

# Staff Report 50

## LESSEE/APPLICANT:

County of Stanislaus and County of Merced

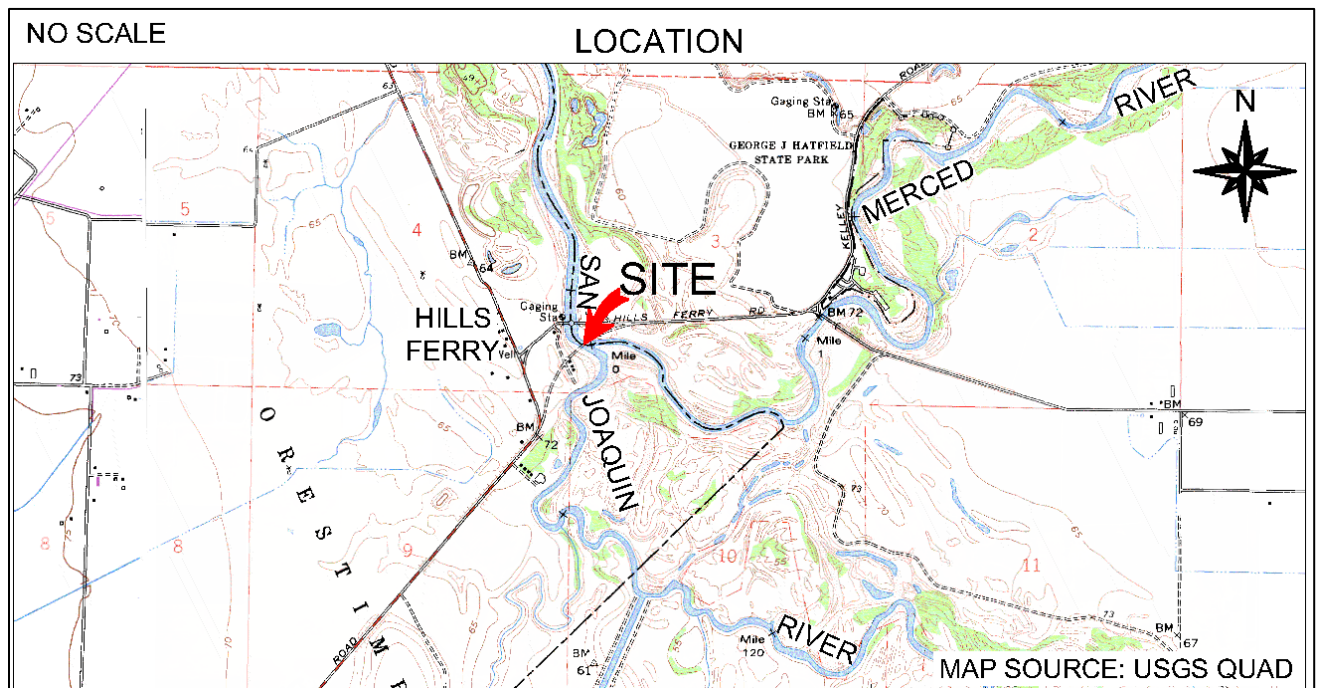
## PROPOSED ACTION:

Termination and Issuance of a General Lease – Public Agency Use

## AREA, LAND TYPE, AND LOCATION:

Sovereign land in the San Joaquin River, near Newman, adjacent to Assessor's Parcel Numbers 049-037-002 and -003 in Stanislaus County and Assessor's Parcel Numbers 045-280-011 and -012 in Merced County (as shown in Figure 1).

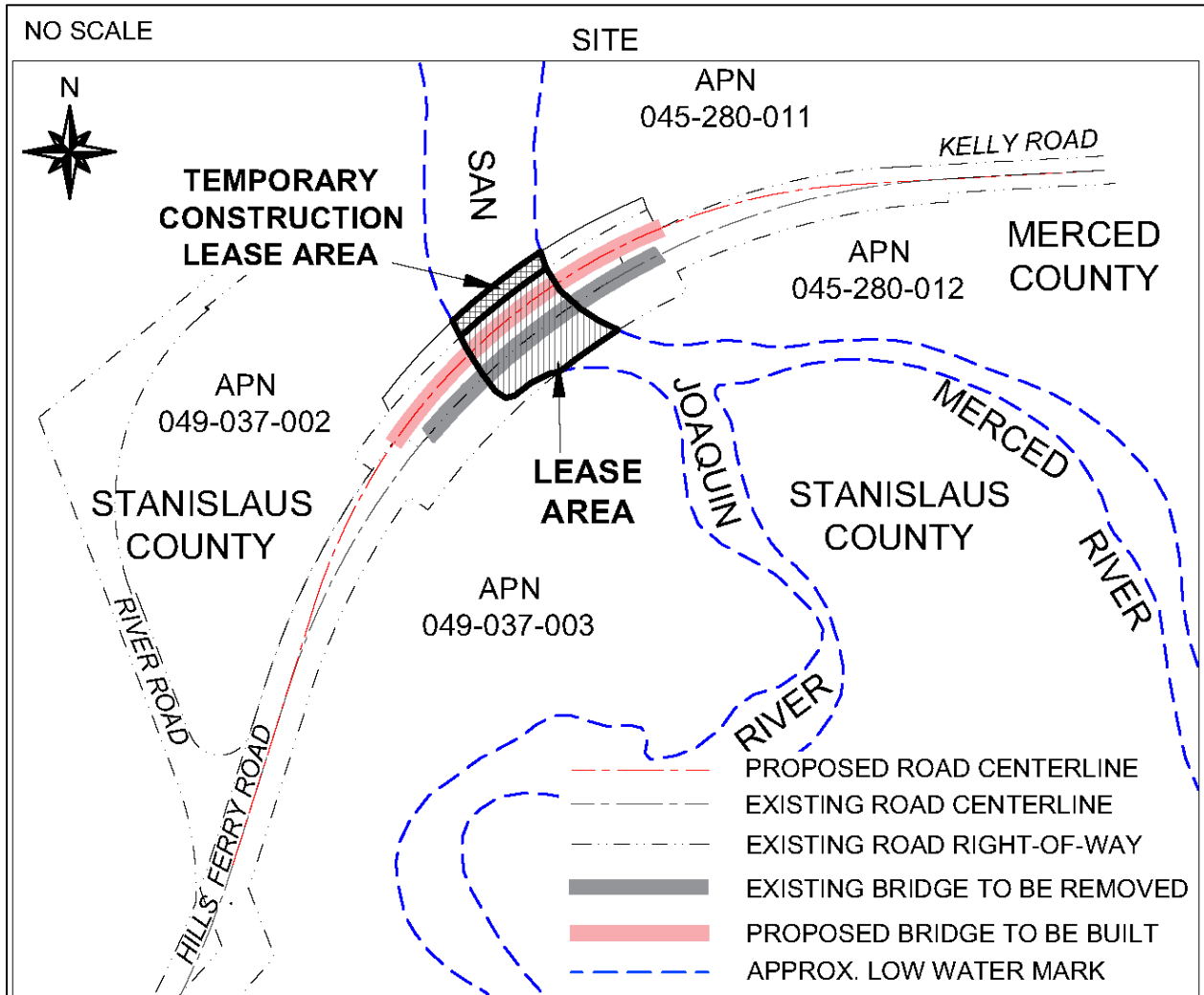
**Figure 1. Location**



**AUTHORIZED USE:**

Construction, use, and maintenance of a new bridge, known as the Hills Ferry Road Bridge; use of a temporary construction easement; temporary use and maintenance of the existing Hills Ferry Road Bridge (Bridge No. 39C-0001); and the demolition and removal of the existing bridge and concrete piers (as shown in Figure 2).

**Figure 2. Site Map**



NOTE: This depiction of the lease premises is based on unverified information provided by the Applicant or other parties and is not a waiver or limitation of any State interest in the subject or any other property.

**TERM:**

20 years, beginning April 28, 2023.

**CONSIDERATION:**

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.

**SPECIFIC LEASE PROVISIONS:**

- Lessee shall not install, attach, or authorize the placement or expansion of any utilities or other improvements on the bridge or within the Lease Premises without Lessor's prior review and approval. Separate leases or subleases are required and shall be obtained for all utilities not operated by Lessee.
- Lessee agrees and acknowledges that the hazards associated with climate change may require additional maintenance or protection strategies regarding the improvements on the lease premises.
- Within 60 days of completing the construction of authorized improvements, Lessee will provide Lessor with photographs and a set of "as-built" plans that will show where the improvements have been placed. Lessor shall then replace Exhibit A-1 (Land Description) and Exhibit B (Site and Location Map) to this Lease as necessary to accurately reflect the final location of the authorized improvements. Once approved by Lessor's Executive Officer or designee and Lessee, the revised Exhibits shall replace the Exhibits incorporated in the Lease at the time of Lease execution. The revised Exhibits shall be incorporated in this Lease as though fully set forth herein.
- Lessee shall place warning signage or buoys clearly visible from the shore and in the water both upstream and downstream of the construction site to provide notice of the bridge replacement and existing bridge demolition projects, and to advise the public to exercise caution. Lessee shall notify the California Department of Parks and Recreation's Division of Boating and Waterways of the location, description, and purposes of such signage or buoys upon installation and removal.

**STAFF ANALYSIS AND RECOMMENDATION:**

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**AUTHORITY:**

Public Resources Code sections 6005, 6216, 6301, 6501.1, and 6503; California Code of Regulations, title 2, sections 2000 and 2003.

**PUBLIC TRUST AND STATE'S BEST INTERESTS:**

On April 28, 1960, the Commission authorized a 49-year Right of Way Permit to Stanislaus and Merced Counties for the construction of the Hills Ferry Bridge ([Item 6, April 28, 1960](#)). On February 1, 2010, the Commission authorized a General Lease –

Public Agency Use to the County of Stanislaus and the County of Merced for the use and maintenance of the existing bridge ([Item C10, February 1, 2010](#)). In 2018, the California Department of Transportation (Caltrans) determined that the bridge is seismically deficient due to critical scour that has eroded support around the bridge pilings. The scour is attributed to river migration and channel widening. The bridge also has substandard traffic railings which creates a safety risk. The Lessee, with Caltrans concurrence, determined the best option to address these concerns is to replace the entire bridge. The lease will expire on April 28, 2029.

The Lessee submitted an application for a new General Lease – Public Agency Use for the construction, use, and maintenance of a new bridge, known as the Hills Ferry Road Bridge; use of a temporary construction easement; temporary use and maintenance of the existing Hills Ferry Road Bridge (Bridge No. 39C-0001); and the demolition and removal of the existing bridge and concrete piers, as part of the Hills Ferry Road Bridge Replacement (Project). Staff recommends the termination of the existing lease and issuance of a new lease. The Lessee has the right to use the uplands adjoining the existing and proposed lease premises.

The Hills Ferry Road Bridge is a rural major east-west connector between Interstate 5 (I-5) and United States Highway 99 (US-99) between the towns of Patterson in Stanislaus County and Los Banos in Merced County. The existing two-lane road bridge was built in 1961 and is approximately 647-feet long with three reinforced concrete frames with 18 spans.

The proposed two-lane road bridge would be constructed immediately north of the current bridge, within the current lease area, to maintain vehicular access across the San Joaquin River (River) throughout construction by using the current bridge. The profile of the proposed bridge would be raised approximately 5-feet to allow longer and fewer spans than the existing bridge while maintaining the required freeboard above the anticipated flood events. It would be approximately 750-feet long with two 12-foot-wide lanes providing passage in either direction with 6-foot-wide and 4-foot-wide shoulders, and a five-span cast-in-place post-tensioned box girder.

Construction and demolition are anticipated to be complete within two full construction seasons, with in-water construction occurring between June 15 to October 31. Construction activities may require diversion or channelizing of the flow at the crossing and/or construction of temporary work trestles. One temporary trestle would be constructed approximately 90-feet north of the existing bridge centerline to facilitate construction of the proposed bridge. A second temporary trestle may be constructed approximately 40-feet south of the existing bridge

centerline to facilitate removal of the existing bridge. Both trestles would be removed after construction and demolition activities are complete.

Construction of the concrete piling would likely be done using temporary steel casings that are driven, vibrated, rotated, or oscillated into the soils. If the casings are driven and the water level is high, such that water surrounds the casing during driving, then a bubble curtain would likely be required to reduce the magnitude of sound waves through the water in order to protect fish. Due to the expected high-water table during pile construction, slurries would likely be needed within the casings and drilled holes. Falsework to support the new cast-in-place box girder structure would likely be a combination of driven pipe piling and timber posts on timber pads. The piles would be driven from cranes on the upland and on the trestles. Depending on the progress, it may be necessary for falsework to remain in place through the winter.

After shifting traffic to the new bridge, the current bridge and support structures will be removed from the River. Demolition of the current bridge could also include working from the deck of the current bridge and working backwards during the removal. Removal of the concrete piers located in the River will require either temporary coffer dams or cutting the piers into sections for removal by crane. The concrete piers may be cut off 5-feet below the mud line and left in place if the Lessee is unsuccessful in its attempts to remove the concrete piers completely. In the event the Applicant is unable to completely remove the concrete piers, the Lessee will remain responsible for any abandoned structures. Should the Commission determine that any abandoned structures have become a hazard to the public, the Lessee will be required to remedy the hazard. Upon submission of the as-built plans showing the location of the new bridge and remaining portions of the current bridge to be demolished, if any, the leased area may be revised.

The public may launch small craft approximately 0.35 mile north of the lease area at the Fisherman's Bend boat ramp, a privately owned pay-per-use site. There is also a public access site to the Merced River approximately 0.8 mile east of the lease area at the George J. Hatfield State Recreation Area. This recreation area provides parking, day use, trails, river access, and camping along the Merced River upstream of its convergence with the San Joaquin River. The current bridge has existed for many years at this location. The proposed lease includes provisions protecting the public use of the proposed lease area and requires the Applicant to obtain necessary permits for the project. Furthermore, the current and proposed bridges do not significantly alter the land, the lease does not alienate the State's fee simple interest, and neither permanently impairs public rights. The lease requires the Lessee to conduct all repair and maintenance work safely and indemnify the Commission in the event of any liability resulting from the proposed action. The

lease is limited to a 20-year term and does not grant the lessee exclusive rights to the lease premises, which allows the Commission flexibility to determine if the Public Trust needs of the area have changed over time.

For all the reasons above, staff believes the issuance of this lease will not substantially impair the public rights to navigation, fishing, and commerce; or substantially interfere with Public Trust needs and values at this location, at this time, and for the foreseeable term of the proposed lease; and is in the best interests of the State.

### **CLIMATE CHANGE:**

The project area is not tidally influenced and therefore, would not be subject to sea level rise. However, 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, drought, and storms. In rivers, more frequent and powerful storms can result in increased flooding conditions and damage from storm-created debris. Conversely, prolonged droughts could dramatically reduce river flow and water levels, leading to loss of public access and navigability. Climate change will further influence riverine areas by changing erosion and sedimentation rates, and flooding and storm flow, as well as runoff, will likely increase scour, decreasing bank stability at a faster rate.

Due to these potential changes, the proposed replacement bridge could need reinforcement in the future to withstand higher levels of flood exposure and more frequent storm events. Regular maintenance, as required by the lease, will reduce the likelihood of severe structural degradation or dislodgement. Pursuant to the proposed lease, the Lessee acknowledges that the lease premises are located in an area that may be subject to effects of climate change.

### **OTHER PERTINENT INFORMATION:**

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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. If the Commission denies the application, the Lessee may not conduct the proposed Project activities within lands under the Commission's jurisdiction. The lessee has no right to a new lease or to renewal of any previous lease.

2. This action is consistent with the "Leading Climate Activism" and "Meeting Evolving Public Trust Needs" Strategic Focus Areas of the Commission's 2021-2025 Strategic Plan.
3. Termination of the lease is not a project as defined by the California Environmental Quality Act (CEQA) because it is an administrative action that will not result in direct or indirect physical changes in the environment.

Authority: Public Resources Code section 21065 and California Code of Regulations, title 14, section 15378, subdivision (b)(5).

4. A Mitigated Negative Declaration, State Clearinghouse No. 2020100593, and a Mitigation Monitoring and Reporting Program were prepared by Stanislaus County and adopted on July 19, 2021, for this project. Staff reviewed these documents and prepared an independent Mitigation Monitoring Program (attached, Exhibit A) incorporating the County's document and recommends adoption by the Commission.
5. This activity involves lands identified as possessing significant environmental values pursuant to Public Resources Code section 6370 et seq., but the activity will not affect those significant lands. Based upon staff's consultation with the persons nominating such lands and through the CEQA review process, it is staff's opinion that the project, as proposed, is consistent with its use classification.

## **APPROVALS OBTAINED:**

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California Department of Transportation  
National Marine Fisheries Service

## **APPROVALS REQUIRED:**

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U.S. Army Corps of Engineers  
State Water Resources Control Board  
California Department of Fish and Wildlife  
U.S. Department of Agriculture, National Resources Conservation Service

## **EXHIBIT:**

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A. Mitigation Monitoring Program

## **RECOMMENDED ACTION:**

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It is recommended that the Commission:

### **CEQA FINDING:**

Find that a Mitigated Negative Declaration, State Clearinghouse No. 2020100593, and a Mitigation Monitoring and Reporting Program were prepared by the Stanislaus County and adopted on July 19, 2021, for this project 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 lease 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 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 A.

### **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.

### **PUBLIC TRUST AND STATE'S BEST INTERESTS:**

Find that the proposed lease will not substantially impair the public rights to navigation or substantially interfere with the Public Trust needs and values at this location, at this time, and for the foreseeable term of the proposed lease; and is in the best interests of the State.

### **AUTHORIZATION:**

1. Authorize issuance of a General Lease – Public Agency Use to the County of Stanislaus and County of Merced beginning April 28, 2023, for a term of 20 years, for construction, use, and maintenance of a new bridge; construction, use, and maintenance of a temporary pedestrian and bicycle bridge crossing; and demolition and removal of the existing bridge; consideration: 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.
2. Authorize the Executive Officer or designee to replace exhibits in the lease upon submission, review, and approval of as-built plans detailing the final location of



the new improvements, and to remove the temporary construction area, following construction.

**EXHIBIT A**  
**CALIFORNIA STATE LANDS COMMISSION**  
**MITIGATION MONITORING PROGRAM**  
**RIVER ROAD OVER SAN JOAQUIN RIVER BRIDGE REPLACEMENT**  
**AKA HILLS FERRY ROAD BRIDGE REPLACEMENT**  
(A3784, State Clearinghouse No. 2020100593)

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The California State Lands Commission (Commission or CSLC) is a responsible agency under the California Environmental Quality Act (CEQA) for the River Road Over San Joaquin River Bridge Replacement (AKA Hills Ferry Road Bridge Replacement) (Project). The CEQA lead agency for the Project is Stanislaus County.

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 Guidelines<sup>1</sup> 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. 2020100593, adopted a Mitigation Monitoring and Reporting Program (MMRP) for the whole of the Project (see Exhibit A, Attachment A-1), and remains responsible for ensuring that implementation of the mitigation measures occurs in accordance with its program. The Commission's action and authority as a responsible agency apply only to the mitigation measures listed in Table A-1 below. The full text of each mitigation measure, as set forth in the MMRP prepared by the

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

CEQA lead agency and provided in Attachment A-1, is incorporated by reference in this Exhibit A. Any mitigation measures adopted by the Commission that differ substantially from those adopted by the lead agency are shown as follows:

- Additions to the text of the mitigation measure are underlined; and
- Deletions of the text of the mitigation measure are shown as ~~strikeout~~ or as otherwise noted.

**Table A-1. Project Impacts and Applicable Mitigation Measures**

<b>Potential Impact</b>	<b>Mitigation Measure (MM)<sup>2</sup></b>	<b>Difference Between CSLC MMP and Lead Agency MMRP</b>
AIR-3. Sensitive Receptors	MM AIR-1	None
BIO-6. Swainson's Hawk	MM BIO-5	None
BIO-9. Western Pond Turtle	MM BIO-7	None
BIO-10. Steelhead	MMs BIO-8, HYD-1	None
BIO-12. Riparian Habitat	MM BIO-11	None
BIO-13. Riverine Habitat	MM BIO-12	None
BIO-14. Salmon Essential Fish Habitat	MMs BIO-8, HYD-1	None
BIO-15. Wetlands	MMs BIO-13, BIO-14	None
CULT-1. Cultural Resources	MM CULT-1	See addition to CULT-1 below
CULT-2. Human Remains	MM CULT-2	None
GEO-6. Paleontological Resources	MM GEO-1	See addition to GEO-1 below
HAZ-1. Stormwater Prevention Plan	MM HAZ-1	None
HAZ-2. Lead Paint	MM HAZ-2	None
HYD-1. Water Quality	MMs HYD-1, HYD-2, HYD-3	None
HYD-2. Erosion	MMs HYD-2, HYD-3	None
NOI-1. Noise	MM NOI-1	None
TCR-1. Tribal Cultural Resources	MMs CULT-1, CULT-2	None

<sup>2</sup> See Attachment A-1 for the full text of each MM taken from the MMRP prepared by the CEQA lead agency.

Add to MM CULT-1:

California State Lands Commission (Commission) staff shall be notified of any significant cultural resources discovered on lands under the jurisdiction of the Commission. The final disposition of archaeological and historical resources from such lands must be approved by the Commission. Regional Parks shall also contact applicable Tribes if an archeological discovery is made.

Add to MM GEO-1:

California State Lands Commission (Commission) staff shall be notified of any paleontological specimens discovered on lands under the jurisdiction of the Commission. The final disposition of any artifacts or specimens including, but not limited to, those of a paleontological nature from such lands must be approved by the Commission.

## **ATTACHMENT A-1**

### **MITIGATION MONITORING AND REPORTING PROGRAM ADOPTED BY STANISLAUS COUNTY**

## MITIGATION MONITORING AND REPORTING PROGRAM

This Mitigation Monitoring and Reporting Program (MMRP) has been prepared based upon the findings of the River Road over San Joaquin River Bridge Replacement (aka Hills Ferry Road Bridge Replacement) Project Final Mitigated Negative Declaration (MND). The MMRP, which is found in Table A of this section, lists mitigation measures recommended in the June 2021 Final MND for the proposed project. The MMRP must be adopted when the Board of Supervisors makes a final decision on the project.

This MMRP has been prepared to comply with the requirements of State law (Public Resources Code Section 21081.6). State law requires the adoption of an MMRP when mitigation measures are required to avoid significant impacts. The MMRP is intended to ensure compliance during implementation of the project.

The MMRP is organized in a matrix format. The first column identifies the mitigation measure. The second column, entitled "Mitigation Responsibility," refers to the party responsible for implementing the mitigation measure. The third column, entitled "Monitoring/Reporting Agency," refers to the agency responsible for oversight or ensuring that the mitigation measure is implemented. The fourth column, entitled "Monitoring Schedule," refers to when monitoring will occur to ensure that the mitigating action is completed. Please note that these mitigation measures include any revisions made as a result of the Response to Comments Document and the June 2021 Final MND.

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### Mitigation Monitoring and Reporting Program

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
Agriculture and Forestry Resources					
AG-1: Williamson Act Notification. Prior to construction, County of Merced shall notify the California DOC of its intent to acquire land that is under a Williamson Act Contract for a public improvement project. The notification shall follow the procedures set forth by the California DOC Public Acquisitions of Williamson Act Contracted Land. The notice shall indicate the amount of land that would need to be acquired to implement the proposed project. The notice shall also indicate that the remaining land not required for project implementation would continue to be governed by a Williamson Act Contract.	Merced County	Merced County and California Farmland Conservancy	Pre-construction		
Air Quality					
AIR-1: The project contractor, on behalf of Stanislaus County, shall prepare a Dust Control Plan for demolition and construction activities at the project site pursuant to the requirements and regulations of the SJVAPCD, including Regulation VIII. The project contractor shall be responsible for ensuring that all	Contractor	SJVAPCD	During Construction		



Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>adequate dust control measures are implemented in a timely manner during all phases of construction and maintenance activities at the project site. The Dust Control Plan shall include, at a minimum, the following measures:</p> <ul style="list-style-type: none"> <li>• All disturbed areas, including storage piles, which are not being actively utilized for construction purposes, shall be effectively stabilized of dust emissions using water, chemical stabilizer/suppressant, covered with a tarp or other suitable cover or vegetative ground cover.</li> <li>• All on-site unpaved roads and off-site unpaved access roads shall be effectively stabilized of dust emissions using water or chemical stabilizer/suppressant.</li> <li>• All land clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill, and demolition activities shall be effectively controlled of fugitive dust emissions utilizing application of water or by presoaking.</li> <li>• When materials are transported off-site, all material shall be covered, or effectively wetted to limit visible dust emissions, and at least six inches of</li> </ul>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>freeboard space from the top of the container shall be maintained.</p> <ul style="list-style-type: none"> <li>• All operations shall limit or expeditiously remove the accumulation of mud or dirt from adjacent public streets at the end of each workday. (The use of dry rotary brushes is expressly prohibited except where preceded or accompanied by sufficient wetting to limit the visible dust emissions.) (Use of blower devices is expressly forbidden.)</li> <li>• Following the addition of materials to, or the removal of materials from, the surface of outdoor storage piles, said piles shall be effectively stabilized of fugitive dust emissions utilizing sufficient water or chemical stabilizer/suppressant.</li> <li>• Within urban areas, trackout shall be immediately removed when it extends 50 or more ft from the site and at the end of each workday.</li> <li>• An owner/operator of any site with 150 or more vehicle trips per day, or 20 or more vehicle trips per day by vehicles with three or more axles shall implement measures to prevent carryout and trackout.</li> </ul>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
Biological Resources					
<b>BIO-1:</b> The following measures shall be implemented to avoid and minimize effects to bats. 1. Prior to bridge demolition, bats shall be excluded from potential day roost habitat on the existing bridge. Exclusion shall occur only during seasonal periods of bat activity when no non-volant young or overwinter bats are present so that no bats are trapped inside the roost features. In this region, the first annual appropriate season to conduct humane eviction is between approximately March 1 and April 15 (or after evening temperatures rise above 45°F, and less than 0.5 in rainfall in 24 hours occurs). The next annual season is after maternity season and prior to winter torpor or hibernation; September 1 through about October 15 (or before evening temperatures fall below 45°F, and prior to greater than 0.5 in rainfall within 24 hours). 2. Under guidance of a qualified bat biologist experienced with humane bat exclusion procedures on bridges, bat exclusion measures shall be installed	County/Qualified Bat Biologist	CDFW	Pre-construction/During construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>during the daytime and shall consist of one-way structures that allow the bats to exit the roost but not re-enter. The exclusion measures shall remain in place and function until the existing bridge deck is removed. The number of exclusion measures installed at each roost location shall be sufficient to allow complete evacuation of all bats.</p> <p>3. A qualified biologist with experience assessing trees for bat roosts shall survey all trees to be removed during construction for suitability as bat roosts. Any trees suitable as bat roost shall be removed between the same periods (and conditions) specified in measure 1.</p> <p>4. The follow process shall be followed to remove trees identified in measure 3.</p> <p>a. A qualified biologist shall conduct a night emergence survey of the suitable roost tree 1-2 nights prior to tree removal using night vision and/or IR-sensitive camera equipment and bioacoustic recording equipment. If surveys are negative, trees shall be removed between the same periods</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>(and conditions) specified in measure 1.</p> <p>b. If night emergent surveys are positive, trees shall be removed using a two-step process on two consecutive days, and shall be monitored by a qualified biologist. The first day, small branches and small limbs that do not contain potential roost habitat (e.g., cavities, crevices, exfoliating bark) shall be removed using chainsaws. The second day, the remainder of the tree shall be removed. The disturbance caused by chainsaw noise and vibration, coupled with the physical alteration of the tree will cause colonial bat species to abandon the roost tree after nightly emergence for foraging. Removing the tree the next day prevents re-habitation and re-occupation of the altered tree.</p> <p>5. In-kind replacement of day and night roost habitat shall be provided on the new bridge commensurate with the amount of each habitat identified on the existing bridge, as determined by a</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>qualified biologist with experience assessing bat habitat on bridges.</p> <p>6. Demolition of the existing bridge shall not occur until after the new bridge is completed and replacement bat habitat has been installed.</p>					
<p><b>BIO-2:</b>The following measure shall be implemented to reduce impacts to San Joaquin pocket mouse and tricolored blackbird:</p> <p>1. Annual grassland temporarily disturbed during construction shall be revegetated with the seed mix specified in Table 2 included in Appendix A of this MMRP.</p>	County	CDFW	During construction/Post-construction		
<p><b>BIO-3:</b>The following measures from the USFWS's Standard Recommendations for the Protection of the San Joaquin Kit Fox Prior to or During Ground Disturbance (June 1999) shall be implemented as part of the project:</p> <p>1. A preconstruction/pre-activity survey shall be conducted no less than 14 days and no more than 30 days prior to the beginning of ground disturbance and/or construction activities or any project activity likely to impact the SJKF.</p>	County/Qualified Biologist	USFWS/CDFW	Pre-construction/During construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>2. If a natal/pupping den is discovered within the project area or within 200 ft of the project boundary, the USFWS and CDFW shall be immediately notified and under no circumstance should the den be disturbed or destroyed without prior authorization.</p> <p>3. Project-related vehicles should observe a 20-miles per hour speed limit in all project areas, except on county roads and State and federal highways; this is particularly important at night when SJKF are most active. To the extent possible, night-time construction should be minimized. Off-road traffic outside of the BSA should be prohibited.</p> <p>4. To prevent inadvertent entrapment of SJKF or other animals during the construction phase of the project, all excavated, steep-walled holes or trenches more than 2 ft deep should be covered at the close of each working day by plywood or similar materials, or provided with one or more escape ramps constructed of earth fill or wooden planks. Before such holes or trenches are filled, they should be</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>thoroughly inspected for trapped animals. If at any time a trapped or injured SJKF is discovered, the procedures under number 12 of this measure must be followed.</p> <p>5. SJKF are attracted to den-like structures such as pipes and may enter stored pipe becoming trapped or injured. All construction pipes, culverts, or similar structures with a diameter of 4 inches or greater that are stored at a construction site for one or more overnight period should be thoroughly inspected for SJKF before the pipe is subsequently buried, capped, or otherwise used or moved in any way. If a SJKF is discovered inside a pipe, that section of pipe should not be moved until the USFWS and CDFW has been consulted. If necessary, and under the direct supervision of the biologist, the pipe may be moved once to remove it from the path of construction activity, until the fox has escaped.</p> <p>6. All food-related trash items such as wrappers, cans, bottles, and food scraps should be disposed of in closed</p>					



Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>containers and removed at least once a week from the BSA.</p> <p>7. No firearms shall be allowed in the BSA.</p> <p>8. To prevent harassment, mortality of SJKF or destruction of dens by dogs or cats, no pets should be permitted in the project area.</p> <p>9. Use of rodenticides and herbicides in project areas should be restricted. This is necessary to prevent primary or secondary poisoning of SJKF and the depletion of prey populations on which they depend. All uses of such compounds should observe label and other restrictions mandated by the U.S. Environmental Protection Agency, California Department of Food and Agriculture, and other State and federal legislation, as well as additional project-related restrictions deemed necessary by the USFWS. If rodent control must be conducted, zinc phosphide should be used because of proven lower risk to SJKF.</p> <p>10. A representative shall be appointed by Stanislaus County who will be the contact source for any employee or contractor who might</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>inadvertently kill or injure a SJKF or who finds a dead, injured, or entrapped individual. The representative shall be identified during the employee education program. The representative's name and telephone number shall be provided to the USFWS and CDFW.</p> <p>11. An employee education program shall be conducted. The program should consist of a brief presentation by persons knowledgeable in kit fox biology and legislative protection to explain endangered species concerns to contractors, their employees, and military and agency personnel involved in the project. The program should include the following: a description of the SJKF and its habitat needs; a report of the occurrence of SJKF in the project area; an explanation of the status of the species and its protection under the Federal Endangered Species Act and California Endangered Species Act; and a list of measures being taken to reduce impacts to the species during project construction and implementation. A fact sheet conveying this information</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>should be prepared for distribution to the above-mentioned people and anyone else who may enter the BSA.</p> <p>12. Upon completion of the project, all areas subject to temporary ground disturbances, including storage and staging areas, temporary roads, pipeline corridors, etc., should be recontoured if necessary, and revegetated to promote restoration of the area to pre-project conditions. An area subject to “temporary” disturbance means any area that is disturbed during the project, but that after project completion will not be subject to further disturbance and has the potential to be revegetated. Appropriate methods and plant species used to revegetate such areas should be determined on a site-specific basis in consultation with the USFWS and CDFW and revegetation experts.</p> <p>13. In the case of trapped animals, escape ramps, or structures should be installed immediately to allow the animal(s) to escape, or the USFWS and CDFW should be contacted for advice.</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>Additional minimization measures include:</p> <p>14. In the event that a SJKF or its sign is observed in the project area, or it is otherwise determined that SJKF may be affected by the proposed action during work on the bridge, Caltrans (on behalf of the FHWA) and the USFWS and CDFW must be notified immediately to determine whether additional consultation is necessary.</p>					
<p><b>BIO-4:</b>The following measures shall be implemented to reduce impacts to burrowing owls:</p> <ol style="list-style-type: none"> <li>1. Preconstruction surveys for western burrowing owl shall be conducted by a qualified biologist in accordance with CDFW's 2012 Staff Report on Burrowing Owl Mitigation.</li> <li>2. If burrowing owls are identified during the preconstruction survey, passive exclusion shall be implemented per CDFW's 2012 Staff Report on Burrowing Owl Mitigation (including avoidance of occupied burrows during the breeding season).</li> <li>3. Annual grassland, pasture, and ruderal areas temporarily disturbed during</li> </ol>	County/Qualified Biologist	USFW/CDFW	Pre-construction/During construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
construction shall be revegetated with the seed mix specified in Mitigation Measure BIO-2.					
<b>BIO-5:</b> The following measures shall be implemented to reduce potential impacts to nesting Swainson's hawks and impacts to suitable foraging habitat: 1. If work begins between February 1 and August 31, an early season preconstruction survey for nesting Swainson's hawks shall be conducted between January and March in the BSA and immediate vicinity (an approximately 0.25-mile radius) by a qualified biologist when tree foliage is relatively sparse and nests are easy to identify. A second preconstruction survey for nesting Swainson's hawks shall be conducted in the BSA and immediate vicinity (an approximately 0.25 mile radius) by a qualified biologist no more than 14 days prior to initiation of earthmoving activities. 2. If nesting Swainson's hawks are found within the survey area, a qualified biologist shall evaluate the potential for the project to disturb nesting activities. CDFW shall be contacted to review the	County/Qualified Biologist	CDFW	Pre-construction/During construction/Post-construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>evaluation and determine if the project can proceed without adversely affecting nesting activities. CDFW shall also be consulted to establish protection measures such as buffers. Disturbance of active nests shall be avoided until it is determined by a qualified biologist that nesting is complete and the young have fledged, or that the nest has failed. If work is allowed to proceed, at a minimum, a qualified biologist shall be on-site during the start of construction activities during the nesting season to monitor nesting activity. The monitor shall have the authority to stop work if it is determined the project is adversely affecting nesting activities.</p> <p>3. Worker environmental awareness training shall be conducted by a qualified biologist for all construction personnel. This training instructs workers to recognize Swainson's hawks and their habitat(s).</p> <p>4. Brightly colored Environmentally Sensitive Area (ESA) fencing shall be placed along the limits of work to prevent unnecessary encroachment</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>into adjacent areas. Fencing shall be maintained in good condition for the duration of construction activities.</p> <p>5. Annual grassland temporarily disturbed during construction shall be revegetated with the seed mix specified in Mitigation Measure BIO-2.</p>					
<p><b>BIO-6:</b>The following measures shall be implemented to reduce potential impacts to nesting northern harriers, loggerhead shrike and impacts to suitable foraging habitat:</p> <ol style="list-style-type: none"> <li>1. If work begins between February 1 and August 31, a preconstruction survey for nesting northern harriers and loggerhead shrike shall be conducted by a qualified biologist no more than 14 days prior to initiation of earthmoving activities. The survey shall include the BSA and suitable nesting habitat within 500 ft.</li> <li>2. If nesting northern harriers or loggerhead shrike are found within the survey area, a qualified biologist shall evaluate the potential for the project to disturb nesting activities. CDFW shall be contacted to review the evaluation and determine if the project can proceed</li> </ol>	County/Qualified Biologist	CDFW	Pre-construction/During construction/Post-construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>without adversely affecting nesting activities. CDFW shall also be consulted to establish protection measures such as buffers. Disturbance of active nests shall be avoided until it is determined by a qualified biologist that nesting is complete and the young have fledged, or that the nest has failed. If work is allowed to proceed, at a minimum, a qualified biologist shall be on-site during the start of construction activities during the nesting season to monitor nesting activity. The monitor shall have the authority to stop work if it is determined the project is adversely affecting nesting activities.</p> <p>3. Worker environmental awareness training shall be conducted by a qualified biologist for all construction personnel. This training instructs workers to recognize northern harriers, loggerhead shrike and their habitat(s).</p> <p>4. Brightly colored ESA fencing shall be placed along the limits of work to prevent unnecessary encroachment into adjacent areas. Fencing shall be maintained in good condition for the duration of construction activities.</p>					



Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
5. Annual grassland temporarily disturbed during construction shall be revegetated with the seed mix specified in Mitigation Measure BIO-2.					
<b>BIO-7:</b> The following measures shall be implemented to reduce impacts to western pond turtle: 1. Prior to the start of construction activities in the San Joaquin River, the reach of the river within the BSA shall be surveyed by a qualified biologist for the presence of western pond turtles. If western pond turtles are observed in the BSA, they shall be relocated outside of the work area by a qualified biologist. 2. Following completion of the new bridge, all fill slopes, temporary impact and/or otherwise disturbed areas shall be restored to preconstruction contours (if necessary) and revegetated with the native seed mix specified in Mitigation Measure BIO-2. 3. Measures consistent with the current Caltrans' Construction Site Best Management Practices (BMP) Manual (including the Storm Water Pollution Prevention Plan [SWPPP] and Water	County/Qualified Biologist	CDFW	Pre-construction/During construction/Post-construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>Pollution Control Plan [WPCP] Manuals) shall be implemented to minimize effects to Pacific pond turtle suitable habitat resulting from erosion, siltation, etc. during construction.</p> <p>4. Brightly colored ESA fencing shall be placed along the limits of work to prevent unnecessary encroachment into the San Joaquin River. Fencing shall be maintained in good condition for the duration of construction activities.</p>					
<p><b>BIO-8:</b>The following measures shall be implemented to reduce impacts to Central Valley steelhead:</p> <p>1. All in-water work associated with the proposed project shall be conducted between June 1 and October 15, which is within the seasonal work window recommended by National Marine Fisheries Service to minimize effects to steelhead.</p> <p>2. Brightly colored ESA fencing shall be placed along the limits of work to prevent unnecessary encroachment into the San Joaquin River. Fencing shall be maintained in good condition for the duration of construction activities.</p>	County/Qualified Biologist	NMFS	Pre-construction/During construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>3. The project shall retain a qualified fishery biologist prior to construction to inspect the temporary steel casings prior to installation. The temporary steel casings will be utilized during construction of the CIDH pilings to contain spoils during drilling and to keep the drilled holes from collapsing. The temporary steel casings shall have wire mesh, netting, or equivalent material attached to the bottom of the casings, prior to the casings being lowered into the water. The wire mesh, netting, or equivalent material shall have openings small enough to prevent juvenile salmonids from being trapped in the casing during installation. Prior to installation, the temporary steel casings shall be inspected by a qualified fishery biologist. When and if necessary, a qualified fishery biologist may halt work activity and recommend measures for avoiding adverse effects to salmonids and their habitat and inform National Marine Fisheries Service of any such occurrences.</p> <p>4. Water collected in the CIDH casings shall be pumped into settling basins on</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>the bank or into trucks for off-site disposal.</p> <p>5. During removal of any part of the existing bridge, a debris collection device (e.g., heavy tarps, chain link mats) shall be installed below the bridge to prevent debris from falling into the San Joaquin River and left in place until removal is complete.</p> <p>6. Measures consistent with the current Caltrans' Construction Site BMP Manual (including the SWPPP and WPCP Manuals) shall be implemented to minimize effects to steelhead during construction.</p> <p>7. A SWPPP shall be prepared by the contractor in accordance with typical provisions associated with a Regional General Permit for Construction Activities (on file with the Central Valley RWQCB). The SWPPP shall contain a Spill Response Plan with instructions and procedures for reporting spills, the use and location of spill containment equipment, and the use and location of spill collection materials.</p> <p>Implementation of the SWPPP will minimize effects to salmonids and their</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>habitat from potential spills associated with construction activities.</p> <p>8. Any emergent or submergent aquatic vegetation shall be retained. Other vegetation shall be retained as practical within the constraints of the proposed project. Where vegetation removal is necessary, rapidly sprouting plants, such as willows, shall be cut off at the ground line and the root systems left intact.</p>					
<p><b>BIO-9:</b>The following measures are consistent with the provisions of the USFWS “Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle” dated May 2017 and shall be implemented for the project:</p> <p>1. ESA fencing shall be established along the limits of construction to exclude construction activities from avoided habitat. Activities that may damage or kill an elderberry shrub (e.g., trenching, paving, etc.) may need an avoidance area of at least 20 ft from the drip-line, depending on the type of activity. Trucks and other vehicles shall not be allowed to park in and equipment shall not be stored in, an ESA. No storage or</p>	County/Qualified Biologist	USFWS	Pre-construction/During construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>dumping of oil, gasoline, or other substances shall be permitted within an ESA. All ESAs shall be clearly delimited with yellow caution tape or temporary fencing prior to commencement of construction activities.</p> <p>2. Signs shall be installed along the edge of the ESA and shall read the following: "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." The signs should be clearly readable from a distance of 20 ft and must be maintained for the duration of construction.</p> <p>3. All temporarily disturbed areas shall be restored to approximate pre-construction contours and revegetated, either through hydroseeding or other means, with native species.</p> <p>4. To prevent fugitive dust from drifting into adjacent habitat, all clearing, grubbing, scraping, excavation, land leveling, grading, cut and fill,</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>demolition activities, or other dust generating activities shall be effectively controlled for fugitive dust emissions utilizing application of water or by presoaking.</p> <p>5. Prior to the start of construction, a qualified biologist shall survey for elderberry shrubs within 165 ft of the disturbance area. If the survey documents any shrubs with stem diameter greater than 1 inch that were not identified during the May 14, 2019 survey conducted within the BSA, Caltrans shall contact the USFWS. The USFWS and Caltrans shall work to determine a way to proceed without take or Caltrans shall reinitiate consultation with the USFWS to update the Biological Opinion to obtain an Incidental Take Statement that includes any additional take that may occur.</p> <p>6. All construction personnel shall attend environmental awareness training. During the environmental awareness training, construction personnel shall be briefed on the status of the beetle, the need to avoid damage to the elderberry host plant, and the possible</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>penalties for not complying with these requirements.</p> <p>7. Herbicides shall not be used within the drip-line of the elderberry shrubs. Insecticides shall not be used within 30 meters (98 ft) of an elderberry shrub. All chemicals will be applied using a backpack sprayer or a similar direct application method.</p> <p>8. A qualified biologist shall monitor the work area at project appropriate intervals to assure that all avoidance and minimization measures are implemented.</p>					
<p><b>BIO-10:</b> In accordance with the 2017 VELB Framework, direct impacts to elderberry shrubs within riparian habitat shall be compensated at a minimum 2:1 ratio. Additionally, elderberry shrubs that will be removed shall be transplanted, if feasible, to a USFWS-approved location. The VELB compensatory mitigation approach is shown in Table 3 included in Appendix A of this MMRP. As shown in Table 3, the purchase of a total of 8 credits will be required. In addition, all four elderberry shrub will require transplanting to a USFWS-approved location.</p>	County	USFWS	Pre-construction		



Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<b>BIO-11:</b> The following measures shall be implemented to reduce impacts to black willow community: <ol style="list-style-type: none"> <li>1. Work in the black willow community shall be minimized to the extent possible. Work in the live channel of the San Joaquin River shall also be minimized to the extent possible.</li> <li>2. Brightly colored ESA fencing shall be placed along the limits of work to protect the adjacent black willow community. Fencing shall be maintained in good condition for the duration of construction activities.</li> <li>3. Staging areas, access routes, and construction areas shall be located outside of wetland and riparian areas to the maximum extent practicable.</li> <li>4. Worker environmental awareness training shall be conducted by a qualified biologist for all construction personnel. The training shall instruct workers about the purpose of ESA fencing and the resources being protected.</li> <li>5. Measures consistent with the current Caltrans' Construction Site BMP Manual (including the SWPPP and WPCP</li> </ol>	County/Qualified Biologist	USACE, RWQCB, CDFW	Pre-construction/During construction/Post-construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>Manuals) shall be implemented to minimize effects to the red willow thickets community resulting from erosion, siltation, etc. during construction.</p> <p>6. A SWPPP shall be prepared by the contractor in accordance with typical provisions associated with a Regional General Permit for Construction Activities (on file with the Central Valley RWQCB). The SWPPP shall contain a Spill Response Plan with instructions and procedures for reporting spills, the use and location of spill containment equipment, and the use and location of spill collection materials.</p> <p>7. All upland areas temporarily impacted during project construction shall be restored to preconstruction contours (if necessary) and revegetated with native species as specified in Mitigation Measure BIO-2. Invasive exotic plants shall be controlled to the maximum extent practicable.</p> <p>Prior to issuance of a grading permit or other authorization to proceed with project construction, the County shall obtain any</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
regulatory permits that are required from the USACE, RWQCB, and/or CDFW.					
<b>BIO-12:</b> The following measures shall be implemented to reduce impacts to riverine habitat: 1. All in-water work associated with the proposed project shall be conducted between June 1 and October 15. 2. Brightly colored ESA fencing shall be placed along the limits of work to prevent unnecessary encroachment into the San Joaquin River. Fencing shall be maintained in good condition for the duration of construction activities. 3. The project shall retain a qualified fishery biologist prior to construction to inspect the temporary steel casings prior to installation. The temporary steel casings will be utilized during construction of the CIDH pilings to contain spoils during drilling and to keep the drilled holes from collapsing. The temporary steel casings shall have wire mesh, netting, or equivalent material attached to the bottom of the casings, prior to the casings being lowered into the water. The wire mesh,	County/Contractor	RWQCB, CDFW	Pre-construction/During construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>netting, or equivalent material shall have openings small enough to prevent juvenile salmonids from being trapped in the casing during installation. Prior to installation, the temporary steel casings shall be inspected by a qualified fishery biologist. When and if necessary, a qualified fishery biologist may halt work activity and recommend measures for avoiding adverse effects to salmonids and their habitat and inform NMFS of any such occurrences.</p> <p>4. Water and/or slurry collected in the CIDH casings shall be pumped into settling basins on the bank or into trucks for off-site disposal.</p> <p>5. If the casings are driven and the water level is high such that water surrounds the casing during driving, a bubble curtain will be required to reduce the magnitude of sound waves through the water in order to protect fish.</p> <p>6. During removal of any part of the existing bridge, a debris collection device (e.g., heavy tarps, chain link mats) shall be installed below the bridge to prevent debris from falling into the San Joaquin River and left in</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>place until removal is complete. A qualified fish biologist shall be on site during the installation of cofferdams and during the cofferdam dewatering process to remove any trapped salmonids and other fish from the cofferdam. The fish will be relocated to suitable habitat upstream of the work area. Protocols for the capture, handling, and release of fish will be developed in cooperation with NMFS and CDFW. Fish biologists will contact NMFS and CDFW immediately if any steelhead are found dead or injured.</p> <p>7. A SWPPP shall be prepared by the contractor in accordance with the Caltrans <i>Stormwater Pollution Prevention Plan (SWPPP)</i> and <i>Water Pollution Control Program (WPCP) Preparation Manual</i> (October 2016 or most current version available) and typical provisions associated with a Regional General Permit for Construction Activities (on file with the Central Valley RWQCB). Consistent with these resources, the SWPPP shall include a description of potential pollutants and the manner in which</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>sediments and hazardous materials present on site during construction (including vehicle and equipment fuels) would be managed. The SWPPP shall also contain a Spill Response Plan with instructions and procedures for reporting spills, the use and location of spill containment equipment, and the use and location of spill collection materials. Implementation of the SWPPP shall minimize effects to salmonids and their habitat from potential spills associated with construction activities.</p> <p>8. Any emergent or submergent aquatic vegetation shall be retained as practical within the constraints of the proposed project.</p> <p>9. All upland areas temporarily impacted during project construction will be restored to pre-construction contours and revegetated with native species as specified in Table 2.</p>					
<p><b>BIO-13:</b> The following measures shall be implemented to reduce impacts to wetlands:</p> <p>1. To the extent practicable, the project shall include design features such as</p>	County/Qualified Biologist	USACE, RWQCB, CDFW	Pre-construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>retaining walls, non-standard slope gradients, etc. to avoid and minimize impacts to wetlands.</p> <p>2. Worker environmental awareness training shall be conducted by a qualified biologist for all construction personnel. The training shall instruct workers about the purpose of ESA fencing and the resources being protected.</p>					
<p><b>BIO-14:</b> Compensatory mitigation for impacts to wetlands and other waters of the U.S. and State shall be accomplished using one of the following methods, or by a combination of these methods:</p> <p>1. Preservation, creation, and/or restoration in accordance with the USACE Mitigation Monitoring Program Guidelines (2015). The Mitigation Monitoring Program shall address, at minimum, the following: a project site impact assessment, compensatory mitigation site selection, compensatory mitigation site design, compensatory mitigation site construction, long-term compensatory mitigation site maintenance and monitoring, and long-term site management.</p>	County	USACE, RWQCB, CDFW	Pre-construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
2. Purchase of credits at an approved mitigation bank. 3. Payment of in-lieu fees pursuant to an approved in-lieu fees program. 4. Appropriate mitigation ratios shall be established in coordination with the USACE during the permitting process to ensure no net loss of acreage or value of waters of the U.S.					
<b>Cultural Resources</b>					
<b>CULT-1:</b> An Archaeological Monitoring Program shall be planned and implemented for this Project. The program shall consist of a qualified archaeologist developing and implementing a Worker's Environmental Awareness Program (WEAP), developing and implementing an archaeological monitoring plan (AMP), and preparing a report of findings at the conclusion of monitoring. The report shall be submitted to the County and the appropriate California Historical Resources Information System Information Center. The WEAP shall be developed to inform the construction crew on the legal requirements, identification, and treatment of cultural resources, as well as procedures to follow in the event that	County/Contractor/Qualified Archaeologist	County/Contractor	During construction		



Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>cultural resources are encountered. A qualified archaeologist shall provide the WEAP training to the construction crew before ground disturbing work commences. A tribal representative from the North Valley Yokuts Tribe shall be invited to present alongside the archaeologist. The WEAP training shall include handouts to be provided to new workers.</p> <p>The AMP shall stipulate the areas to be monitored during construction, the areas to be fenced off for protection, the type of monitoring proposed, points of contact, responsible parties, and thresholds for determining the significance of an unanticipated discovery. A qualified archaeologist shall monitor Project activities in the areas stipulated in the AMP. A monitor from the North Valley Yokuts Tribe shall be invited to monitor alongside the archaeologist. The archaeologist and tribal monitor will (1) identify any archaeological resources that may be present; and (2) ensure that if human remains are identified they are treated in an appropriate and respectful</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>manner and the County is notified in a timely manner.</p> <p>During construction, if any archaeological deposits or cultural materials are encountered, all work within 25 ft of the discovery shall be redirected and a qualified archaeologist contacted (if one is not present) to assess the situation, consult with agencies as appropriate, and make recommendations for the treatment of the discovery. The County with jurisdiction over the location of the find shall also be notified. Project personnel shall not collect or move any archaeological materials.</p> <p>Any adverse impacts to the finds shall be avoided by project activities. If avoidance is not feasible, the archaeological deposits shall be evaluated to determine if they qualify as a historical resource or unique archaeological resource, or as historic property. If the deposits do not qualify, avoidance is not necessary. If the deposits do qualify, adverse impacts on the deposits shall be avoided, or such impacts shall be mitigated. Mitigation may consist of, but is not limited to, recovery and analysis of the archaeological deposit;</p>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
recording the resource; preparing a report of findings; and accessioning recovered archaeological materials at an appropriate curation facility. Educational public outreach may also be appropriate. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations for the treatment of the archaeological deposits discovered. The report shall be submitted to Stanislaus and/or Merced County, as appropriate.					
<b>CULT-2:</b> During construction, in the event that human remains are encountered, work within 50 ft of the discovery shall be redirected and the Stanislaus and/or Merced County Coroner notified immediately. At the same time, a qualified archaeologist shall be contacted to assess the situation and consult with agencies as appropriate. Project personnel shall not collect or move any human remains and associated materials. If the human remains are of Native American origin, the coroner shall notify the NAHC within 24 hours of this identification. The NAHC shall identify a Most Likely Descendant to inspect the	County/Contractor	County/California Historical Resources Information System	During construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion of the assessment, the archaeologist shall prepare a report documenting the methods and results, and provide recommendations of the treatment of the human remains and any associated cultural materials, as appropriate and in coordination with the recommendations of the Most Likely Descendant. The report shall be submitted to the County, in which the remains were found, and the California Historical Resources Information System.					
<b>Geology/Soils</b>					
<b>GEO-1:</b> During construction, if paleontological resources are encountered, all ground-disturbing activities shall be redirected within 50 ft of the find until a qualified paleontologist can be contacted to evaluate the find and make recommendations. If found to be significant and proposed project activities cannot avoid the paleontological resources, a paleontological evaluation and monitoring plan shall be implemented. Adverse impacts to paleontological resources shall be mitigated, which may	County/Contractor	County/Contractor	During construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
include monitoring, data recovery and analysis, a final report, and the accession of all fossil material to a paleontological repository. Upon completion of project ground-disturbing activities, a report documenting methods, findings, and recommendations shall be prepared and submitted to the paleontological repository.					
<b>Hazards &amp; Hazardous Materials</b>					
<b>HAZ-1:</b> The contractor shall prepare a SPCP. The SPCP must be submitted to Stanislaus County for review and approval prior to the commencement of construction activities. The SPCP shall include information on the nature of all hazardous materials that would be used on site. The SPCP shall also include information regarding the proper handling of hazardous materials and cleanup procedures in the event of an accidental release. The phone number of the agency overseeing hazardous materials and toxic cleanup shall be provided in the SPCP.	Contractor	County	Pre-construction		
<b>HAZ-2:</b> The contractor shall prepare and implement a Lead Compliance Plan for removal and disposal of traffic stripes and	Contractor	County	Pre-construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
industrial paint. The Lead Compliance Plan shall require the contractor to use trained personnel and comply with all Cal/OSHA regulations and requirements. Employee training should include guidelines that prevent or minimize worker exposure to lead-based paint and chromium-based paint. The training shall include (but not be limited to) protocols for environmental and personal monitoring, requirements for personal protective equipment, and other health and safety protocols and procedures for the demolition of existing structures.					
<b>Hydrology &amp; Water Quality</b>					
<b>HYD-1:</b> The construction contractor shall implement the following dewatering BMPs to reduce water quality impacts to the San Joaquin River and downstream waters. <ul style="list-style-type: none"> <li>• During high water conditions, a temporary work trestle may be required to support the pile drilling equipment and to service construction of the new bridge.</li> <li>• Visibility permitting, all excavations shall be inspected for sensitive aquatic wildlife prior to dewatering. Wildlife found in excavations shall be allowed to</li> </ul>	Contractor	RWQCB	During construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>leave passively or shall be relocated by a qualified biologist (BIO-8).</p> <ul style="list-style-type: none"> <li>• If dewatering of an excavation is needed, all dewatering pump intakes shall be fitted with filter screening to prevent impacts to aquatic wildlife that may accidentally enter excavations.</li> <li>• Where feasible (e.g., landowner approval is provided, sufficient space with permeable surfaces is available, slopes are gentle enough to allow control of potential sediment transport), all stormwater or groundwater removed from excavations shall be discharged overland into well-vegetated areas to promote the settling of sediment. If overland discharge is not possible, then water removed from excavations shall be collected, treated, and disposed of consistent with requirements of the RWQCB and any other agencies with jurisdiction over the activity.</li> <li>• The contractor shall have on hand, at all times, sufficient pumping equipment, filter sleeves, hoses and machinery in good working condition and shall have available, at all times, competent personnel for the implementation of</li> </ul>					

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>dewatering. Adequate standby equipment and supplies shall be kept available at all times to ensure efficient dewatering and maintenance of dewatering operation during power failure.</p> <ul style="list-style-type: none"> <li>• Dewatering shall commence at an appropriate time prior to commencing excavation (if possible), or immediately upon encountering groundwater, and shall be continuous until the work is completed and backfilled.</li> <li>• The contractor shall comply at all times with the project SWPPP.</li> <li>• The contractor shall be responsible to design and control the dewatering operations such that disposal of water does not cause erosion or other damage and such that water to be disposed of is free from silt and other objectionable materials. Settling basins and/or other means shall be used as necessary. Groundwater shall be disposed of and treated, as necessary, so as not to create environmental nuisance or harm.</li> <li>• Work shall be conducted within areas of the project allowed by the permits and as shown on the plans. Stanislaus</li> </ul>					



Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>County shall ensure that all contractor personnel understand all permit and plan requirements that affect dewatering.</p> <ul style="list-style-type: none"> <li>The termination of dewatering operations shall be performed in such a manner as to maintain the undisturbed state of the natural soils and prevent disturbance of compacted backfill.</li> <li>The contractor shall implement a monitoring plan to ensure that applicable water quality release standards are met. The contractor shall document in a report to be submitted to the permitting agencies that the water quality standards have been met.</li> </ul>					
<p><b>HYD-2:</b> Prior to commencement of construction activities, the proposed project shall obtain coverage under the State Water Resources Control Board's NPDES General Permit for Storm Water Discharges Associated with Construction and Land Disturbance Activities (Construction General Permit) Order No. 2009-0009 DWQ, as amended by 2010-0014-DWG and 2012- 0006-DWQ, NPDES No. CAS000002, or any other subsequent permit. This shall include submission of</p>	County/Contractor	RWQCB	Pre-construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
<p>Permit Registration Documents (PRDs), including a Notice of Intent for coverage under the permit to the State Water Resources Control Board via the Stormwater Multiple Application and Report Tracking System (SMARTS). Construction activities shall not commence until a Waste Discharge Identification Number is obtained from SMARTS. The proposed project shall comply with the Risk Level 2 requirements of the Construction General Permit. A SWPPP shall be prepared and implemented to address all construction-related activities, equipment, and materials that have the potential to impact water quality. The SWPPP shall identify the sources of pollutants that may affect the quality of storm water and include BMPs to ensure that the potential for soil erosion, sedimentation, and spills is minimized and to control the discharge of pollutants in storm water runoff as a result of construction activities. Upon completion of construction, a Notice of Termination shall be submitted via SMARTS.</p>					
<b>HYD-3:</b> Prior to construction, the contractor shall prepare an Erosion	Contractor	County	Pre-construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
Control Plan. The Erosion Control Plan shall be reviewed and approved by Stanislaus County and implemented by its designated contractor in compliance with the provisions of the Stanislaus County Standards and Specifications. The Erosion Control Plan shall indicate the proposed methods for the control of runoff, erosion, and sediment movement during project construction.					
<b>Noise</b>					
<b>NOI-1:</b> The following minimization measures shall be incorporated when construction activities occur within 300 ft of any noise sensitive use: <ul style="list-style-type: none"> <li>The Contractor shall use an alternative warning method instead of a sound signal unless required by safety laws.</li> <li>The Contractor shall equip all internal combustion engines with the manufacturer-recommended muffler and shall not operate any internal combustion engine on the job site without its appropriate muffler.</li> </ul>	Contractor	County	During construction		
<b>Transportation</b>					
<b>TRANS-1:</b> Prior to the start of construction, the construction contractor for the	Contractor	County	Pre-construction		

Mitigation Measures	Mitigation Responsibility	Monitoring/Reporting Agency	Monitoring Schedule	Verification of Compliance	
				Initials	Date
proposed project shall prepare and implement a standard Traffic Management Plan to minimize traffic disruption and ensure adequate access is maintained. Temporary disruptions shall be minimized by coordinating construction activities to provide alternative access points and/or by coordinating construction phasing to reduce disruptions. Notification of any temporary disruptions to roadway access shall be posted along local roadways.					
<b>TRANS-2:</b> Prior to the start of construction, the construction contractor shall coordinate with the Stanislaus County Sheriff's Department, the Merced County Sheriff's Department, and local public and private ambulance and paramedic providers in the area to prepare a Construction Period Emergency Access Plan. The Emergency Access Plan shall identify phases of the proposed project and construction scheduling, as well as appropriate alternative emergency access routes.	Contractor	County	Pre-construction		

Source: LSA (2021).

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## APPENDIX A

### TABLES

**Table 2: Native Seed Mix**

Scientific Name	Common Name	Rate (pounds per acre)	Minimum Percent Germination
<i>Artemisia douglasiana</i>	Mugwort	2.0	50
<i>Bromus carinatus</i>	California brome	5.0	85
<i>Elymus trachycaulus</i>	Slender wheatgrass	2.0	60
<i>Elymus X triticum</i>	Regreen	10.0	80
<i>Eschscholzia californica</i>	California poppy	2.0	70
<i>Hordeum brachyantherum</i>	California barley	2.0	80
<i>Lupinus bicolor</i>	Bicolored lupine	4.0	80

**Table 3: VELB Compensation**

Number of Shrubs to be Removed	Compensation Ratio	Total Credit Purchase <sup>1</sup>	Acres of Credits
4	2:1	8	0.328 ac

<sup>1</sup> One credit (unit) = 1,800 sq. ft. or 0.041 acre