedimentation rates. Flooding and storm flow, as well as runoff, will likely increase scour and decrease bank stability at a faster rate.

The Caltrans District 3 Climate Vulnerability Assessment determined that the Project location is outside areas that would be at risk of sea level rise-related inundation even if levees or other barriers failed during a 100-year storm event. Accordingly, direct impacts to the bridge structures due to projected sea level rise are not expected. However, climate change can affect precipitation events which can result in heavy rain inundating the bridge structures or contributing to structural damage. Climate change is expected to bring fewer but more intense rainfall events in California. To help understand future flood risks to the Project area, Caltrans analyzed changes in 100-year storm precipitation depth and found the project location could experience up to a 9.9 percent increase in 100-year storm precipitation depth through 2085 (Caltrans 2019). These results were factored into the bridge design.

Regular maintenance will reduce the likelihood of severe structural degradation or dislodgement. Caltrans has acknowledged that the right-of-way and temporary construction areas and adjacent upland (not within the temporary construction areas) are located in an area that may be subject to effects of climate change, including sea level rise.

TRIBAL COORDINATION AND CONSULTATION AND ENVIRONMENTAL JUSTICE:

The California Native American Heritage Commission (NAHC) was contacted to request a search of the sacred lands file and an updated list of Native American contacts for the project area. Consultation was initiated with the local Native American tribes and no concerns have been raised at this time regarding the project. Consultation is on-going.

Staff determined that Environmental Justice outreach is not required at this time, given the details of the proposed project, including the additional pedestrian and bicycle access. Staff will engage with environmental justice communities when CalTrans pursues their future bridge replacement project.

CONCLUSION:

For all the reasons above, staff believes the approval of the Public Agency Permit and Right-of-Way Map for the American River Bridge, and related Temporary

Construction Areas, will temporarily impair the public rights to navigation during construction. However, staff believes this temporary impairment is important for the long-term benefits. Long term, approval of the permit will not substantially impair the public rights to navigation, fishing, or other Public Trust needs and values at this location and for the foreseeable term of the permit; and is in the best interests of the State.

OTHER PERTINENT INFORMATION:

1. Approval or denial of the application is a discretionary action by the Commission. Each time the Commission approves or rejects a use of sovereign land, it exercises legislatively delegated authority and responsibility as trustee of the State's Public Trust lands as authorized by law.
2. This action is consistent with the "Meeting Evolving Public Trust Needs" and "Climate Activism" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.
3. Caltrans has filed maps showing the proposed right-of-way and temporary construction areas with the Commission.
4. Section 101.5 of the Streets and Highways Code requires Caltrans to determine the reasonable value of the proposed rights-of-way and to deposit that amount in the State Parks and Recreation Fund.
5. A Mitigated Negative Declaration (MND), State Clearinghouse No. 2020100388, was prepared by Caltrans, District 3, and adopted on February 16, 2021, for this project. On May 27, 2021, Caltrans approved an Addendum to the MND. Staff reviewed these documents and prepared an independent MMP (attached, Exhibit C) incorporating Caltrans' documents and recommends adoption by the Commission.
6. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but such activity will not affect those significant lands. Based upon participation from the agency nominating such lands through the California Environmental Quality Act (CEQA) review and permitting process, it is the staff's opinion that the project, as proposed, is consistent with its use classification.

APPROVALS OBTAINED:

California Department of Fish and Wildlife
Central Valley Regional Water Quality Control Board
Central Valley Flood Control Board
National Marine Fisheries Service
US Fish and Wildlife Service
US Coast Guard
National Park Service

APPROVALS REQUIRED:

US Army Corps of Engineers
Central Valley Flood Control Board
California Department of Fish and Wildlife

EXHIBITS:

- A. Land Description
- B. Site and Location Map
- C. Mitigation Monitoring Plan

RECOMMENDED ACTION:

It is recommended that the Commission:

CEQA FINDING:

Find that a Mitigated Negative Declaration (MND), State Clearinghouse No. 2020100388, was prepared by Caltrans, and adopted on February 16, 2021, for this Project, that an Addendum to the MND was prepared and approved on May 27, 2021, and that the Commission has reviewed and considered the information contained therein; that in the Commission's independent judgment, the scope of activities to be carried out under the permit to be issued by this authorization have been adequately analyzed; that none of the events specified in Public Resources Code section 21166 or the State California Environmental Quality Act (CEQA) Guidelines section 15162 resulting in any new or substantially more severe significant impact has occurred; and, therefore no additional CEQA analysis is required.

Adopt the Mitigation Monitoring Program, as contained in the attached Exhibit C.

PUBLIC TRUST AND STATE'S BEST INTERESTS:

Find that the approval of the proposed permit and right-of-way map and two temporary construction areas will temporarily impair public rights to navigation during construction. However, staff believes this temporary impairment is important for the long-term benefits. Long term, approval of the permit will not substantially impair the public rights to navigation, fishing, or other Public Trust needs and values at this location and for the foreseeable term of the permit; and is in the best interests of the State.

SIGNIFICANT LANDS INVENTORY FINDING:

Find that this activity is consistent with the use classification designated by the Commission for the land pursuant to Public Resources Code section 6370 et seq.

AUTHORIZATION:

1. Authorize a termination, effective April 26, 2022, of Lease Number PRC 571, a Public Agency Permit and Right-of-Way Map issued to Caltrans.
2. Authorize a Public Agency Permit and approve a Right-of-Way Map, as submitted by Caltrans, pursuant to section 101.5 of the Streets and Highways Code and as authorized by section 6210.3 of the Public Resources Code, effective April 26, 2022, for a right-of-way with a term of continuous use plus one year and two temporary construction areas valid until construction is completed but not later than December 31, 2025, as shown on Exhibits A and Exhibit B (for reference purposes only), attached and by this reference made a part hereof; consideration for the Public Agency Permit being a reasonable value of the right-of-way in an amount no less than \$2,100 to be deposited in the State Parks and Recreation Fund; and consideration for the temporary constructions areas being the public use and benefit, with the State reserving the right at any time to set a monetary rent if the Commission finds such action to be in the State's best interests.

EXHIBIT A

A 3187

LAND DESCRIPTION

Two parcels of tide and submerged land situate in the bed of American River in Sacramento County, California, adjacent to on the right bank Rancho Del Paso, approved April 4, 1857 and adjacent to on the left bank Rancho New Helvetia approved August 9, 1873 and more particularly described as follows:

PARCEL 1 (Temporary Construction Area 1-NW)

Bounded on the northwest by a line lying parallel with and 230 feet northwesterly from the centerline of Highway Business 80, "Route 51"(Caltrans) per 101.5 Map No. 03-SAC-98-B/1/1 issued by the Division of Highway on September 22, 1950 and on file with the State Lands Commission;

Bounded on the northeast by southwest line of those lands transferred to the Department of General Services per Chapter 1318, Statutes of 1968 via JTO 18;

Bounded on the southeast by the northwesterly line of the existing "Route 51" Right-of-way per said 101.5 Map;

Bounded on the southwest by the Ordinary High Water Mark of the American River.

Sidelines shall be lengthened or shortened so as to terminate on the Ordinary High Water Mark of the American River on the left bank and the southwesterly line of JTO 18 on the right bank.

PARCEL 2 (Temporary Construction Area 2-SE)

Bounded on the northwest by a line lying parallel with and 110 feet southeasterly from the centerline of Highway Business 80, "Route 51"(Caltrans) per 101.5 Map No. 03-SAC-98-B/1/1 issued by the Division of Highway on September 22, 1950 and on file with the State Lands Commission;

Bounded on the northeast by southwest line of those lands transferred to the Department of General Services per Chapter 1318, Statutes of 1968 via JTO 18;

Bounded on the southeast by a line lying parallel with and 280 feet southeasterly from the centerline of Highway Business 80, "Route 51"(Caltrans) per 101.5 Map No. 03-SAC-98-B/1/1 issued by the Division of Highway on September 22, 1950 and on file with the State Lands Commission;

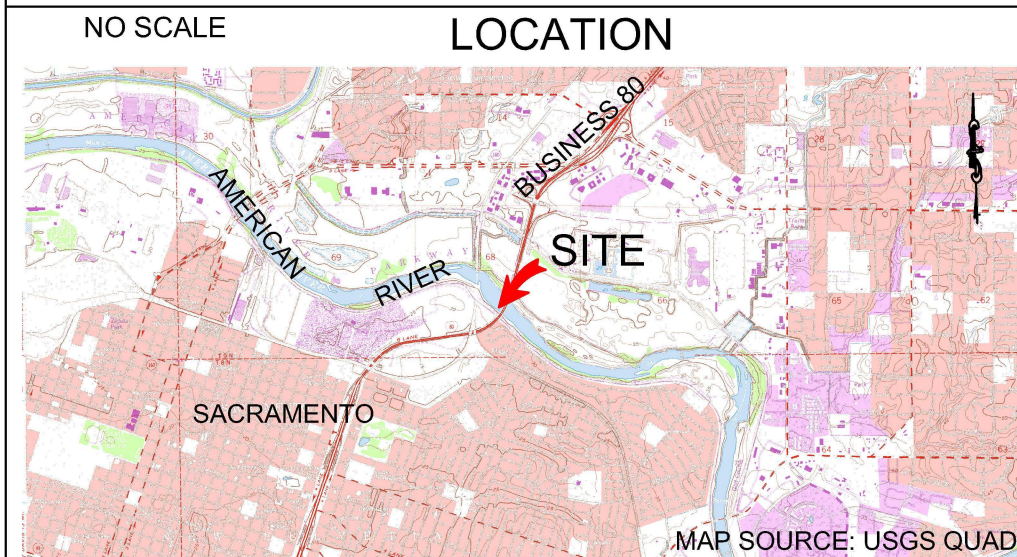
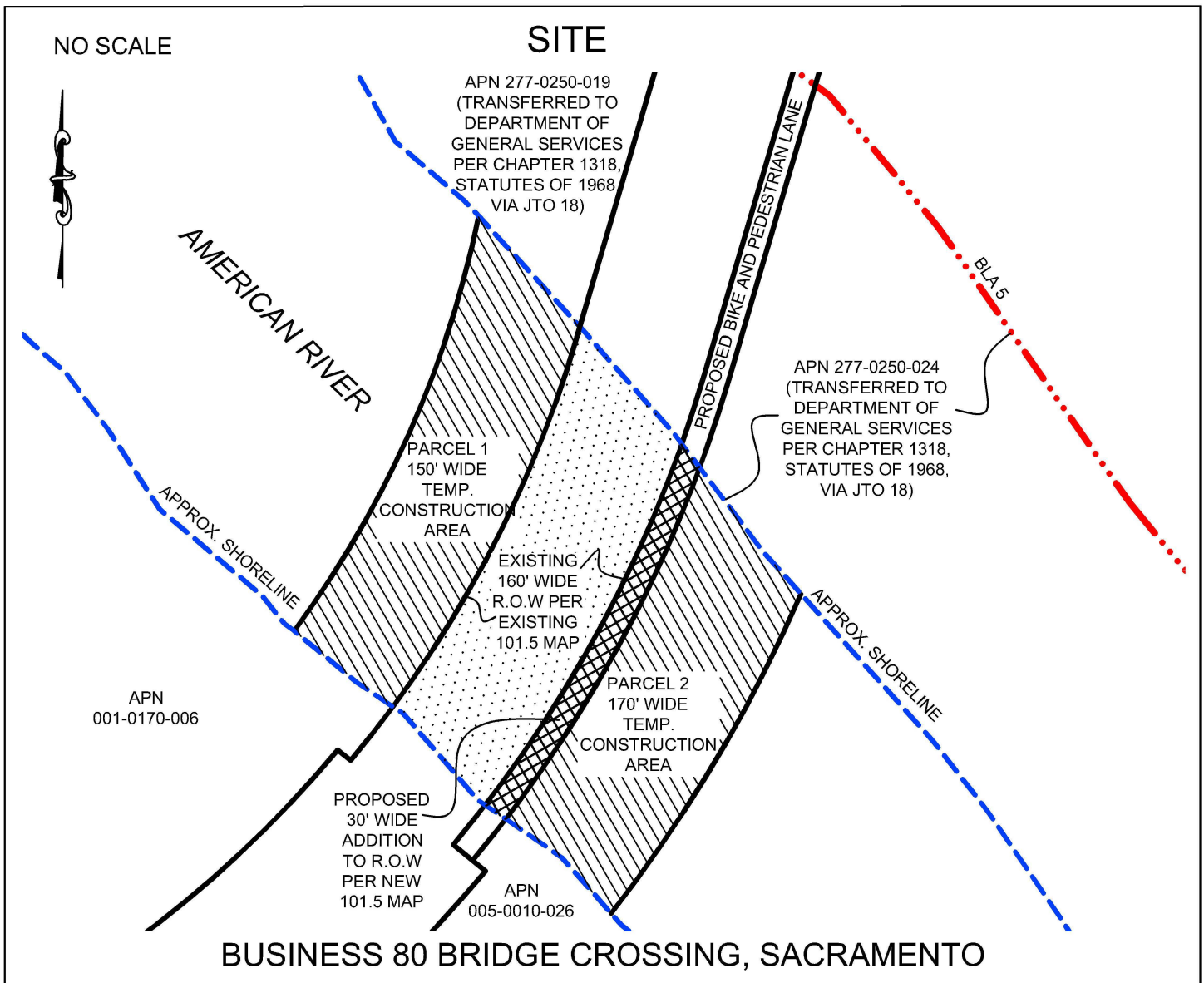
Bounded on the southwest by the Ordinary High Water Mark of the American River.

Sidelines shall be lengthened or shortened so as to terminate on the Ordinary High Water Mark of the American River on the left bank and the southwesterly line of JTO 18 on the right bank.

END OF DESCRIPTION

PREPARED 4/19/2022 BY THE CALIFORNIA STATE LANDS COMMISSION BOUNDARY UNIT.





THIS EXHIBIT IS SOLELY FOR PURPOSES OF GENERALLY DEFINING THE LEASE PREMISES, IS BASED ON UNVERIFIED INFORMATION PROVIDED BY THE LESSEE OR OTHER PARTIES AND IS NOT INTENDED TO BE, NOR SHALL IT BE CONSTRUED AS, A WAIVER OR LIMITATION OF ANY STATE INTEREST IN THE SUBJECT OR ANY OTHER PROPERTY.

EXHIBIT C
CALIFORNIA STATE LANDS COMMISSION
MITIGATION MONITORING PROGRAM
AMERICAN RIVER BRIDGE DECK REPLACEMENT PROJECT
(A3187, State Clearinghouse No. 2020100388)

The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the American River Bridge Deck Replacement Project (Project). The CEQA lead agency for the Project is the California Department of Transportation.

In conjunction with approval of this Project, the Commission adopts this Mitigation Monitoring Program (MMP) for the implementation of mitigation measures for the portion(s) of the Project located on State lands. The purpose of a MMP is to impose feasible measures to avoid or substantially reduce the significant environmental impacts from a project identified in an Environmental Impact Report (EIR) or a Mitigated Negative Declaration (MND). State CEQA Guidelines¹ section 15097, subdivision (a), states in part:

In order to ensure that the mitigation measures and project revisions identified in the EIR or negative declaration are implemented, the public agency shall adopt a program for monitoring or reporting on the revisions which it has required in the project and the measures it has imposed to mitigate or avoid significant environmental effects. A public agency may delegate reporting or monitoring responsibilities to another public agency or to a private entity which accepts the delegation; however, until mitigation measures have been completed the lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the program.

The lead agency adopted an MND, State Clearinghouse No. 2020100388, and adopted mitigation measures for the whole of the Project (see Exhibit C, Attachment C-1). In addition, the MND included avoidance and minimization measures that reduced impacts to environmental resources. The lead agency subsequently approved an Addendum to the MND. The lead agency remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with the MND. The Commission's action and authority as a responsible agency apply only to the mitigation measures listed in Table C-1 below, which includes the full text of each mitigation measure. In addition, a list of avoidance and minimization measures that further minimize impacts to environmental resources within Commission jurisdiction is contained in Attachment C-2.

¹ The State CEQA Guidelines are found at California Code of Regulations, title 14, section 15000 et seq.

Table C-1. Project Impacts and Applicable Mitigation Measures

Potential Impact	Mitigation Measure (MM)
Wetlands and Waters of the U.S.	The permanent loss of 0.33 acres of jurisdictional waters of the United States and 0.13 acres of jurisdictional wetlands will be mitigated by the purchase of credits at an approved mitigation bank or through “in-lieu-fee” mitigation. Temporary impacts of 0.59 acres of jurisdictional waters of the United States and 0.26 acres of jurisdictional wetlands will be mitigated through “in-lieu-fee” mitigation.
Special-Status Fish and Essential Fish Habitat	Impacts to Central Valley steelhead, Central Valley spring-run Chinook salmon, Central Valley winter-run Chinook salmon, and green sturgeon habitat will be mitigated through a cooperative agreement with the Sacramento Water Forum in which Caltrans will fund the ongoing Salmonid Habitat Restoration Project being conducted by the Water Forum. If this is infeasible, Caltrans will pursue purchasing mitigation credits at an approved mitigation bank.

No mitigation measures were proposed for the unanticipated discovery of cultural or tribal resources; however, the lead agency approved avoidance and minimization measures related to cultural and tribal cultural resources. The following measure is required on Commission lands:

Title to all archaeological sites, historic or cultural resources, and tribal cultural resources on or in the tide and submerged lands of California is vested in the state and under California State Lands Commission (Commission) jurisdiction. The final disposition of archaeological, historical, and tribal cultural resources recovered on State lands under Commission jurisdiction must be approved by the Commission.

ATTACHMENT C-1

MITIGATION MEASURES ADOPTED BY CALTRANS

MITIGATED NEGATIVE DECLARATION

Pursuant to: Division 13, Public Resources Code

Project Description

The California Department of Transportation (Caltrans) proposes to rehabilitate the American River Bridge along State Route (SR) 51 in Sacramento County from post mile 2.0 to 3.5. The project would remove and replace the existing concrete deck, remove and replace the steel girder post-tensioning systems in spans 1 and 2, modify existing soundwall, install sheet piling around piers for scour mitigation, construct concrete catcher blocks, and widen the bridge to accommodate traffic during construction, add a Class I bike/pedestrian path, and plan for future transportation needs on SR 51.

Determination

This Mitigated Negative Declaration (MND) is included to give notice to interested agencies and the public, that it is Caltrans' intent to adopt an MND for this project. This does not mean that Caltrans' decision regarding the project is final. This MND is subject to change based on comments received by interested agencies and the public.

Caltrans has prepared an Initial Study for this project, and pending public review, expects to determine from this study that the proposed project would not have a significant effect on the environment for the following reasons:

The proposed project would have no effect on aesthetics, agriculture and forest resources, energy, geology and soils, mineral resources, population and housing, public services, tribal cultural resources, and wildfire.

In addition, the proposed project would have less than significant effects to air quality, cultural resources, greenhouse gas emissions, hazards and hazardous materials, hydrology and water quality, land use and planning, noise, recreation, utilities and service systems, and transportation.

With the following mitigation measures incorporated, the project would have less than significant effects to biological resources:

Natural Communities

- The permanent loss of 5.21 acres of riparian habitat will be mitigated through a cooperative agreement with the Sacramento Water Forum in which Caltrans will fund the ongoing Salmonid Habitat Restoration Project being conducted by the Water Forum. If this is infeasible, Caltrans will pursue purchasing mitigation credits at an approved mitigation bank.

Wetlands and Other Waters

- The permanent loss of 0.33 acres of jurisdictional waters of the United States and 0.13 acres of jurisdictional wetlands will be mitigated by the purchase of credits at an approved mitigation bank or through “in-lieu-fee” mitigation. Temporary impacts of 0.59 acres of jurisdictional waters of the United States and 0.26 acres of jurisdictional wetlands will be mitigated through “in-lieu-fee” mitigation.

Threatened and Endangered Species

- Impacts to Valley Elderberry Longhorn Beetle will be mitigated by the purchase of credits at a United States Fish and Wildlife Service approved mitigation bank.
- Impacts to Central Valley steelhead, Central Valley spring-run Chinook salmon, Central Valley winter-run Chinook salmon, and green sturgeon habitat will be mitigated through a cooperative agreement with the Sacramento Water Forum in which Caltrans will fund the ongoing Salmonid Habitat Restoration Project being conducted by the Water Forum. If this is infeasible, Caltrans will pursue purchasing mitigation credits at an approved mitigation bank.

Mike Bartlett

Mike Bartlett, Office Chief
North Region Environmental Management (South)
California Department of Transportation

02/16/2021

Date

ATTACHMENT C-2

CALTRANS AVOIDANCE AND MINIMIZATION MEASURES

ATTACHMENT C-2

Caltrans SR-51 American River Project Avoidance and Minimization Measures within CSLC jurisdiction

Environmental Resource	Avoidance and Minimization Measure
Air Quality	<p>Comply with Caltrans Standards Specifications Section 10-5 “Dust Control,” Section 14-9 “Air Quality,” and Section 18 “Dust Palliatives” which include preventing and alleviating dust, and complying with applicable air-pollution control rules, ordinances, and statutes.</p> <p>The construction contractor must comply with the Caltrans Standard Specifications Section 14-9. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations related to air quality. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.</p> <ul style="list-style-type: none">• Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of construction vehicles and equipment to no more than 5 minutes.• Caltrans Standard Specification 7-1.02C “Emissions Reduction” ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board.• Utilize a traffic management plan to minimize vehicle delays and idling emissions.
Biological Resources - General	<p>Prior to initiating construction, Environmentally Sensitive Area (ESA) fence shall be installed along the construction limits to prevent encroachment into riparian areas adjacent to the construction site that are not targeted for clearing.</p>
	<p>Prior to the start of construction activities, Caltrans will obtain all necessary regulatory permits for this project. These permits are expected to include a Clean Water Act (CWA) Section 401 Water Quality Certification from the Regional Water Quality Control Board (RWQCB), a CWA Section 402 National Pollutant Discharge Elimination System (NPDES) Compliance Permit from the State Water Resources Control Board, a CWA Section 404 Nationwide 14 Permit from the United States Army Corps of Engineers (USACE), a Fish and Game Code 1602 Streambed Alteration Agreement from the California Department of Fish and Wildlife (CDFW), and a Floodplain Encroachment Permit from the Central Valley Flood Protection Board (CVFPB).</p>
Biological Resources - Migratory Birds	<p>To ensure compliance with MBTA and CDFW code, vegetation removal and initiation of construction activities should not occur during the nesting season (defined as February 15 – September 30). If this is not possible and vegetation removal or initiation of work is to occur during</p>

Environmental Resource	Avoidance and Minimization Measure
	<p>the nesting season, a pre-construction survey will be required. The pre-construction survey shall be performed by a qualified biologist, to determine the presence of nesting birds and ensure active nests are not directly or indirectly impacted during construction. The preconstruction survey area will include the limits of the project impact area plus a 500-ft buffer. If work is planned to begin during the nesting season (February 15 – September 30), all vegetation removal shall be completed within 7-10 days of the nesting survey where the survey determines no active nests are present. If the nest of a protected bird is found, the perimeter shall be flagged and a qualified biologist will coordinate with USFWS and CDFW to determine an appropriate buffer distance from construction to ensure protection of the nest. The contractor shall stop work in the nesting area and is prohibited from conducting work that could disturb the nesting birds until the buffer is established (as determined by the project biologist in coordination with wildlife agencies). The buffer shall remain in the protected area until the biologist has determined that nesting activities are complete.</p> <p>Construction activities shall not disturb nesting swallows. A qualified biologist shall coordinate with CDFW and USFWS to determine what construction activities, if any, can occur once nesting activities commence.</p> <p>To protect migratory swallows, unoccupied nests will be removed from the existing bridge structure prior to the nesting season (February 15 – September 30). During the nesting season, the bridge structure shall be maintained either through exclusion devices and/or the active removal of partially constructed nests. After a nest is completed, it can no longer be removed until an approved biologist has determined that all birds have fledged and the nest is no longer being used.</p>
Biological Resources – SWHA	<p>By incorporating the project features listed below, if any nesting Swainson’s hawks are found, potential construction related impacts would be minimized.</p> <ul style="list-style-type: none"> • Vegetation removal and initiation of construction activities should not occur during the nesting season (defined as February 15 – September 30). If this is not possible and vegetation removal or initiation of work is to occur during the nesting season, a pre-construction survey will be required. The pre-construction survey will be performed by a qualified biologist, to determine the presence of nesting birds and ensure active nests are not directly or indirectly impacted during construction. The preconstruction survey area will include the limits of the project impact area plus a 500-foot buffer. If work is planned to begin during the nesting season, all vegetation removal shall be completed within two weeks of the nesting survey where the survey determines no active nests are present. If the nest of a protected bird is found, the perimeter shall be flagged and a qualified biologist will coordinate with USFWS and CDFW

Environmental Resource	Avoidance and Minimization Measure
	<p>to determine an appropriate buffer distance from construction to ensure protection of the nest. The contractor shall stop work in the nesting area and is prohibited from conducting work that could disturb the nesting birds until the buffer is established (as determined by the project biologist in coordination with wildlife agencies). The buffer shall remain in the protected area until the biologist has determined that nesting activities are complete.</p> <ul style="list-style-type: none"> • Protocol level surveys will be conducted to establish a <i>no take</i> determination for Swainson's Hawk. This will use the "Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley" written by the Swainson's Hawk Technical Advisory Committee dated May 31, 2000. These surveys are ongoing and will continue through project development. Survey reports will be written as each phase of the nesting season is surveyed and will be available upon request.
Biological Resources – Fish	<p>The following project features would reduce impacts to green sturgeon, Central Valley steelhead, Central Valley spring-run Chinook salmon, and Central Valley winter-run Chinook salmon:</p> <ol style="list-style-type: none"> 1) All construction work that will take place in the live channel shall occur between June 1 to October 15 during the summer low-flow period to minimize potential exposure of juveniles to pile driving noise/vibration, and to minimize fish entrapment within cofferdams. 2) In-channel work shall not be conducted at night to allow fish quiet, unobstructed passage during nighttime migratory hours. 3) A qualified biologist shall prepare and implement a fish salvage plan to recover any individuals entrapped in cofferdams. The fish salvage plan shall receive approval from NMFS prior to initiating any in-channel work. At a minimum the plan shall incorporate: <ul style="list-style-type: none"> • Provide for the collection, transfer and release of all entrapped sensitive fish by a qualified biologist to a designated location downstream of project activities; • Recordation of the electrical conductivity, temperature (water and air), and pH within both the enclosure and within the free-flowing river; and • Ensure all rescued sensitive fish be kept in aerated water and at appropriate temperatures at all times before release. 4) To minimize the potential for accidental spills of materials hazardous to the aquatic environment, a Spill Prevention Control and Countermeasures Plan (SPCCP) shall be prepared.

Environmental Resource	Avoidance and Minimization Measure
	<p>5) The number and size of piles shall be limited to the minimum necessary to meet the engineering and design requirements.</p> <p>6) All impact pile driving of the 30'' piles and 18'' temporary trestle piles will be performed behind an aquatic sound attenuation device that reduces transmission of sound through the water, where possible. Any piles driven into the river channel shall be installed using vibratory methods to the greatest extent possible (cofferdam panels).</p> <p>7) Prior to initiating construction, ESA fence shall be installed along the construction limits to prevent encroachment into the riparian areas adjacent to the construction site.</p> <p>8) Prior to construction, an acoustical monitoring plan to evaluate the sound levels during pile driving activities shall be prepared by a qualified biologist. The acoustical monitoring plan shall receive approval from NMFS prior to in-channel work and shall be implemented during all impact pile driving activities. At a minimum the plan shall incorporate:</p> <ul style="list-style-type: none"> • Daily acoustical monitoring by a qualified biologist during all pile driving activities; • Measurement of underwater background levels using current NMFS methodology; • Require equipment for underwater sound monitoring (hydrophone, signal amplifier, and calibrator) to utilize current National Institute of Standards and Technology traceable calibration; • Require a minimum recordation distance of 10 meters (33') from each pile being monitored; and <p>9) Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction.</p> <ul style="list-style-type: none"> • Implementation of the project will also require approval of a site-specific Storm Water Pollution Prevention Plan that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques. • Scheduling - A specific work schedule will be implemented to coordinate the timing of land disturbing activities and the installation of erosion and sedimentation control practices to reduce on-site erosion and off-site sedimentation. • Preservation of Existing Vegetation – In addition to measure #7 above, existing vegetation shall be protected in place, where feasible, to provide an effective form of erosion and sediment

Environmental Resource	Avoidance and Minimization Measure
	<p>control, and watershed protection, landscape beautification, dust control, pollution control, noise reduction, and shade.</p> <ul style="list-style-type: none"> • Mulching - Loose bulk materials shall be applied to the soil surface as a temporary cover to reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff. • Soil Stabilizers - Stabilizing materials shall be applied to the soil surface to prevent the movement of dust from exposed soil surfaces on construction sites as a result of wind, traffic, and grading activities. • Slope Roughening/Terracing/Rounding - Roughening and terracing will be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, and aiding in the establishment of vegetative cover from seed. <p>10) Project activities that may affect the flow of the river through placement of fill and pier construction shall comply with the 2001 <i>NMFS Guidelines for Salmonid Passage at Stream Crossings</i>, where applicable. The guidelines include but are not limited to:</p> <ul style="list-style-type: none"> • a minimum water depth (12" for adults and 6" for juveniles) at the low fish passage, • a maximum hydraulic drop of 1' for adults and 6" for juveniles, • avoidance of abrupt changes in water surface and velocities, and • structures shall be aligned with the stream, with no abrupt changes in flow direction upstream or downstream of the crossing. <p>11) All water pumping or withdrawal from the river shall comply with 1997 <i>NMFS Fish Screening Criteria for Anadromous Salmonids</i>, where applicable, to avoid entrainment of fish. The criteria include but are not limited to:</p> <ul style="list-style-type: none"> • screen design must provide for uniform flow distribution over the surface of the screen; • screen material openings shall not exceed 1/10" for fry sized salmonids and shall not exceed 1/4" for fingerling sized salmonids;

Environmental Resource	Avoidance and Minimization Measure
	<ul style="list-style-type: none"> • where physically practical, the screen shall be constructed at the diversion entrance. The screen face should be generally parallel to river flow and aligned with the adjacent bankline; • the design approach velocity shall not exceed 0.33' per second for fry sized sturgeon or 0.8' per second for fingerling sized sturgeon; and • the screen design must provide for uniform flow distribution over the surface of the screen.
Biological Resources – EFH	<p>1) All construction work that will take place in the live channel shall occur between June 1 to October 15 during anticipated summer low-flow period. This will minimize potential exposure of juveniles to pile driving noise/vibration, and to minimize fish entrapment within cofferdams.</p> <p>2) In-channel work shall not be conducted at night to afford fish quiet, unobstructed passage during night time migratory hours.</p> <p>3) A qualified biologist shall prepare and implement a fish salvage plan to recover any individuals entrapped in cofferdams. The fish salvage plan shall receive approval from NMFS/CDFW prior to initiating any in-channel work. Since river conditions at the time of construction are not currently known, a detailed fish relocation plan cannot be provided until 30 days prior to construction. A contractor supplied biologist will draft a plan to provide to Caltrans. Caltrans will then make any needed revisions and send to NMFS for approval. At a minimum the plan shall incorporate:</p> <ul style="list-style-type: none"> • Provide for the collection, transfer and release of all entrapped sensitive fish by a qualified biologist to a designated location downstream of project activities; • Recordation of the electrical conductivity, temperature (water and air), and pH within both the enclosure and within the free-flowing river; and • Ensure all rescued sensitive fish be kept in aerated water and at appropriate temperatures at all times prior to release. <p>4) To minimize the potential for accidental spills of materials hazardous to the aquatic environment, a SPCCP shall be prepared.</p> <p>5) The number and size of piles shall be limited to the minimum necessary to meet the engineering and design requirements.</p> <p>6) All impact pile driving of the 30" piles will be performed behind an aquatic sound attenuation device that reduces transmission of sound through the water. Any piles driven into the river channel shall be installed using vibratory methods to the greatest extent possible. Aquatic sound attenuation systems may include:</p>

Environmental Resource	Avoidance and Minimization Measure
	<ol style="list-style-type: none"> 1) Air bubble curtain used with attenuation casing (confined air bubble curtain). 2) De-watered attenuation casing 3) De-watered cofferdam <p>The contractor will be required to submit working drawings and the supplement for sound attenuation system to the Caltrans Engineer for approval in conformance with the provisions of Section 5-1.02 "Plans and Working Drawings."</p> <ol style="list-style-type: none"> 1) Complete details of the system including mechanical and structural details 2) Details of anchorage components, air compressors, supply lines, distribution manifolds, aeration pipes and frames 3) Details of proposed means of isolating noise-producing systems on the driving platform <p>The engineer will be required to inspect the sound attenuation system for proper operation before each deployment and during deployment. A sound attenuation system is not required for pile or casing installation using a vibratory hammer. The approved sound attenuation system must be operating prior to beginning pile driving at any pile location. If the attenuation system fails, pile driving shall immediately stop and may not resume at that location until it is again operating.</p> <p>7) Prior to initiating construction, ESA fence shall be installed along the construction limits to prevent encroachment into the riparian areas adjacent to the construction site.</p> <p>8) Prior to construction, an acoustical monitoring plan to evaluate the sound levels during pile driving activities shall be prepared by a qualified biologist. The acoustical monitoring plan shall receive approval from NMFS/CDFW prior to in-channel work and shall be implemented during all impact pile driving activities. At a minimum the plan shall incorporate:</p> <ul style="list-style-type: none"> • Daily acoustical monitoring by a qualified biologist during all pile driving activities, • Measurement of underwater background levels using current NMFS methodology, • Require equipment for underwater sound monitoring (hydrophone, signal amplifier, and calibrator) to utilize current National Institute of Standards and Technology traceable calibration, • Require a minimum recordation distance of 10 meters (33') from each pile being monitored, and

Environmental Resource	Avoidance and Minimization Measure
	<ul style="list-style-type: none"> • Provide for the collection and release of fish impacted by pile driving. <p>9) Contract specifications will include the following BMPs, where applicable, to reduce erosion during construction.</p> <ul style="list-style-type: none"> • Preservation of Existing Vegetation. In addition to measure #7 above, existing vegetation shall be protected in place where feasible to provide an effective form of erosion and sediment control, and watershed protection, landscape beautification, dust control, pollution control, noise reduction, and shade. • Implementation of the Project will require approval of a site-specific SWPPP that would implement effective measures to protect water quality, which may include a hazardous spill prevention plan and additional erosion prevention techniques. • Scheduling. A specific work schedule will be implemented to coordinate the timing of land disturbing activities and the installation of erosion and sedimentation control practices to reduce on-site erosion and off-site sedimentation. • Mulching. Loose bulk materials shall be applied to the soil surface as a temporary cover to reduce erosion by protecting bare soil from rainfall impact, increasing infiltration, and reducing runoff. • Soil Stabilizers. Stabilizing materials shall be applied to the soil surface to prevent the movement of dust from exposed soil surfaces on construction sites as a result of wind, traffic, and grading activities. • Slope Roughening/Terracing/Rounding. Roughening and terracing will be implemented to create unevenness on bare soil through the construction of furrows running across a slope, creation of stair steps, or by utilization of construction equipment to track the soil surface. Surface roughening or terracing reduces erosion potential by decreasing runoff velocities, trapping sediment, and increasing infiltration of water into the soil, aiding in the establishment of vegetative cover from seed. <p>10) Project activities that may affect the flow of the river through placement of fill and pier construction shall comply with the 2001 <i>NMFS Guidelines for Salmonid Passage at Stream Crossings</i>, where applicable. The guidelines include but are not limited to:</p> <ul style="list-style-type: none"> • a minimum water depth (12" for adults and 6" for juveniles) at the low fish passage, • a maximum hydraulic drop of 1' for adults and 6" for juveniles, • avoidance of abrupt changes in water surface and velocities, and

Environmental Resource	Avoidance and Minimization Measure
	<ul style="list-style-type: none"> • structures shall be aligned with the stream, with no abrupt changes in flow direction upstream or downstream of the crossing. <p>11) All water pumping or withdrawal from the river shall comply with 1997 NMFS <i>Fish Screening Criteria for Anadromous Salmonids</i>, where applicable, to avoid entrainment of fish. The criteria include but are not limited to:</p> <ul style="list-style-type: none"> • screen design must provide for uniform flow distribution over the surface of the screen; screen material openings shall not exceed 3/32" for fry sized salmonids and shall not exceed 1/4" for fingerling sized salmonids; • where physically practical, the screen shall be constructed at the diversion entrance. The screen face should be generally parallel to river flow and aligned with the adjacent bankline; • the design approach velocity shall not exceed 0.33' per second for fry sized salmonids or 0.8' per second for fingerling sized salmonids; and • the screen design must provide for uniform flow distribution over the surface of the screen.
Cultural Resources	<p>It is Caltrans policy to avoid cultural resources whenever possible. In addition, if cultural materials (e.g., bones, stone implements, old bottles) are encountered during the project construction, Caltrans policy requires that all work in the area (within a 60 meter [200 feet] radius) must immediately halt until a qualified archaeologist can evaluate the nature and significance of the material and determine an appropriate course of action in consultation with the State Historic Preservation Office (Stipulation XV, Post Review Discoveries, Section B.1-3 in the Section 106 PA) and other agencies as required. No pre-construction, construction, or post construction activities will occur outside the area that has been surveyed for archaeological resources. This includes staging, storage, and parking of equipment.</p>
	<p>If human remains are discovered or recognized during construction, there shall be no further excavation or disturbance of the location (within a 60 meter [200 feet] radius), or any nearby area reasonably suspected to overlie adjacent remains, until a qualified archaeologist has contacted the appropriate county coroner and they have determined that the remains are not subject to provisions of Section 27491 of the Government Code. If the coroner determines the remains to be Native American, they shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will appoint a Most Likely Descendent for disposition of the remains (Health and Safety Code Sect. 7050.5 and 7052, Public Resources Code Sect. 5097.9 to 5097.99).</p>
Greenhouse Gas Emissions	<p>The construction contractor must comply with the Caltrans Standard Specifications Section 14-9. Section 14-9.02 specifically requires compliance by the contractor with all applicable laws and regulations</p>

Environmental Resource	Avoidance and Minimization Measure
	<p>related to air quality. Certain common regulations, such as equipment idling restrictions, that reduce construction vehicle emissions also help reduce GHG emissions.</p> <ul style="list-style-type: none"> • Compliance with Title 13 of the California Code of Regulations, which includes restricting idling of construction vehicles and equipment to no more than 5 minutes. • Caltrans Standard Specification 7-1.02C “Emissions Reduction” ensures that construction activities adhere to the most recent emissions reduction regulations mandated by the California Air Resource Board. • Utilize a traffic management plan to minimize vehicle delays and idling emissions. • Construction traffic would be scheduled and routed to reduce congestion and related GHG emissions caused by idling vehicles along local roads during peak travel times.
Hazards and Hazardous Materials	<p>The Contractor is required to properly manage removed stripe and pavement marking and must prepared a project specific Lead Compliance Plan (LCP) to prevent or minimize worker exposure to lead while working on and/or handling materials containing lead.</p>
	<p>The contractor would use one of the following Standard Special Provisions (SSPs) for traffic striping removal, depending on the method and type required.</p> <ul style="list-style-type: none"> • SSP 36-4 “Concentration Lead from Paint and Thermoplastic” to remove yellow paint or yellow thermoplastic paint during grinding/cold planning and the project will not require the paint or thermoplastic paint to be removed before grinding begins. And/or • SSP 84-9.03B “Remove Traffic Stripes and Pavement Markings Containing Lead” to remove traffic striping that is nonhazardous and/or other colors of paints (white, blue, black, etc.). And/or • SSP 14-11.12 “Remove Hazardous Striping” to remove yellow painted traffic striping and pavement marking.
	<p>The Department of Toxics Substances Control (DTSC) requires that TWW either be disposed as a hazardous waste, or if not tested, the generator may presume that TWW is a hazardous waste and must be disposed in an approved TWW facility. If TWW is present, the Contractor would use SSP 14-11.14 “Treated Wood Waste”.</p>
	<p>The Contractor would prepare demolition/renovation/rehabilitation notification/permit form and attachments to be submitted to the Air Pollution Control District (APCD) or Air Quality Management District (AQMD) as required by the National Emission Standards for Hazardous Air Pollutants (NESHAP) at 40 CFR Part 61, Subpart M, and California</p>

Environmental Resource	Avoidance and Minimization Measure
	Health and Safety Code section 39658(b)(1). The Contractor would use SSP 14-9.02 "Asbestos Notification" (use regardless of asbestos presence or not if demolishing/disturbing structures). If asbestos is detected, then the Contractor would develop an Asbestos Compliance Plan (ACP).
Hydrology and Water Quality	The proposed project would comply with the conditions of the Caltrans Statewide National Pollutant Discharge Elimination System Municipal Separate Storm Sewer System Permit (Order No. 2012-0011-DWQ) and the National Pollutant Discharge Elimination System Construction General Permit (Order No. 2009-0009-DWQ), and the State Water Resources Control Board Water Quality Permit (Order No. 2003-0003-DWQ) for Low Threat Discharges to Land, as necessary. A Storm Water Pollution Prevention Plan would be prepared by the contractor. The Storm Water Pollution Prevention Plan would incorporate temporary construction site best management practices and ensure effective implementation, placement, handling, storage, use, and disposal practices. In addition, Section 13 of the Caltrans Standard Specifications would be implemented to ensure water pollution control and general specifications for preventing, controlling, and abating pollutant discharges into stream, waterways, and other bodies of water are in place.
Noise	Construction would be conducted in accordance with the Caltrans Standard Specifications Section 14-8.02 "Noise Control" which includes provisions for controlling and monitoring noise resulting from work activities. Construction noise would be short-term, intermittent, and overshadowed by local traffic noise.
	Notify the residents within 100' of the project area in advance of nighttime construction activities.
	Limit operation of jackhammers, concrete saws, pneumatic tools and demolition equipment operations to the daytime hours (8AM to 7PM) to the maximum extent feasible. Nighttime construction work would be limited to the portion of the project site furthest from the residences, to the maximum extent feasible.
	All equipment would have sound-control devices that are no less effective than those provided on the original equipment. No equipment would have an unmuffled exhaust.
	The Contractor would implement appropriate additional noise mitigation measures, including changing the location of stationary construction equipment, turning off idling equipment, rescheduling construction activity, notifying adjacent residents before construction work, and installing acoustic barriers around stationary construction noise sources.
Public Services; Recreation	Early coordination with the official with jurisdiction to consider their input and make design adjustments where feasible was completed with Mary Maret (Natural Resource Specialist - Sacramento County Parks), James Mitts (Park Maintenance Worker - Sacramento County Parks), Elcid Nieto (Park Maintenance Supervisor - Sacramento County Parks),

Environmental Resource	Avoidance and Minimization Measure
	Rick Pickering (Chief Executive Office - Cal Expo), and Marcia Shell (Assistant General Manager - Cal Expo).
	During construction, the project will provide signage describing the project, alongside the signage for closure and detours, to communicate to Parkway users, what is happening in the area. This signage will include contact information for the public. This signage will warn "through traffic" that there is a closure ahead, but allow park users to access the non-construction areas of the Parkway.
	Paved trails, equestrian/hiking trails and/or maintenance roads will be available to the public during times when it is safe and feasible to do so.
	Signage, detours and flag persons will be used as necessary to allow for the public to use non-construction areas.
	Trail closures will consist of a 14-day advance notice to trail users, via signage at the detour locations.
Tribal Cultural Resources	It is Caltrans policy to avoid cultural resources whenever possible. In addition, if cultural materials (e.g., bones, stone implements, old bottles, etc.) are encountered during the project construction, Caltrans policy requires that all work in the area (within a 60 meter [200 feet] radius) must immediately halt until a qualified archaeologist can evaluate the nature and significance of the material and determine an appropriate course of action in consultation with the State Historic Preservation Office (Stipulation XV, Post Review Discoveries, Section B.1-3 in the Section 106 PA) and other agencies as required. No pre-construction, construction, or post construction activities will occur outside the area that has been surveyed for archaeological resources. This includes staging, storage, and parking of equipment.
	If human remains are discovered or recognized during construction, there shall be no further excavation or disturbance of the location (within a 60 meter [200 feet] radius), or any nearby area reasonably suspected to overlie adjacent remains, until a qualified archaeologist has contacted the appropriate county coroner and they have determined that the remains are not subject to provisions of Section 27491 of the Government Code. If the coroner determines the remains to be Native American, they shall contact the Native American Heritage Commission (NAHC) within 24 hours. The NAHC will appoint a Most Likely Descendent for disposition of the remains (Health and Safety Code Sect. 7050.5 and 7052, Public Resources Code Sect. 5097.9 to 5097.99).
Utilities and Service Systems	Transverse to the bridge, at bents 16-23, there are four high voltage power lines that span over the bridge, causing construction constraints. These lines are, from south to north, Pacific Gas and Electric Company (230 kV), Sacramento Municipal Utility District (230 kV), Wester Area Power Administration (230 kV), and Sacramento Municipal Utility District (60 kV). To avoid impacts these lines, Caltrans Division of Engineering Services has determined that splicing the piles will allow for proper vertical clearance for construction of the bridge foundations.