Administrative Draft

CEQA Findings of Fact and Statement of Overriding Considerations for the Broadway Bridge Project

Federal Project No.: TGR2DGL 5447(043)
State Clearinghouse Number 2017072019

May 18, 2022

CEQA Findings of Fact and Statement of Overriding Considerations for the Broadway Bridge Project

Introduction

The City of West Sacramento, in cooperation with the City of Sacramento and the California Department of Transportation (Caltrans), proposes to construct a new bridge over the Sacramento River south of the Pioneer Bridge (US 50). The Broadway Bridge (proposed project) would provide local interconnectivity across the river and between neighborhoods. The new connection would serve multiple modes of transportation and comply with current American Association of State Highway and Transportation Officials (AASHTO), California Department of Transportation (Caltrans), and local agency design standards. Caltrans is the lead agency under the National Environmental Policy Act (NEPA). Under CEQA, the City of West Sacramento is the lead agency, and the City of Sacramento is a responsible agency.

Description of the Project

The City of West Sacramento was awarded a grant from FHWA under provisions of the Consolidated Appropriations Act, 2014, regarding National Infrastructure Investments. The grant program is referred to as "Fiscal Year 2014 TIGER VI Discretionary Grant." The grant provides funding to the City of West Sacramento to help support the project and is therefore subject to state and federal environmental review requirements resulting from the use of federal grant funds from the Federal Highway Administration (FHWA). The project is included in the Sacramento Area Council of Governments (SACOG) 2016 Metropolitan Transportation Plan/Sustainable Communities Strategy (MTP/SCS).

Project Location

The proposed bridge project is in both Yolo and Sacramento Counties in California and would cross over the Sacramento River between the cities of West Sacramento and Sacramento. The bridge would be located approximately 1,000 feet south of the Pioneer Bridge (Bus80/US 50). The total length of the project (including road improvements on existing facilities) is approximately 1.0 mile from Jefferson Boulevard in West Sacramento to the 5th Street and Broadway intersection in Sacramento. In general, the project limits start in West Sacramento, along 15th Street at Jefferson Boulevard, continuing east and over the Sacramento River into the City of Sacramento along Broadway to the 5th Street intersection. The project limits also extend along Jefferson Boulevard approximately 1,300 feet south of the 15th Street intersection to Alameda Boulevard, along South River Road approximately 1,300 feet south and 650 feet north of 15th Street, along Marina View Drive approximately 400 feet south of Broadway, along Front Street approximately 350 feet north and south of Broadway, along 3rd Street approximately 350 feet north of Broadway to X Street, and along 5th Street approximately 200 feet north and

south of Broadway. The project limits include proposed improvements to the northbound Interstate 5 off-ramp to Broadway.

A fiber optic cable is proposed to interconnect operational communications of the proposed project, the Tower Bridge, and the I Street Replacement bridge. The fiber optic line would be placed in West Sacramento under Riverfront Street north to Tower Bridge Gateway and 3rd Street, ending at the intersection of 3rd Street and C Street. Staging areas that would be accessed via South River Road in West Sacramento and Front Street in Sacramento also are proposed and included in the project limits. Termini for the Project were developed through an iterative process involving engineering design and traffic operations analysis. Preliminary design concepts were tested with the traffic operations analysis model to evaluate how lane configurations and approaches influenced peak-hour conditions. The new bridge would connect 15th Street and South River Road in West Sacramento with the Broadway corridor in Sacramento.

Purpose and Need

The primary purpose of the project is to increase the number of river crossings over the Sacramento River between West Sacramento and Sacramento.

Purpose

The purpose and objectives of the project are listed below.

- Increase the number of river crossings that meet current design standards and encourage travel by walking, bicycling, low-energy vehicles, and public transit.
- Increase the number of persons that can safely, efficiently, and reliably cross the river.
- Increase options for emergency response teams to cross the river.
- Increase options for evacuations in the event of a natural disaster or other emergency.
- Improve the connectivity to, and accessibility of, business, recreational areas, and new or redevelopment opportunity sites located in the urban core of Sacramento and West Sacramento without affecting the use of Miller Regional Park or the Sacramento Marina and without precluding, or negatively restricting, redevelopment options in the Pioneer Bluff or West Broadway areas of the cities.
- Reduce trip length distances across the river between major origins and destinations.
- Reduce the growth in transportation-related energy use, air pollution emissions, and greenhouse gas
- emissions.
- Reduce the growth in vehicle traffic on local neighborhood streets, especially cut-through traffic.
- Alleviate the growth of local trips on the State Highway System.
- Provide a project design that does not preclude the future addition of light-rail, streetcar, or other mass transit mode, as a separate stand-alone project.

- Provide a new public crossing that meets the requirements of Sacramento's Neighborhood Friendly Bridge policy that the Sacramento City Council adopted by resolution on October 18, 2011.

Need

The project is needed for the following reasons:

- Limited connectivity across the river creates longer trip lengths, which discourage walking and bicycling.
- Longer trip lengths create dependence on automobile use that generates negative public health effects and adverse environmental effects such as emissions of air pollutants and greenhouse gases.
- Limited connectivity across the river creates concentrated vehicle traffic flows on existing bridges and their connecting approach roadways, resulting in undesirable travel delays for vehicular traffic, including public bus transit during weekday peak periods and special events.
- Limited connectivity across the river reduces options for emergency response teams, thereby increasing response times and limiting alternatives for evacuations.
- Limited connectivity across the river is a barrier to economic activity, social exchanges, and recreational opportunities and limits access to jobs within the urban core of Sacramento and West Sacramento.
- Limited connectivity to the riverfront reduces the potential to achieve planned urban development and redevelopment of opportunity sites identified in the adopted plans of Sacramento and West
- Sacramento.
- Limited connectivity reduces opportunities to use the riverfront for enjoyment and recreation.
- Peak AM/PM congestion is caused by local intercity commuters using the State Highway System as a result of having few local river crossing options.

Construction of the proposed project has independent utility because it would provide a local roadway connection between West Sacramento and Sacramento and their existing roadway networks that does not rely on construction of other facilities to operate. The project would meet the purpose and need without being dependent on construction of other projects or improvements.

Project Description

As identified in the Broadway Bridge Project Final Environmental Impact Report/Environmental Assessment (EIR/EA), the project limits include the combined area of each of the proposed project alternatives. The build alternatives considered are two alignments for the new bridge and approach roadways. A No Build (No-Project) Alternative also was considered.

- Alternative B would realign 15th Street to connect to Jefferson Boulevard in West Sacramento and connect to Broadway at 5th Street in Sacramento. This alignment would require modification to the planned mobility network for

South River Road and 15th Street in Pioneer Bluff.

- Alternative C (a modified Alignment C from the *Broadway Bridge Feasibility Study*) would connect as a "T" intersection to South River Road in West Sacramento and connect to Broadway at 5th Street in Sacramento. This alignment would require modification to the planned mobility network for South River Road in Pioneer Bluff.
- The No Build (No-Project) Alternative would not build a bridge across the Sacramento River from the Pioneer Bluff area of West Sacramento to Broadway in Sacramento. The future no project conditions planned by both cities would be developed as proposed.

The Cities of West Sacramento and Sacramento have identified Alternative B as the preferred alternative. Alternative B satisfies the purpose and objectives of the project better than Alternative C because it would require fewer changes to the approved mobility network in West Sacramento, would result in greater congestion relief, and would cause a lesser amount of permanent and temporary impacts on sensitive terrestrial and aquatic habitats.

This Finding of Fact and Statement of Overriding Considerations identifies the potential impacts associated with the preferred alignment (Alternative B) and mitigation measures adopted to address significant impacts and reduce it below the level of significance.

Under the provisions of the General Bridge Act of 1946, the proposed location and plans for bridges over navigable waters of the United States (including this segment of the Sacramento River) must be approved by the United States Coast Guard (USCG). Hence, the physical parameters for the new bridge were set by the USCG. The proposed structure would be a movable bridge that satisfies the vertical clearance and river navigation requirements of the U.S. Coast Guard.

Broadway Bridge is intended to improve the connectivity to, and accessibility of, businesses, recreational opportunities, and new/redevelopment infill opportunity sites located in the urban core of Sacramento and West Sacramento consistent with SACOG blueprint objectives, including the West Broadway Specific Plan area in Sacramento and the Pioneer Bluff and Bridge District infill development sites in West Sacramento. The Project will include pedestrian pathways compliant with Americans with Disabilities Act (ADA) standards and enhanced bicycle facilities designed to improve user safety, connectivity, and mobility. Bridge engineering and structural design will facilitate improved vehicular travel and allow transit vehicles, including bus and light rail transit systems to use the bridge in the future. The Project will also facilitate trail connections between the Sacramento River Parkway and future extension of Riverwalk Park in West Sacramento.

New Bridge Construction and Roadway Modifications

Bridge Construction

Broadway Bridge would extend approximately 850-feet over the Sacramento River

with two fixed-span approach structures that tie into the Sacramento and West Sacramento banks of the river, respectively. The movable span of the bridge would be an approximately 170 feet or roughly half of the length of the movable span required for the proposed C Street/Railyards bridge. The approximately 83-foot cross-section consists of two 12-foot vehicle/transit lanes, one 12-foot center turn lane/median, two on-street Class II 8-foot buffered bike lanes, and 12-foot multi-use sidewalks along both sides of the bridge outside the truss structure. This design was conceptualized to meet the multimodal and future local and regional transit service objectives of the two cities. The bridge section was developed in concert with, and agreed to, by both cities, Caltrans and FHWA as the most appropriate design for delivering long-term functionality and infrastructure resiliency.

The required length of the movable span portion of the bridge was determined through coordination with the USCG. The movable span would provide a 170- to 230-foot clear channel opening (depending on the alignment alternative) that would line up with the western pier of the existing Pioneer Bridge (US 50 bridge) located upstream. The new bridge would have the same minimum vertical clearance of 59 feet above the maximum river elevation of 31 feet in the open position that the existing Pioneer Bridge provides (measured to the 29 National Geodetic Vertical Datum).

Two different roadway profiles were considered for the river crossing. The first consists of a lower profile where the top of the roadway is 9’-9” above the 200-year water surface elevation. This provides for a 6’-9” clearance between the profile grade and the low steel and 3’-0” clearance between low steel and design high water. The second profile is higher, where the top of the roadway is 17’-0” above the 200-year water surface elevation, which provides a 14’-0” clearance between the profile grade and the low steel and 3’-0” clearance. Both profiles provide for a similar overall structure length.

The difference in the profile grade elevations at the movable span are achieved by changing the roadway grades for the approach spans. The higher profile allows for the consideration of deck type superstructure movable spans, but also have the advantage of using through type superstructure movable spans that provide a higher vertical clearance above water elevations. The higher clearance in the closed position has the advantage of possibly reducing the number of bridge openings which would help reduce the maintenance costs of the movable spans and inconvenience to traffic. The lower profile would allow for only the use of through type superstructure movable spans.

The bridge would include two fixed-span approach structures that tie into the banks of the river; the structures would vary from approximately 200 to 300 feet in length on the West Sacramento bank and from 450 to 600 feet in length on the Sacramento bank. The two fixed-span approach structures would have a superstructure depth (or total bridge thickness) of approximately 4 to 10 feet depending on the selected alternative. Each approach structure would be a one- to six-span bridge.

Rock slope protection would be installed on the river side of the bridge abutments

both above and below the ordinary high-water mark to stabilize approximately 400 linear feet of shoreline on each side of the river.

Broadway Bridge will be designed with the capability to carry potential future light rail vehicles between Sacramento and West Sacramento. Light rail infrastructure may not be included when the bridge is initially constructed, therefore allowance will be included to add rail infrastructure to the bridge structure sometime in the future. An assumption of the additional dead load required for the future light rail modifications was accounted for in the conceptual design of the movable bridge alternatives. Since the cross section of the new bridge does not allow sufficient width for light rail vehicles to occupy lanes separate from vehicular traffic, an embedded track would need to be implemented. Embedded track is a commonly used system for light rail transit in urban areas where the rail is encased, except for the top of the rail, within pavement.

Bridge Deck Types

Five deck types were evaluated to determine the relative cost and weight of different floor system alternatives. These five types were selected to fulfill the need to minimize the weight of the movable span. The deck types evaluated were as follows:

- Reinforced Lightweight Concrete deck supported by stringers and floor beams
- Half Filled Grid deck supported by stringers and floor beams
- Exodermic deck supported by stringers and floor beams
- Orthotropic deck
- Open Grid deck

The reinforced lightweight concrete and Exodermic deck alternatives were investigated in greater detail in order to determine the most viable option. Due to the cross-sectional configuration of the movable span, different deck types could be utilized for the roadway and pedestrian walkway floor systems. Therefore, the roadway and pedestrian decks were evaluated separately to allow for different combinations of deck types. In addition, rolled and built-up stringer sections were investigated for the pedestrian walkway floor system, in order to compare the weight savings associated with built-up stringers. The possibility of future light rail vehicles carried by the bridge was also considered in the comparison of the concrete and Exodermic deck types.

Evaluation of the various combinations of roadway and pedestrian walkway deck types from Table 2 shows that a floor system comprised entirely of an Exodermic deck results in the lightest floor system alternative. A floor system comprised entirely of an Exodermic deck results in a small increase in cost in comparison to a lightweight concrete deck floor system. A floor system comprised entirely of a lightweight concrete deck would result in the lowest cost but the highest weight. The weight savings associated with the Exodermic deck would also reduce the weight of the counterweight and mechanical systems, which would ultimately reduce the overall cost.

The recommended deck type for the Broadway Bridge is an Exodermic deck system. This deck type provides a preferred ratio of weight to initial construction cost of the deck types considered. The Exodermic deck system is the lowest weight deck type aside from the orthotropic deck and has a more reasonable initial construction cost associated with it. The cost of an Exodermic deck system is slightly higher than that of a lightweight reinforced concrete deck system (5%). However, using an Exodermic lower weight floor system will allow for reductions in the supporting steel, counterweight, and mechanical components, which will ultimately lower the overall project cost. In addition, the Exodermic deck can accommodate the implementation of light rail transit system infrastructure with limited construction requirements and user delays.

Movable Bridge Type Alternatives

After an alignment alternative is selected and the project is approved, final aesthetic design criteria would be developed in cooperation with the selected bridge architect in the next phase of project development for Broadway Bridge. Some of the guiding principles of the bridge aesthetics will be how the bridge fits within the surrounding setting and within the overall Sacramento region history, values, and vision. Selection of the type of movable span would be part of the aesthetic design of the bridge.

Regardless of the bridge type that is constructed over the Sacramento River as part of the proposed project, a bridge fender system would be installed around the movable span piers to protect the piers from errant watercrafts that are navigating along the river. The scope for the study of movable bridge types was to identify and comparatively analyze differing bridge solutions that may be possible for the new Broadway Bridge project. Three different movable bridge types were considered in the Broadway Bridge Project Movable Span Type Selection Report (March 9, 2019) and included:

- Bascule Span
- Vertical Lift Span
- Swing Span

Vertical lift span bridges have a movable span that is lifted vertically to permit passage of boats beneath it. The Tower Bridge over the Sacramento River upstream of the proposed Broadway Bridge is an example of a vertical lift span bridge.

Swing span bridges rotate the movable span on a center pivot pier, allowing navigational traffic to pass the bridge on either side of the center pier. Because of the span lengths required by the USCG for the proposed project and the requirement of creating a neighborhood-friendly river crossing with low vertical grades, the superstructure of a swing span would most likely be a through-truss design (the truss would be cross-braced above and below vehicular traffic). The existing historic I Street Bridge is an example of a swing span bridge.

Bascule span bridges operate by raising into the air one side of a counterweighted movable span while the other side rotates on a horizontal axis. The rotating axis could be fixed (like a hinge) or rolling (like a rocking chair). A bascule bridge can be designed with a single movable span or two movable spans (double bascule bridge). The Freeport Bridge over the Sacramento River in the town of Freeport is a double bascule span bridge.

To address the possible impacts of the bridge type that ultimately is built, the largest in- and over-water footprint and the greatest number of construction-related impacts of the three types were assumed for the analysis. Within each movable bridge type, several alternatives were selected for comparison. Each alternative, including a summary of advantages and disadvantages of each alternative structure type, is described in more detail in the report. The bridge alternatives were assessed both qualitatively and quantitatively using three primary evaluation categories:

- Performance
- Construction Cost
- Life Cycle Costs

Of the three main movable bridge span types making up eleven viable alternatives that were considered in the Alternatives Evaluation Matrix of the report, the vertical lift girder spans and the two leaf partially counterweighted bascule spans received the highest rankings. The fully counterweighted bascule spans, the truss vertical lift spans, and the swing spans scored lower in comparison and will therefore no longer be considered for further study.

The Broadway Bridge Project Movable Span Type Selection Report recommended that the partially counterweighted two leaf rolling bascule and the vertical lift girder bridge with either steel or concrete towers continue to be advanced for further study in the final design phase of the project. Each alternative will require additional approach structures on either side of the main, movable span. Since this study focused on the comparison of movable span options, the details of these approach structures will be studied in the next phase of project development for the Broadway Bridge project. Continuing developments and additional deciding factors for the Broadway Bridge Project may influence the decision on the preferred bridge type.

Over-Water Construction-Site Access

Temporary trestles and barges would be used to provide the contractor with access to the river portion of the project area. Together, the trestles and barges would be used to stage construction materials, to provide a working platform for cranes, and for general construction support. The temporary trestles would consist of steel piles that would be driven into place with an impact hammer. Although the temporary work platforms would be removed at the end of the first construction season before the onset of winter, the temporary trestle piles could remain in place for the duration of construction. The barges would be anchored to the river bottom with piles that would be driven into place with an impact hammer. Up to two barges would be

anchored in the river at one time. The barges would be repositioned in the channel throughout construction only as needed to complete the work. The barges and temporary piles would be removed after bridge construction is completed.

In-Water Construction Activities

In-water construction activities consist of those that would occur below the OHWM. The activities would be limited to the period of May 1 to November 30 during the two construction seasons. The in-water construction window allows sufficient time for most in-water work to be completed within the first "in-water work season," thus limiting potential impacts on fish and other species from the activities to primarily one construction season. The in-water work window was selected after consideration of agency in-water work restrictions, timing of the presence of multiple special-status fish species, timing of breeding seasons for other special-status species in the project area, and other constraints. Other construction activities occurring above the OHWM (e.g., work on the abutments and approach superstructure) would not be limited to the in-water window of May 1 to November 30.

Temporary falsework platforms would be required to construct the proposed bridge foundations and approach structures. The platforms would be constructed using temporary piles within the river. In addition, temporary cofferdams would be required to construct the bridge piers within the water. The cofferdams would consist of temporary sheet piles installed around the individual piers. Dewatering inside the cofferdams would be required. In-water construction activities would include the following:

- Installation and removal of steel piles with a vibratory hammer and an impact hammer for the temporary falsework platforms (trestles).
- Installation and removal of steel piles with an impact hammer for anchoring barges.
- Installation of steel sheet piles with a vibratory driver for temporary cofferdams.
- Installation of steel piles for the piers with an impact hammer for the new bridge (although work would occur within dewatered cofferdams, underwater sound would propagate beyond the dewatered cofferdams).
- Installation of steel casings for the piers with a vibratory hammer or hydraulic oscillator/rotator system for the new bridge.
- Installation of concrete piles with an impact hammer for the new bridge fender system.

Above-Water Construction Activities

After the temporary cofferdams are installed around the piers, forms would be constructed, and concrete poured in the dewatered cofferdams to construct the pile caps. Work then would focus on the pier column construction. After the casings are installed, a rebar cage would be placed into the pile, and concrete would be poured into the steel shell. A cast-in-place concrete pier cap would be placed atop

the columns to serve as the substructure. Work then would focus on constructing the approach superstructure. The movable span superstructure likely would be constructed offsite, floated in, and erected when construction of the foundations is completed.

Roadway Modifications

The project may be constructed in two phases or in a single phase. The decision to construct in one or two phases will be driven by the extent of redevelopment and implementation of the approved mobility network in the Pioneer Bluff area of West Sacramento at the time project construction starts.

If constructed in two phases, an interim (opening year 2030) design phase for the proposed project would include constructing the new bridge and approach roadways with temporary pavement transitions along the existing alignment of South River Road to open the bridge to traffic operations; allowing for motor vehicle, bicyclists and pedestrians access to the bridge. Construction of this first phase is expected to take approximately 36 months, with two seasons of in-water work.

By the design year, the remaining improvements and roadway connections proposed as part of the project would be constructed to allow the full, final design of the proposed project to be operational. See *Existing Conditions* for interim and design year condition assumptions without the project in the Broadway Bridge EIR/EA.

If the project is constructed in a single phase, the efforts needed to construct the new bridge and the ultimate (design year) roadway alignment configuration would be completed at the same time. The following description includes construction components identified for both the interim (opening year 2030) and ultimate design year improvements for the preferred alternative (Alignment B).

City of West Sacramento

Between the bridge touchdown location along South River Road in West Sacramento and the Jefferson Boulevard/15th Street intersection, the roadway would consist of two westbound travel lanes, two eastbound travel lanes (the two eastbound travel lanes would taper down to one eastbound lane east of the South River Road intersection), a center left-turn lane, on-street Class II bike lanes, and sidewalks along both sides of the roadway. The existing 15th Street right of way would be skewed south from the existing Jefferson Blvd./15th Street intersection to the touchdown at South River Road, and a dual left turn pocket would be introduced at the intersection.

The roadway alignment is consistent with planned road network within the Pioneer Bluff and Stone Lock planning area that was planned to accommodate a future Broadway Bridge alignment. Modifications to the

planned street network include additional eastbound turn pockets to accommodate peak hour motor vehicle travel on southbound Jefferson Boulevard, eastbound and westbound turn pockets on the future realigned South River Road, and northbound and southbound turn pockets on the future extension of Alameda Boulevard at the future Rail Street in Pioneer Bluff. These modifications assume that the Pioneer Bluff roadway network will be constructed before Broadway Bridge. However, it is likely that these operational changes to the streets will be constructed in anticipation of Broadway Bridge moving forward.

At Broadway Bridge, a planned grade separation will provide the means for safe bicycle and pedestrian travel under Broadway Bridge along a future Class I Riverwalk Trail extension within the levee setback, planned from Mill Street south to the Deep-Water Ship Channel. Cyclists and pedestrians approaching Broadway Bridge in either direction from the trail would have the option to continue along the trail under the new structure, avoiding the need to cross the roadway, or to connect to the structure and cross the river into Sacramento or travel westward in West Sacramento.

Interim Year Features (West Sacramento)

Project features that would be constructed and in operation by 2030 include the following:

New bridge and roadway modifications, including a redesigned intersection connection for the bridge at 15th Street and new turn pockets on South River Road to facilitate traffic turning movements at the bridge connection in West Sacramento.
Stormwater drainage management features.

- Utility relocations.
- Fiber optic cable installation for operational communications.

  In West Sacramento, modifications to the approved mobility network would be necessary for construction of Alternative B. These modifications include the following:

- Constructing a northbound right-turn pocket on South River Road at 15th Street.
- Constructing a southbound right-turn pocket on South River Road at 15th Street.

Design Year Features (West Sacramento)

Project features that would be constructed by 2040 include the following:
Roadway alignment modifications in West Sacramento necessary to shift the alignment of South River Road and connection of the new bridge to the east to conform with the approved mobility network alignment of South River

Road. Roadway striping and turn pocket additions on Jefferson Boulevard, South River Road, and Alameda Boulevard.

Construction of the design year features of Alternative B would not increase impervious surface area from that created during the interim year phase.

In both West Sacramento and Sacramento, no additional modifications to the assumed design year conditions without the project would be needed.

A fiber optic cable is proposed to interconnect operational communications of the proposed project (the new Broadway Bridge), the Tower Bridge, and the I Street Replacement bridge. The fiber optic line would be placed in West Sacramento under Riverfront Street. From the proposed project, the fiber optic line would run north until Riverfront Street turns into 3rd Street and would end at the intersection of 3rd Street and C Street. The fiber optic line would be installed within an existing City of West Sacramento-owned conduit along Riverfront Street to Tower Bridge Gateway. North of Tower Bridge Gateway, a new conduit would be placed within the 3rd Street right-of-way north to the intersection of 3rd Street and C Street. To minimize ground disturbance, the construction method for the new fiber optic line would be jack and bore.

City of Sacramento

In Sacramento, the Broadway corridor would be redesigned from the Sacramento River to include one eastbound travel lane, one westbound travel lane and a center turn median. Class II 6-foot bicycle lanes with 3-foot bicycle buffer zones would connect from Broadway Bridge to Front Street, reduced to 2-foot bicycle buffer zones from Front Street to 3rd Street, connecting with existing Class II bicycle facilities east of 3rd Street. Sidewalks are not present on Broadway from Front Street west to the Sacramento River. The Broadway Bridge project will construct 6-foot sidewalks north and south of the Broadway corridor.

Eastbound Broadway will be widened from the Interstate 5 (I-5) northbound off ramp to approximately 200 feet west of Front Street to accommodate motor vehicle traffic exiting I-5 and heading west. In addition, a second right-turn pocket will be constructed on the northbound offramp to manage congestion during peak hours. East of I-5, The current striped turn median east and west of 3rd Street will be modified to include a dedicated turn pocket in each direction, and 5th Street will be modified (northbound and southbound) to include left turn lanes at the signalized intersection.

Northbound and southbound Front Street is currently one-lane in each direction with Class II bicycle lanes. The Broadway Bridge project will construct new westbound and eastbound left turn pockets at these locations to improve traffic operations and will construct a new signal at the intersection. Access into Miller Park from Broadway will also be improved to

include southbound left turn pocket from Broadway into Marina View Drive, as well as a westbound left turn pocket from Marina View Drive to Broadway Bridge. Marina View Drive will also be elevated to match the proposed elevation of Broadway Bridge. The proposed roadway profile elevation would be approximately 6 feet higher than the existing ground elevation at the Broadway/Marina View Drive intersection. The profile adjustment is needed to satisfy Central Valley Flood Protection Board (CVFPB) requirements to provide 3 feet of clearance between the 200-year-flood water surface elevation and the bridge soffit (low chord of the bridge).

At Broadway Bridge, a grade separation and minor modification in the location of the Sacramento River Bike Trail to pass under and connect to the new bridge will be constructed to preserve and enhance access to Miller Park. The existing Class I Sacramento River Bike Trail would be reconstructed approximately 1,000 feet north and 300 feet south of Broadway as part of the proposed project. In order to reconstruct the trail, permanent right-of-way acquisition from four adjacent private parcels would be necessary. The trail would be grade-separated under the proposed bridge structure. Cyclists and pedestrian approaching Broadway in either direction would have the option to continue along the trail under the new structure, avoiding the need to cross the roadway, or to connect to the structure and cross the river into West Sacramento or travel eastward on Broadway into Sacramento.

A change of grade along Broadway introducing a gradual elevation increase from Front Street west to Broadway Bridge will require access improvements to private property along that stretch of Broadway. This elevated roadway profile will meet at the existing railroad crossing creating a safer, enhanced ADA compliant crossing over the railroad tracks.

Interim and Design Year Features (Sacramento)

In Sacramento, Alternative B requires the following modifications to the existing (or planned opening year) conditions.

- Reconstructing 350 feet of Marina View Drive to provide for a new connection to Broadway.
- Modifying property access along Broadway west of I-5.

The existing at-grade State Parks railroad crossing at Broadway would remain in the same location. Construction of the interim year design of Alternative B would create 2.0 acres of new impervious surface.

Traffic Management and Detours during Construction

While most of the project would be constructed outside of existing roadways, some project construction areas would require temporary detours or staged construction.

In West Sacramento, in order to construct the proposed project—including the new intersection at South River Road, a portion of South River Road would be closed to traffic. Closure of 15th Street also may be necessary. Travelers on South River Road to the south of the project area needing to get to South River Road north of the project area would be detoured around the project to the south and directed to travel over the Mike McGowan Bridge, turn right onto Locks Drive, right onto Jefferson Boulevard, right onto Tower Bridge Gateway, and then right onto 5th Street that becomes South River Road. The detour would be repeated in reverse for travelers on South River Road north of the project area with the desire to travel south on South River Road.

In Sacramento, construction of street widening and sidewalk improvements under the I-5 viaduct structures would be phased to allow traffic access to Front Street for the duration of construction. Miller Park and Sacramento Marina traffic would travel on westbound Broadway, turn left onto southbound Front Street, right onto Miller Park Circle, and then left onto Marina View Drive. About 3,400 feet of the Sacramento River Bike Trail would be closed north and south of Broadway and detoured to the bike lane on Front Street between the Sacramento Marina and where the Sacramento River Bike Trail meets the R Street bicycle/pedestrian bridge.

Storm Water Drainage Management

Stormwater and road runoff drainage for the proposed roadway would be conveyed in a new storm drain system installed approximately 5 feet below the finished road grade of South River Road, 15th Street, and Circle Street in West Sacramento and of Broadway in Sacramento. New storm drain outfalls into the Sacramento River would be constructed near each of the bridge abutments in West Sacramento and Sacramento.

Staging, Storage, and Proposed Access during Construction

Staging areas would be used to store materials and equipment during construction, such as pipe materials, precast manholes and drop inlets, steel girders, piles, and rebar, along with construction equipment when not in use. In West Sacramento, staging area options are the West Sacramento Corporation Yard (1951 South River Road, Assessor's Parcel Number [APN] 058-260-017-000), or the Shell property recently purchased by the Port of West Sacramento (1509 South River Road, APN 058-280-005-000). Both staging areas in West Sacramento would be accessed via South River Road and are options on the condition that they are still available (have not been redeveloped) at the time the proposed project is constructed.

In Sacramento, one option for a staging area would be closing Broadway to traffic west of Front Street and using the road as a staging area with access via Broadway to the east. This option would require a traffic detour for continued access to Marina View Drive using Front Street and Miller Park Circle. Another staging area option

in Sacramento is use of vacant lots (2000 Front Street, APN 009- 0012-003-0000 and 2100 Front Street, APN 009-0012-075-0000) north of the California Automobile Museum with access via Front Street.

Staging areas would be in use throughout the construction duration; the areas would be returned to their pre-project conditions at completion of the project.

Utility Relocations

Public and private utilities would need to be relocated or adjusted to the new ground elevation as part of the project, including existing water, sewer, gas, overhead and underground electric, and communication facilities within Broadway, South River Road, 15th Street, and Jefferson Boulevard.

Two existing gas transmission lines, Kinder Morgan and Pacific Gas and Electric (PG&E), and a communication line run under the Sacramento River. The alternatives could conflict with the location of the utility lines and require the utilities to be relocated. Utility relocations and adjustments would be conducted prior to or during construction. As part of the final project design process, prior rights would be used to determine who is responsible for the utility relocations.

Project Construction Sequence

The project may be constructed in two phases or in a single phase. The decision to construct in one or two phases will be driven by the extent of redevelopment and implementation of the approved mobility network in the Pioneer Bluff area of West Sacramento at the time project construction starts. If constructed in two phases, an interim (opening year 2030) design phase for the proposed project would include constructing the new bridge and approach roadways with temporary pavement transitions along the existing alignment of South River Road. Construction of this first phase is expected to take approximately 36 months, with two seasons of in-water work.

A subsequent phase, the design year phase (complete by 2040), would take approximately 6 months and would complete the remaining project roadway construction consistent with full buildout of the approved mobility network. The roadway connection to the bridge and all other project improvements in Sacramento would be constructed during the first phase. If the project is built in a single phase, construction is expected to take 36 months.

In Sacramento, Alternative B requires the following modifications to the existing (or planned opening year) conditions.

- Reconstructing 350 feet of Marina View Drive to provide for a new connection to Broadway.
- Modifying property access along Broadway west of I-5.

The existing at-grade State Parks railroad crossing at Broadway would remain in

the same location. Construction of the interim year design of Alternative B would create 2.0 acres of new impervious surface.

Property Acquisitions

Permanent property acquisitions or permanent easements would be necessary to construct preferred Alternative B. Temporary construction easements (TCEs) also would be needed. The acquisitions described below assume that the project is constructed in two phases. The acquisitions that would be needed for the interim and ultimate design years are identified in Table 1.

Table 1. Property Acquisitions Needed for Alternative B

Assessor's Parcel Number	Total Parcel Size (acres)	Interim Year Permanent Acquisition (acres)	Design Year Permanent Acquisition (acres)	Interim Year TCE (acres)	Design Year TCE (acres)	Business Relocation Necessary? (Yes, No)
West Sacramento						
058-270-006-000	2.579		0.023		0.013	No
058-270-014-000	7.568	0.120		0.015		No
058-280-003-000	3.530	1.005	0.056	0.089	0.012	No
058-280-005-000	6.010	2.920	0.200	0.325	0.065	No
058-280-006-000	0.473	0.056		0.055		Yes
058-280-007-000	0.911	0.177		0.027		Yes
843-57-5-7	6.477	0.064		0.019		No
Sacramento						
009-0012-008-0000	1.598	0.220		0.074		Yes*
009-0012-038-0000	0.033	0.033				No
009-0012-064-0000	2.673	2.673				No
009-0012-065-0000	0.793	0.793				No
009-0012-071-0000	2.494	0.378		0.159		Yes*
009-0012-072-0000	6.903	0.049		0.068		Yes*
009-0020-001-0000	1.525	0.605		0.083		No
009-0030-054-0000	5.616	0.657		0.274		Yes*

TCE = temporary construction easement.

*Assumes fill slopes along realigned Broadway. No business relocation would be necessary if retaining walls are constructed instead of fill slopes to support the increase in elevation and widening of Broadway between the bridge and Front Street.

Findings Required Under CEQA

Procedural Findings

The City Council of the City of West Sacramento finds as follows:

The Draft EIR for the Broadway Bridge project (SCH # 2017072019) was prepared, noticed, published, circulated, reviewed, and completed in compliance with the California Environmental Quality Act (Public Resources Code Section 21000 et seq. ("CEQA"), the CEQA Guidelines (14 California Code of Regulations Section 15000 et seq.), and the City of Sacramento environmental guidelines, as follows:

- A Notice of Preparation of the Draft EIR was filed with the Governor's Office of Planning and Research (OPR) and each responsible and trustee agency circulated for public comments from July 12, 2017 through August 10, 2017.

- A public scoping meeting was held on July 12, 2017, at the Arthur A. Benjamin Health Professions High School, 451 McClatchy Way, Sacramento, California, 95818, to request the public's input on the scope and content of the environmental information that should be addressed in the Draft EIR.

- A Notice of Completion (NOC) and copies of the Draft EIR were distributed to the OPR on April 27, 2022, and to those public agencies that have jurisdiction by law with respect to the project, or which exercise authority over resources that may be affected by the project, and to other interested parties and agencies as required by law. The comments of such persons and agencies were sought.

- An official 45-day public review and comment period for the Draft EIR was established by the OPR. The official OPR public comment period began on July 7, 2021 ended on August 23, 2021; and.

- A Notice of Availability (NOA) of the Draft EIR was posted on July 7, 2021 and sent to all interested groups, organizations, and individuals who had previously requested notice in writing. The NOA stated that the City of West Sacramento as CEQA Lead Agency and Caltrans as NEPA Lead Agency as assigned by the Federal Highway Administration had completed the Draft EIR/EA and that copies were available at the City of West Sacramento at 1110 West Capitol Avenue, West Sacramento, CA 95691. The document was also available for review online at both the City of Sacramento and City of West Sacramento's publicly accessible webpages. The letter also indicated that the official 45-day public review period for the Draft EIR would end at 4:00pm on August 23, 2021 and issued notice of a virtual public meeting on the Broadway Bridge Draft EIR/EA on Wednesday, July 28, 2021, at 5:00pm to 6:30pm.

- A public notice was issued by the City of Sacramento on July 23, 2021, which

stated that the Draft EIR was available for public review and comment, and issued notice of a virtual public meeting on the Broadway Bridge Draft EIR/EA on Wednesday, July 28th from 5:00pm to 6:30pm.

- The NOA and Draft EIR were published on the City of Sacramento's website linking to West Sacramento's website and the Draft EIR/EA at: https://www.cityofwestsacramento.org/government/departments/capital-projects-and-transportation/projects/broadway-bridge-projects.

- An informational open house was held on Wednesday, July 28, 2021, at 5:00pm to 6:30pm. The meeting was held virtually through an online platform due to the COVID-19 pandemic and state restrictions on in-person gathering. The meeting was held to inform the public of key analyses and conclusions reached in the Draft EIR.

- Following closure of the public comment period, all comments received on the Draft EIR during the comment period, the City of West Sacramento and Sacramento's written responses to the significant environmental points raised in those comments, and additional information were included in the Draft EIR to produce the Final EIR.

- The Final EIR was made available for public review and published on the City of West Sacramento's Broadway Bridge project website at: https://www.cityofwestsacramento.org/government/departments/capital-projects-and-transportation/projects/broadway-bridge-projects

- Notices were mailed to all federal and State agencies that provided comments on the Draft EIR. The notice sent to each agency included that agency's comment letter and proposed response to the comment letter.

- The West Sacramento City Council finds that the Final EIR does not add substantial new information to the Draft EIR that would require recirculation of the EIR under CEQA because the Final EIR contains no information identifying:

    - any new significant environmental impact that would result from the proposed project or from a new or revised mitigation measure proposed to be implemented;
    - any substantial increase in the severity of a previously identified environmental impact;
    - any feasible project alternative or mitigation measures considerably different from others previously analyzed that would clearly lessen the environmental impacts of the project but that were rejected by the City; or
    - that the Draft EIR was so fundamentally and basically inadequate and conclusory in nature that meaningful public review and comment were precluded.

Instead, the modifications are either environmentally benign or

environmentally neutral, and thus represent the kinds of changes that commonly occur as the environmental review process works towards its conclusion.

The modifications to the mitigation measures result in final mitigation measures that are as good or more effective than the measures described in the Draft EIR. The City Council of the City of West Sacramento, as a "Lead Agency" under CEQA, hereby determines, based on the standards provided in section 15088.5 of the CEQA Guidelines, that recirculation of the Draft EIR is not required.

Record of Proceedings

The contents of the record of proceedings shall be as set forth in subdivision (e) of Public Resources Code Section 21167.6. The following information is incorporated by reference and made part of the record supporting these findings:

- The Draft and Final EIR and all documents relied upon or incorporated by reference therein;

- All comments submitted by agencies or members of the public during the 45-day comment period on the Draft EIR;

- All comments and correspondence submitted to the City during the public comments period on the Draft EIR, in addition to all other timely comments on the Draft EIR;

- All reports, studies, memoranda, maps, or other planning documents related to the Project prepared by the City of West Sacramento as lead agency under CEQA, consultants to the City of West Sacramento, or responsible or trustee agencies with respect to the City of West Sacramento's compliance with the requirements of CEQA and with respect to the action by the City of West Sacramento and City of Sacramento on the Project;

- All documents submitted to the City of West Sacramento and City of Sacramento by other public agencies or members of the public in connection to the Project, up through the close of the public hearing in the City of West Sacramento on May 18, 2022, and up through the close of the public hearing in the City of Sacramento on May 31, 2022;

- Matters of common knowledge to the Cities, including, but not limited to Federal, State, and local laws and regulations;

- The Mitigation Monitoring Plan for the Broadway Bridge project.

- All records of decision, staff reports, memoranda, maps, exhibits, letters, synopses of meetings, and other documents approved, reviewed, relied upon, or prepared by any City commissions, boards, officials, consultants, or staff relating to the Project; and

- Any other materials required by Public Resources Code Section 21167.6, or other applicable law, to be included in the record of proceedings.

Findings

CEQA and the CEQA Guidelines[1] require that, for each significant environmental effect identified in an EIR for a proposed project, the approving agency must issue a written finding reaching one or more of the following three conclusions:

- Changes or alterations which avoid or mitigate the significant environmental effects as identified in the EIR have been required or incorporated into the project;

- Such changes or alterations are within the responsibility and jurisdiction of another public agency and not the agency making the finding, and such changes have been adopted by such other agency or can and should be adopted by such other agency; or

- Specific economic, legal, social, technological, or other considerations, including consideration for the provision of employment opportunities for highly trained workers, make infeasible the mitigation measures or project alternatives identified in the DEIR.

For purposes of these findings, the terms listed above are defined as follows:

- "Changes or alterations" are essentially the same as "mitigation measures."

- "Avoid" refers to the effectiveness of one or more mitigation measures to reduce an otherwise significant effect to a less than significant level. The term "substantially lessen" refers to the effectiveness of such measure or measures to substantially reduce the severity of a significant effect, but not to a less than significant level.

- "Feasible," pursuant to the CEQA Guidelines2, means capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social, and technological factors.

---

[1] Pub. Resources Code, § 21081, subd. (a)(1)-(3); CEQA Guidelines, § 15091, subd. (a)(1)-(3).
[2] CEQA Guidelines, § 15364

The concept of "feasibility" also encompasses the question of whether a particular alternative or mitigation measure promotes the underlying goals and objectives of a project. (*City of Del Mar v. City of San Diego* (1982) 133 Cal.App.3d 410, 417 (*City of Del Mar*).) "Feasibility" under CEQA encompasses 'desirability' to the extent that desirability is based on a reasonable balancing of the relevant economic, environmental, social, and technological factors." (Ibid.; see also

Sequoyah Hills Homeowners Assn. v. City of Oakland (1993) 23 Cal.App.4th 704, 715 (*Sequoyah Hills*); see also *California Native Plant Society v. City of Santa Cruz* (2009) 177 Cal.App.4th 957, 1001 [after weighing "'economic, environmental, social, and technological factors' ... 'an agency may conclude that a mitigation measure or alternative is impracticable or undesirable from a policy standpoint and reject it as infeasible on that ground'"].)

With respect to a project for which significant impacts are identified that are not avoided or substantially lessened, a public agency may nevertheless approve the project if the agency first adopts a statement of overriding considerations setting forth the specific reasons why the agency found that the project's "benefits" rendered "acceptable" its "unavoidable adverse environmental effects." (CEQA Guidelines, Sections 15093, 15043, sub. (b); see also Pub. Resources Code, Section 21081, sub. (b).)

In seeking to effectuate the substantive policy of CEQA to substantially lessen or avoid significant environmental effects to the extent feasible, an agency, in adopting findings, need not necessarily address the feasibility of both mitigation measures and environmentally superior alternatives when contemplating approval of a proposed project with significant impacts. Where a significant impact can be mitigated to an "acceptable" level solely by the adoption of feasible mitigation measures, the agency, in drafting its findings, has no obligation to consider the feasibility of any environmentally superior alternative that could also substantially lessen or avoid that same impact — even if the alternative would render the impact less severe than would the proposed project as mitigated. (Laurel Hills Homeowners Association v. City Council (1978) 83 Cal.App.3d 515, 521; see also Kings County Farm Bureau v. City of Hanford (1990) 221 Cal.App.3d 692, 730-731; and Laurel Heights Improvement Association v. Regents of the University of California ("Laurel Heights I") (1988) 47 Cal.3d 376, 400-403.)

The Draft EIR/EA considered several alignment alternatives, and advanced three for consideration, including the No-Build (i.e., no- project) alternative. Alternative Alignment B (Broadway to 15th Street) and Alternative C (Broadway to South River Road) were both considered to be "potentially feasible" within the meaning of CEQA. In these Findings, the City of West Sacramento have determined the No-Build Alternative and Alternative C are, in the final consideration, infeasible.

In the Statement of Overriding Considerations the City of West Sacramento identifies the specific economic, social, and other considerations that, in its judgment, outweigh the significant unavoidable environmental effect (Noise - Temporary Construction) that the project would cause.

The California Supreme Court has stated that "[t]he wisdom of approving ... any development project, a delicate task which requires a balancing of interests, is necessarily left to the sound discretion of the local officials and their constituents who are responsible for such decisions. The law as we interpret and apply it simply requires that those decisions be informed, and therefore balanced." (Citizens of Goleta Valley v. Board of Supervisors (Goleta II) (1990) 52 Cal. 3d 553, 564.)

In support of its approval of the project, the City Council's findings are set forth below for each of the potentially significant environmental effects and alternatives of the project identified in the EIR pursuant to Section 21080 of CEQA and Section 15091 of the CEQA Guidelines.

These findings do not attempt to describe the full analysis of each environmental impact contained in the Final EIR. Instead, a full explanation of these environmental findings and conclusions can be found in the Final EIR and these findings hereby incorporate by reference the discussion and analysis in the Final EIR supporting the determination regarding the impacts of the project and mitigation measures designed to address those impacts. In making these findings, the West Sacramento City Council ratifies, adopts and incorporates in these findings the determinations and conclusions of the Final EIR relating to environmental impacts and mitigation measures except to the extent any such determinations and conclusions are specifically and expressly modified by these findings.

As set forth below, the West Sacramento City Council adopts and incorporates all the mitigation measures set forth in the Final EIR and the attached Mitigation Monitoring Plan (MMP) to substantially lessen or avoid the potentially significant and significant impacts of the project. The West Sacramento City Council will adopt each of the mitigation measures proposed in the Final EIR to reduce or eliminate significant impacts resulting from the project. Accordingly, in the event a mitigation measure recommended in the Final EIR has inadvertently been omitted in these findings or the MMP, such mitigation measure is hereby adopted and incorporated in the Findings below, by reference. In addition, in the event the language describing a mitigation measure set forth in these findings or the MMP fails to accurately reflect the mitigation measures in the Final EIR due to a clerical error, the language of the policies and implementation measures, as set forth in the Final EIR shall control. The impact and mitigation measure titles used in these findings reflect the information contained in the Final EIR.

Potentially Significant Impacts Mitigated to a Less Than Significant Level (Preferred Alignment Alternative B)

The following potentially significant environmental impacts of the project, including cumulative impacts, are being mitigated to a less-than-significant level and are set out on the following pages. Pursuant to Section 21081(a)(1) of CEQA and Section 15091(a)(1) of the CEQA Guidelines, as to each such impact, the West Sacramento City Council, based on the evidence in the record before it, finds that changes or alterations incorporated into the project by means of conditions or otherwise, mitigate, avoid, or substantially lessen to a level of insignificance these significant or potentially significant environmental impacts of the project.

Impacts described here are analyzed and documented in the Broadway Bridge Project Final EIR/EA. The basis for the finding for each identified impact is set forth on following pages (pg. 27-61).

Aesthetics

Impact: Substantially degrade the existing visual character or quality of the site and its surroundings (pg. 3-3)

The largest visual change resulting from the project that would affect the existing visual character or quality of views in the project area would be from construction of a new bridge that could be seen from various locations along the Sacramento River, including bridge lighting. Although the bridge design has not been finalized, it would be designed in a manner that carries forward elements from the nearby Tower and existing I Street Bridges or that creates a new focal point to facilitate creation of a new gateway between Sacramento and West Sacramento. The project would also result in visual changes due to vegetation removal and changes in roadway infrastructure at the new roadway connection in West Sacramento.

Mitigation Measures: The following mitigation measures have been adopted to address this significant impact and reduce it below the level of significance.

AES-1: Work with Stakeholders to Determine Bridge Aesthetics

The project proponent will conduct a focused outreach effort and will conduct a public meeting, charrette session, or similar public engagement method with public stakeholders to develop an aesthetic design approach. This measure will allow concerned viewers to assist in creating a bridge that is visually appealing to the general public, while balancing the need for increased circulation access at this location. Affected stakeholders will be able to provide input on the preferred architectural style and coloring of the proposed bridge.

AES-2: Implement Project Landscaping

The project proponent will install landscaping where space and safety considerations allow and in a manner that is consistent with the Cities of West Sacramento and Sacramento planning policies and directives to improve city streetscapes. Prior to approval of the roadway design, the City of West Sacramento and/or City of Sacramento project landscape architect will review project designs to ensure that the following elements are implemented in the project landscaping plan:

Design and implement low-impact development (LID) measures that disperse and reduce runoff by using such features as vegetated buffer strips/medians between paved areas that catch and infiltrate runoff. Evaluate the use of pervious paving in the proposed project to improve infiltration and to reduce the amount of surface runoff from entering waterways and the storm water system. Do not use LID measures where infiltration could result in adverse environmental effects. Use LID measures, such as cobbled swales and aggregate mulching, as an aesthetic design element to create an attractive view while reducing water use.

Require construction contractors to incorporate native grass and wildflower seed into standard seed mixes, which may be non-native, for erosion control measures that will be applied to all exposed slopes. If appropriate for the surrounding habitat, use wildflowers to provide seasonal interest to areas where trees and shrubs are removed, and grasslands are disturbed. Incorporate into seed mixes only wildflower and grass species that are native, and under no circumstances use any invasive grass or wildflower plant species as any component of any erosion control measure. Choose species that are indigenous to the area and for their appropriateness to the surrounding habitat. For example, choose upland grass and wildflower species for drier upland areas, and wetter species for areas that will receive more moisture. If not appropriate to the surrounding habitat, do not include wildflowers in the seed mix.

Require the species list to include trees, shrubs, and an herbaceous understory of varying heights, as well as both evergreen and deciduous types. Increase the effectiveness of roadside planting areas and reduce their susceptibility to disease by increasing plant variety—providing multiple layers, seasonality, and diverse habitat. Use evergreen groundcovers or low-growing plants, such as *Ceanothus* spp., in areas where taller vegetation could cause driving hazards by obscuring site distances. Use species native and indigenous to the project area and California. Use native plant species to create attractive spaces, high in aesthetic quality, that are not only drought tolerant but also attract more wildlife than traditional landscape plant palettes. Use native species to promote a visual character of California that is being lost through development and reliance on non-native ornamental plant species.

Use vegetative accents and screening to reduce the perceived scale and mass of built features, while accentuating the design treatments that will be applied to those features. Pay special attention to plant choices near residences to ensure that species chosen are of an appropriate height; and rely on evergreen species to provide year-round light screening from nuisance light, if applicable.

Do not use any invasive plant species at any location.

Plant vegetation within the first 6 months following project completion.

Implement an irrigation and maintenance program during the plant establishment period and continue irrigation, as needed, to ensure plant survival. Design the landscaping plan to maximize the use of planting zones that are water efficient. Incorporate aesthetic features such as cobbling swales or shallow detention areas, as appropriate, to reduce or eliminate the need for irrigation in certain areas.

If an irrigation system is required, use a smart watering system to evaluate the existing site conditions and plant material against weather conditions, and avoid overwatering of such areas. To avoid undue water flows, manage

the irrigation system in such a manner that any broken spray heads, pipes, or other components are fixed within 1–2 days; or shut down the zone or system until it can be repaired.

AES-3: Apply Minimum Lighting Standards

All artificial outdoor lighting and overhead street lighting is to be limited to safety and security requirements and the minimum required for driver safety. Lighting will be designed using Illuminating Engineering Society's design guidelines and in compliance with International Dark-Sky Association–approved fixtures. All lighting will be designed to have minimum impact on the surrounding environment and will use downcast, cut-off type fixtures that are shielded and direct the light only toward objects requiring illumination.

Therefore, lights will be installed at the lowest allowable height and cast low-angle illumination while minimizing incidental light spill onto adjacent properties or open spaces, or backscatter into the nighttime sky.

The lowest allowable wattage will be used for all lighted areas, and the amount of nighttime lights needed to light an area will be minimized to the highest degree possible. Light fixtures will have non-glare finishes that will not cause reflective daytime glare. Lighting will be designed for energy efficiency, with daylight sensors or timers with an on/off program. Lights will provide good color rendering with natural light qualities, with the minimum intensity feasible for security, safety, and personnel access. Lighting, including light color rendering and fixture types, will be designed to be aesthetically pleasing.

LED lighting will avoid the use of blue-rich white light lamps and use a correlated color temperature that is no higher than 3,000 Kelvin, consistent with the International Dark-Sky Associations Fixture Seal of Approval Program (International Dark-Sky Association 2010a, 2010b, 2015). In addition, LED lights will use shielding to ensure that nuisance glare and that light spill does not affect sensitive residential viewers.

Lights along pathways and bridge safety lighting will use shielding to minimize offsite light spill and glare and will be screened and directed away from adjacent uses to the highest degree possible. The amount of nighttime lights used along pathways will be minimized to the highest degree possible to ensure that spaces are not unnecessarily over-lit. For example, the amount of light can be reduced by limiting the amount of ornamental light posts to higher use areas and by using bollard lighting on travel way portions of pathways.

Technologies to reduce light pollution evolve over time; design measures that are currently available may help but may not be the most effective means of controlling light pollution once the project is designed. Therefore, all design measures used to reduce light pollution will use the technologies available at

the time of project design to allow for the highest potential reduction in light pollution.

Finding: *With implementation of the mitigation measure, this impact is reduced to a less-than-significant level.*

Air Quality

Impact: Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is a nonattainment area for an applicable federal or state ambient air quality standard (pg. 3- 12)

Temporary construction emissions would result from grubbing/land clearing, grading/excavation, drainage/utilities/sub-grade construction, paving activities, bridge demolition and erection, and construction worker commuting patterns. Construction of the project would not exceed SMAQMD's or YSAQMD's numeric thresholds of significance. However, SMAQMD's (2021) Guide to Air Quality Assessment in Sacramento County only considers PM10 and PM2.5 emissions below their 82- and 80-pound-per-day thresholds, respectively, to be less than significant with application of BMPs. This is considered a potentially significant impact.

Mitigation Measures: The following mitigation measure has been adopted to address this significant impact and reduce it below the level of significance.

AIR-1: Implement Control Measures for Construction Emissions of Fugitive Dust

Caltrans' Standard Specification Section 14, "Environmental Stewardship" addresses the construction contractor's responsibility for avoiding environmental impacts. Section 14-9.02 includes specifications relating to air pollution control for work performed under a contract, including compliance with air pollution control rules, regulations, ordinances, and statutes provided in Government Code Section 11017 (Public Contract Code Section 10231). Section 14-9.03 is directed at controlling dust. Caltrans' Standard Specifications are incorporated into all Caltrans' construction contracts.

Sacramento Metro Air Quality Management District

Additional measures to control dust in Sacramento County will be borrowed from SMAQMD's recommended list of dust control measures and implemented to the extent practicable when the measures have not already been incorporated in, and do not conflict with, the requirements of the Caltrans *Standard Specifications*, special provisions, the NPDES permit, the Biological Opinions, the CWA Section 404 permit, CWA Section 401 Certification, and other permits issued for the project. The following measures are taken from SMAQMD's (2021) *Guide to Air Quality*

Assessment in Sacramento County and represent their basic control measures for fugitive dust.

Control of fugitive dust is required by District Rule 403 and enforced by District Staff.

Water all exposed surfaces two times daily. Exposed surfaces include, but are not limited to soil piles, graded areas, unpaved parking areas, staging areas, and access roads.

Cover or maintain at least two feet of free board space on haul trucks transporting soil, sand, or other loose material on the site. Any haul trucks that would be traveling along freeways or major roadways should be covered.

Use wet power vacuum street sweepers to remove any visible track-out mud or dirt onto adjacent public roads at least once a day. Use of dry power sweeping is prohibited.

Limit vehicle speeds on unpaved roads to 15 mph.

All roadways, driveways, sidewalks, parking lots to be paved should be completed as soon as possible. In addition, building pads should be laid as soon as possible after grading unless seeding or soil binders are used.

Yolo Solano Air Quality Management District

Additional measures to control dust in Yolo County will be borrowed from YSAQMD's recommended list of dust control measures and implemented to the extent practicable when the measures have not already been incorporated in, and do not conflict with, the requirements of Caltrans' Standard Specifications, special provisions, the NPDES permit, the Biological Opinions, the CWA Section 404 permit, CWA Section 401 Certification, and other permits issued for the project. The following measures are taken from YSAQMD's Construction Dust Mitigation Measures (Yolo Solano Air Quality Management District 2007).

Water all active construction sites at least twice daily. Frequency should be based on the type of operation, soil, and wind exposure.

Haul trucks shall maintain at least 2 feet of freeboard.

Cover all trucks hauling dirt, sand, or loose materials.

Apply non-toxic binders (e.g., latex acrylic copolymer) to exposed areas after cut and fill operations and hydroseed area.

Apply chemical soil stabilizers on inactive construction areas (disturbed lands within construction projects that are unused for at least four consecutive days).

Plant tree windbreaks on the windward perimeter of construction projects if adjacent to open land.

Plant vegetative ground cover in disturbed areas as soon as possible.

Cover inactive storage piles.

Sweep streets if visible soil material is carried out from the construction site.

Treat accesses to a distance of 100 feet from the paved road with a 6- to 12-inch layer of wood chips or mulch.

Treat accesses to a distance of 100 feet from the paved road with a 6-inch layer of gravel.

The following practices describe exhaust emission control from diesel powered fleets working at a construction site. California regulations limit idling from both on-road and off-road diesel-powered equipment. The ARB enforces idling limitations and compliance with diesel fleet regulations.

- Minimize idling time either by shutting equipment off when not in use or reducing the time of idling to 5 minutes [California Code of Regulations, Title 13, sections 2449(d)(3) and 2485]. Provide clear signage that posts this requirement for workers at the entrances to the site.

- Provide current certificate(s) of compliance for ARB's In-Use Off-Road Diesel-Fueled Fleets Regulation [California Code of Regulations, Title 13, sections 2449 and 2449.1]. For more information contact ARB at 877-593-6677, doors@arb.ca.gov, or www.arb.ca.gov/doors/compliance_cert1.html.

- Although not required by local or state regulation, many construction companies have equipment inspection and maintenance programs to ensure work and fuel efficiencies.

- Maintain all construction equipment in proper working condition according to manufacturer's specifications. The equipment must be checked by a certified mechanic and determine to be running in proper condition before it is operated.

***Finding**: With implementation of the mitigation measure, this impact is reduced to a less-than-significant level and is considered less than cumulatively considerable.*

Impact: Expose sensitive receptors to substantial pollutant concentrations (pg. 3-12)

SMAQMD and YSAQMD have developed region-specific CEQA thresholds of significance in consideration of existing air quality concentrations and attainment designations under the NAAQS and CAAQS, which are informed by a wide range of scientific evidence which demonstrates that there are

known safe concentrations of criteria pollutants. While recognizing that air quality is a cumulative problem, SMAQMD and YSAQMD consider that the impacts of projects that generate criteria pollutant and ozone precursor emissions below the thresholds to be minor. Such projects would not adversely affect air quality or cause the NAAQS or CAAQS to be exceeded. Moreover, photochemical and health risk modeling conducted by SMAQMD demonstrates that projects generating emissions below SMAQMD thresholds "do not on [their] own lead to sizeable health effects" (Ramboll 2020).

Mitigation Measures: The following mitigation measure has been adopted to address this significant impact and reduce it below the level of significance.

> **AIR-1: Implement Control Measures for Construction Emissions of Fugitive Dust** (*See description above).*

Finding: With implementation of the mitigation measure, this impact is reduced to a less-than-significant level and is considered less than cumulatively considerable.

Biological Resources

Impact: Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service (pg. 3-20)

The project could result in direct and indirect impacts on special-status species known to or potentially occurring in the BSA include VELB, western pond turtle, Swainson's hawk, white-tailed kite, pallid bat, western red bat, Chinook salmon (fall-run, late fall–run, winter-run, and spring-run), steelhead, green and white sturgeon, delta and longfin smelt, Sacramento splittail, Sacramento hitch, hardhead, and Pacific and Western River lamprey; as well as habitat for these species.

Mitigation Measures: The following mitigation measures have been adopted to address this significant impact and reduce it below the level of significance.

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

The project proponent or their contractor will install orange construction fencing between the construction area and adjacent sensitive biological resource areas. Sensitive biological resources that occur adjacent to the construction area that could be directly affected by the project include sensitive natural communities; special-status wildlife habitats, such as nest sites of Swainson's hawk and migratory birds; and protected trees.

Barrier fencing around sensitive biological resource areas will be installed as one of the first orders of work and prior to equipment staging. Before construction begins, the construction contractor will work with the project engineer and a resource specialist to identify the locations for the orange construction fencing and will place stakes around the sensitive resource sites to indicate these locations. The protected areas will be designated as environmentally sensitive areas and clearly identified on the construction plans and described in the specifications. To minimize the potential for snakes and other ground-dwelling animals from being caught in the orange construction fencing, the fencing will be placed with at least a 1-foot gap between the ground and the bottom of the fencing. The exception to this condition is where construction barrier fencing overlaps with erosion control fencing and must be secured to prevent sediment runoff. Barrier fencing will be installed before construction activities are initiated, maintained throughout the construction period, and removed after completion of construction.

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

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

appropriate new personnel as they are brought on the job during the construction period.

Mitigation Measure NC-3: Conduct Periodic Biological Monitoring

The project proponent will retain a qualified biological monitor for the project who will visit the site a minimum of once per week to ensure that fencing around environmentally sensitive areas is intact and that activities are being conducted in accordance with the agreed upon project schedule and agency conditions of approval. The monitor will provide the project proponent with a monitoring log for each site visit.

Certain activities will require the presence of a biological monitor for the duration of the activity or during the initial disturbance of an area to ensure that impacts on special-status species are avoided. The activities that require specific monitoring are identified in Measures AS-3, AS-5, AS-7, and AS-8.

Mitigation Measure NC-4: Compensate for Temporary Effects on and Permanent Loss of Cottonwood Riparian Forest (Including SRA Cover)

The project proponent will compensate for the permanent loss of up to 1.112 acres of riparian forest under Alternative B or up to 1.176 acres of riparian forest under Alternative C. In addition, any unavoidable temporary loss of riparian forest will be mitigated. The project proponent will implement onsite and, if necessary, offsite compensation measures or purchase mitigation bank credits to compensate for losses of cottonwood riparian forest on the waterside slope of the existing levees, including riparian forest supporting SRA cover habitat (as described in EIR/EA Section 4.4.1.1 [*Survey Results*] in the NES, portions of the cottonwood riparian forest in the BSA also provide SRA cover habitat for fish). Onsite compensation will be used to the maximum extent practicable. Compliance with the USACE levee vegetation policy (U.S. Army Corps of Engineers 2014), the ULDC (California Department of Water Resources 2012), or other engineering constraints may limit the ability to achieve full onsite compensation. Therefore, offsite compensation or purchase of mitigation bank credits may be needed to achieve no net loss of existing in-kind riparian and SRA cover habitat values. Each of these options is discussed below.

Onsite or Offsite Restoration or Enhancement along the Sacramento River. Riparian habitat restoration or enhancement onsite or offsite should occur in the same year construction is completed. For onsite or offsite replacement plantings, the project proponent will prepare a mitigation planting plan, including a species list and number of each species, planting locations, and maintenance requirements. Plantings will consist of cuttings taken from local plants or plants grown from local material. Planted species for the mitigation plantings will be similar to those removed from the project area and will include native species, such as Fremont's cottonwood, valley oak, black willow, boxelder, Oregon ash, and black walnut. The final planting

plan will be developed based on results of the arborist survey for species to be removed (see additional discussion below). All plantings will be fitted with exclusion cages or other suitable protection from herbivory. Plantings will be irrigated for up to 3 years or until established. Plantings will be monitored annually for 3 years or as required in the project permits. If 75% of the plants survive at the end of the monitoring period, the revegetation will be considered successful. If the survival criterion is not met at the end of the monitoring period, planting and monitoring will be repeated after mortality causes have been identified and corrected.

Mitigation Bank Credit Purchase. If this option is chosen, the project proponent will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits. The amount to be paid will be the fee that is in effect at the time the fee is paid. The mitigation will be approved by CDFW and may be modified during the permitting process. Mitigation can be in the form of creation or preservation credits. If mitigation is in the form of restoration/creation credits, the mitigation will be at a minimum ratio of 1:1 (1 acre of restored or created riparian habitat for each acre of riparian habitat removed). If mitigation is in the form of preservation credits, the mitigation will be at a minimum ratio of 2:1 (2 acres of preserved riparian habitat for each acre of riparian habitat removed). The final compensation ratio will be approved by CDFW in order to result in no net loss of riparian habitat. The project proponent will purchase riparian habitat credits from an approved mitigation bank near the project, such as the Liberty Island Conservation Bank, Cosumnes Floodplain Mitigation Bank, Fremont Landing Conservation Bank, Elsie Gridley Mitigation Bank, River Ranch Wetland Mitigation Bank, or other approved bank with available riparian forest credits at the time of project permitting. Replacement riparian forest habitat will include tree species that would support nesting Swainson's hawk (i.e., oak, cottonwood) and will occur within the range of nesting Swainson's hawk within the Sacramento Valley.

To provide a current and accurate estimate of tree loss, an arborist survey will be conducted upon completion of 90% design plans for the project and no more than 2 years prior to project construction. In addition to a description of the tree, the arborist survey report will include the precise location of the trunk and size of the dripline for all trees whose trunk or canopy overlap with the project footprint. Riparian forest compensation will be consistent with the requirements of the City of West Sacramento and City of Sacramento tree ordinances to ensure compensation for losses of individual protected trees.

In addition to mitigating the loss of riparian forest habitat, specific measures will be included to satisfy NMFS requirements and compensate for the loss of SRA cover (area and linear feet). The acreage will not be duplicated, such that the acreage of riparian forest habitat restored for SRA cover mitigation will apply toward riparian forest habitat mitigation requirements. SRA cover mitigation will include the following riparian replacement requirements.

Replace the permanent loss of 302 linear feet and up to 0.368 acre of affected SRA cover vegetation (see EIR/EA Section 4.4.1.2, *Temporary and Permanent Loss of Riparian Vegetation [Including SRA Cover*] in the NES) at a 3:1 replacement ratio (i.e., 3 linear feet replaced for every 1 foot affected and 3 acres replaced for every 1 acre affected) by planting native riparian trees in temporary impact areas and along existing onsite or offsite unshaded banks along the Sacramento River.

Plant native riparian trees onsite to the maximum extent practicable, followed by planting on adjacent reaches of the Sacramento River to minimize the need for purchasing offsite mitigation bank credits.

- Plant riparian trees that are intended to provide SRA cover along the water's edge at summer low flows up to the ordinary high-water mark and at sufficient densities to provide shade along at least 85% of the bank's length when the trees reach maturity. This will ensure that riparian plantings intended for SRA cover mitigation will contribute to instream SRA cover when they are inundated during winter/spring flows and overhead cover (shade) during summer flows when they approach maturity.

Monitor and evaluate the revegetation success of riparian plantings intended for SRA cover mitigation as described above.

If mitigation for SRA cover is in the form of offsite mitigation bank credits, credits will need to be purchased from an approved mitigation bank within the approved service area for the project that provides riparian forest floodplain conservation credits as offsite compensation for impacts on state- and federally listed fish species, designated critical habitat, and EFH for Pacific salmon.

Mitigation Measure NC-5: Compensate for Loss of Protected Trees in Landscaping or Ruderal Habitat

Within 1 year prior to construction, the project proponent will conduct a preconstruction inventory of all trees to be removed. The inventory will include the location, species, diameter of all trunks, approximate height and canopy diameter, and approximate age—in support of a tree permit for removal of the protected trees. All conditions of the tree permits will be implemented.

The project proponent will mitigate the loss of protected street trees using one or a combination of the two following options.

- Because it is unlikely that adequate space will be available in the project area for tree planting after construction, pay in-lieu fees to the City of West Sacramento and the City of Sacramento, based on the tree removal locations, which would be used to purchase and plant trees elsewhere in West Sacramento and Sacramento. Replacement trees will be required

at a ratio of 1:1 (i.e., 1-inch diameter of replacement tree planted for every 1-inch diameter of tree removed). Replacement trees will be of the same species, except for replacement of black locust, which is an invasive species and will be replaced with a native tree species. Mitigation will be subject to approval by the City's tree administrator and will take into account species affected, replacement species, location, health and vigor, habitat value, and other factors to determine fair compensation for tree loss. Replacement trees will be monitored annually for 3 years to document their vigor and survival. If any of the original replacement trees die within 3 years of the initial planting, the project proponent will plant additional replacement trees and monitor them until all trees survive for a minimum of 3 years after planting.

- If feasible, plant replacement trees at or near the location of the tree removal, following the same replacement ratio, species, monitoring, and tree survival requirements described for the option above.

Mitigation Measure AS-1: Conduct Preconstruction Surveys for Western Pond Turtle and Implement Protective Measures

To avoid potential injury to or mortality of western pond turtles, the project proponent will retain a qualified biologist to conduct a preconstruction survey for western pond turtles immediately prior to construction activities (including vegetation removal) along the banks of the Sacramento River. The biologist will survey the aquatic habitat, riverbanks, and adjacent riparian and ruderal habitat within the construction area immediately prior to disturbance.

If a western pond turtle is found within the immediate work area during the preconstruction survey or during project activities, work shall cease in the area until the turtle is able to move out of the work area on its own. Information about the location of turtles seen during the preconstruction survey will be included in the environmental awareness training (Measure NC-2) and provided directly to the construction crew working in that area to ensure that areas where turtles were observed are inspected each day prior to the start of work to verify that no turtles are present.

If a western pond turtle nest is discovered during the preconstruction survey or during project construction, the project proponent will coordinate with CDFW to determine whether additional avoidance measures (e.g., no-disturbance buffer or monitoring) are prudent.

Mitigation Measure AS-2: Conduct Tree Removal during Non-Sensitive Periods for Wildlife

The project proponent will remove or trim trees during the non-breeding season for tree-nesting migratory birds and raptors, and prior to periods when bats would be hibernating (generally between September 15 and October 31). If tree removal cannot be confined to this period, the project

proponent will retain a qualified wildlife biologist with knowledge of the wildlife species that could occur in the project area to conduct the appropriate preconstruction surveys and establish no-disturbance buffers for sensitive wildlife species, as described under Measure AS-3 (Swainson's hawk), Measure AS-4 (nesting birds), and Measure AS-5 (roosting bats).

Mitigation Measure AS-3: Monitor Active Swainson's Hawk and White-Tailed Kite Nests during Pile Driving and Other Construction Activities

Active Swainson's hawk and white-tailed kite nests within 600 feet of the BSA will be monitored during pile driving and other construction activities. Monitoring will be conducted by a wildlife biologist with experience in monitoring Swainson's hawk and white-tailed kite nests. The monitor will document the location of active nests, coordinate with the project proponent and CDFW, and record all observations in a daily monitoring log. The monitor will have the authority to temporarily stop work if activities are disrupting nesting behavior to the point of resulting in potential take (i.e., eggs and young chicks still in nests, and adults appear agitated and potentially could abandon the nest). The monitor will work closely with the contractor, the project proponent, and CDFW to develop plans for minimizing disturbance (e.g., modifying or delaying certain construction activities).

A minimum non-disturbance buffer of 600 feet (radius) will be established around all active Swainson's hawk and white-tailed kite nests. No entry of any kind related to construction will be allowed within this buffer while the nest is active, unless approved by CDFW through issuance of an Incidental Take Permit or through consultation during project construction. The buffer size may be modified based on site-specific conditions, including line-of-sight, topography, type of disturbance, existing ambient noise and disturbance levels, and other relevant factors. Entry into the buffer for construction activities will be granted when the biological monitor determines that the young have fledged and are capable of independent survival, or that the nest has failed and the nest site is no longer active. All buffer adjustments will be approved by CDFW.

Mitigation Measure AS-4: Conduct Preconstruction Surveys for Nesting Migratory Birds, Including Special-Status Birds, and Establish Protective Buffers

The project proponent will retain a qualified wildlife biologist to conduct nesting surveys before the start of construction. These nesting surveys will be conducted in conjunction with the Swainson's' hawk nesting surveys under Measure TE-2 and will include a minimum of three separate surveys to look for active nests of migratory birds, including raptors. Surveys will include a search of all trees and shrubs, ruderal areas, and grassland vegetation that provide suitable nesting habitat within 50 feet of disturbance. In addition, a 0.25-mile area from the river will be surveyed for nesting raptors in order to identify raptors that might be affected by pile driving. Surveys

should occur during the height of the breeding season (March 1 to June 1), with one survey occurring in each of the 2 consecutive months within this peak period and the final survey occurring within 1 week of the start of construction. If no active nests are detected during these surveys, no additional measures are required.

If an active nest is found in the survey area, a no-disturbance buffer will be established to avoid disturbance or destruction of the nest site until the end of the breeding season (September 15) or until a qualified wildlife biologist determines that the young have fledged and moved out of the construction area (this date varies by species). The extent of these buffers will be determined by the biologist in coordination with CDFW and will depend on the level of noise or construction disturbance taking place, line-of-sight between the nest and the disturbance, ambient levels of noise and other non-project disturbances, and other topographical or artificial barriers. Suitable buffer distances may vary between species.

Mitigation Measure AS-5: Conduct Preconstruction Surveys for Roosting Bats and Implement Protective Measures

To avoid and minimize potential impacts on pallid bat, western red bat, and non-special-status bat species from the removal of trees and buildings, the project proponent will implement the following actions.

Preconstruction Surveys. Within 2 weeks prior to tree trimming or removal or any building demolition, a qualified biologist will examine trees to be removed or trimmed and buildings planned for demolition with suitable bat roosting habitat. High-quality habitat features (e.g., large tree cavities, basal hollows, loose or peeling bark, larger snags, abandoned buildings, and attics) will be identified, and the area around these features will be searched for bats and bat sign (e.g., guano, culled insect parts, and staining). Riparian woodland and stands of mature broadleaf trees will be considered potential habitat for solitary foliage-roosting bat species.

If suitable roosting habitat or bat sign is detected, biologists will conduct an evening visual emergence survey of the source habitat feature, from 0.5 hour before sunset to 1–2 hours after sunset for a minimum of 2 nights. Full-spectrum acoustic detectors will be used during emergence surveys to assist in species identification. If site security allows, detectors should be set to record bat calls for the duration of each night. All emergence and monitoring surveys will be conducted during favorable weather conditions (calm nights with temperatures conducive to bat activity and no precipitation predicted). The biologist will analyze the bat call data using appropriate software and will document the results in a report.

Timing of Tree Removal and Building Demolition. Exclusion devices will be installed on trees and buildings planned for removal and demolition between September 15 and October 31 to avoid affecting maternal and

hibernating bat roosts. The exact timing of removal and demolition will be determined based on the preconstruction surveys of trees and buildings.

Protective Measures. Protective measures may be necessary if it is determined that bats are using buildings or trees in the BSA as roost sites, or if sensitive bats species are detected during acoustic monitoring. The following measures will be implemented when roosts are found within trees or buildings planned for removal according to the timing discussed above. Specific measures will be approved by the project proponent and CDFW prior to excluding bats from occupied roosts.

- Exclusion from buildings or bridge structures will not take place until temporary or permanent replacement roosting habitat is available.
- Exclusion from roosts will take place late in the day or in the evening to reduce the likelihood of evicted bats falling prey to diurnal predators and will take place during weather and temperature conditions conducive to bat activity.
- Biologists experienced with bats and bat evictions will carry out or oversee the exclusion tasks and will monitor tree trimming and removal and building demolition, if they are determined to be occupied.
- Trees that provide suitable roost habitat will be removed in pieces, rather than felling the entire tree, should be removed late in the day or in the evening to reduce the likelihood of evicted bats falling prey to diurnal predators, and will take place during warm weather conditions conducive to bat activity.
- Structural changes may be made to a known roost proposed for removal in order to create conditions in the roost that are undesirable to roosting bats and encourage the bats to leave on their own (e.g., open additional portals so that the temperature, wind, light, and precipitation regime in the roost change). Structural changes to the roost will be authorized by CDFW and will be performed during the appropriate exclusion timing (listed above) to avoid harming bats.
- Non-injurious harassment at the roost site, such as ultrasound deterrents or other sensory irritants, may be used to encourage bats to leave on their own.
- One-way door devices will be used where appropriate to allow bats to leave the roost but not to return.
- Prior to building demolition and tree removal/trimming, and after other eviction efforts have been attempted, any confirmed roost site will be gently shaken or repeatedly struck with a heavy implement such as a sledgehammer or an axe. Several minutes should pass before beginning demolition work, felling trees, or trimming limbs to allow bats time to arouse and leave the roost. A biological monitor will search downed vegetation for dead and injured bats. The presence of dead or injured

bats will be reported to CDFW. Injured bats will be transported to the nearest CDFW-permitted wildlife rehabilitation facility.

Mitigation Measure AS-6: Implement Measures to Minimize Exceedance of Interim Threshold Sound Levels during Pile Driving

The project proponent will require the contractor to implement the following measures to minimize the exposure of listed fish species to potentially harmful underwater sounds.

The contractor will vibrate all piles to the maximum depth possible before using an impact hammer.

No more than 20 piles will be driven per day.

During impact driving, the contractor will limit the number of strikes per day to the minimum necessary to complete the work and will limit the total number of hammer strikes to 32,000 strikes per day (i.e., 1,600 hammer strikes per pile, per day) for piles for the temporary trestles), 20,000 strikes per day (i.e., 1,000 hammer strikes per pile, per day) for the piles for the bridge fender system, 12,800 strikes per day (i.e., 1,600 hammer strikes per pile, per day) for piles for the fixed span piers, and 6,000 strikes per day (i.e., 1.500 strikes per pile, per day) for the CISS piles for the movable span piers.

During impact driving, the project proponent will require the contractor to use a bubble curtain or dewatered cofferdam to minimize the extent to which the interim peak and cumulative SEL thresholds are exceeded (see EIR/EA Chapter 1, *Environmental Commitments* and Natural Environment Study Section 4.4.1.2, *Project Impacts*).

No pile driving activity will occur at night, thereby providing fish with an extended quiet period during nighttime hours on days pile driving is being conducted for feeding and unobstructed passage.

Mitigation Measure AS-7: Develop and Implement a Hydroacoustic Monitoring Plan

The project proponent or their contractor will develop and implement a hydroacoustic monitoring plan. The monitoring plan will be submitted to the resource agencies (CDFW, NMFS, and USFWS) for approval at least 60 days before the start of project activities. The plan will include the following requirements.

The project proponent or their contractor will monitor underwater noise levels during all impact pile driving activities on land and in water to ensure that peak and cumulative SELs do not exceed estimated values (see NES Tables 4-10 through 4-14).

The monitoring plan will describe the methods and equipment that will be used to document the extent of underwater sounds produced by pile driving,

including the number, location, distances, and depths of the hydrophones and associated monitoring equipment.

The monitoring plan will include a reporting schedule for daily summaries of the hydroacoustic monitoring results and for more comprehensive reports to be provided to the resource agencies on a monthly basis during the pile driving season.

The daily reports will include the number of piles installed per day; the number of strikes per pile; the interval between strikes; the peak sound pressure level, sound exposure level, and root mean square per strike; and the accumulated sound exposure level per day at each monitoring station.

The project proponent or their contractor will ensure that a qualified fish biologist is onsite during impact pile driving to document any occurrences of stressed, injured, or dead fish. If stressed, injured, or dead fish are observed during pile driving, the project proponent or their contractor will stop work immediately to provide fish an opportunity to move out of the area. In addition, the project proponent will coordinate with Caltrans to immediately consult with NMFS to determine the cause of the incident and whether any and which type of additional protective measures are necessary. Protective measures that are determined necessary to protect listed fish species will be implemented by the project proponent within 72 hours of the incident.

Mitigation Measure AS-8: Monitor Turbidity in the Sacramento River

The project proponent will require their contractor to monitor turbidity levels in the Sacramento River during in-water construction activities (e.g., pile driving, extraction of temporary sheet piles used for cofferdams, and placement of RSP). Turbidity will be measured using standard techniques upstream and downstream of the construction area to determine whether changes in ambient turbidity levels exceed the thresholds derived from the *Water Quality Control Plan (Basin Plan) for the California Regional Water Quality Control Board Central Valley Region* (Central Valley Regional Water Quality Control Board 2018). If it is determined that turbidity levels exceed the Basin Plan thresholds, the project proponent or their contractor will adjust work to ensure that turbidity levels do not exceed the Basin Plan thresholds.

Mitigation Measure AS-9: Implement Cofferdam Restrictions

The following restrictions will be implemented during installation of the cofferdams and cofferdam dewatering.

- The extent of cofferdam footprints will be limited to the minimum necessary to support construction activities.
- Sheet piles used for cofferdams will be installed and removed using a vibratory pile driver.
- Cofferdams will be installed and removed only during the proposed in-water work window (between May 1 and November 30).

- Cofferdams will not be left in place over winter where they could be overtopped by winter/spring flows and when juveniles of listed species are most likely to be present in the construction area.
- All pumps used during dewatering of cofferdams will be screened according to CDFW and NMFS guidelines for pumps.
- Cofferdam dewatering and fish rescue/relocation from within cofferdams will commence immediately following cofferdam closure to minimize the duration that fish are trapped in the cofferdam.

Mitigation Measure AS-10: Prepare and Implement a Fish Rescue and Relocation Plan

The project proponent or their contractor will develop and implement a fish rescue and relocation plan to recover any fish trapped in cofferdams. The fish rescue and relocation plan will be submitted to the resource agencies (CDFW, NMFS, and USFWS) for approval at least 60 days before initiating activities to install cofferdams. At a minimum, the plan will include the following.

A requirement that fish rescue and relocation activities will commence immediately after cofferdam closure and that dewatering has sufficiently lowered water levels inside cofferdams to make it feasible to rescue fish.

A description of the methods and equipment proposed to collect, transfer, and release all fish found trapped within cofferdams. Capture methods may include seining, dip netting, and electrofishing, as approved by CDFW, NMFS, and USFWS. The precise methods and equipment to be used will be developed cooperatively by CDFW, NMFS, USFWS, and the project proponent or their contractor in advance of project implementation.

A requirement that only CDFW-, NMFS-, and USFWS-approved fish biologists will conduct the fish rescue and relocation.

A requirement that fish biologists will contact CDFW, NMFS, and USFWS immediately if any listed species are found dead or injured.

A requirement that a fish rescue and relocation report be prepared and submitted to CDFW, NMFS, and USFWS within 5 business days following completion of the fish relocation. Data will be provided in tabular form and at a minimum will include the species and number rescued and relocated, approximate size of each fish (or alternatively, approximate size range if a large number of individuals are encountered), date and time of their capture, and general condition of all live fish (e.g., good–active with no injuries; fair–reduced activity with some superficial injuries; poor–difficulty swimming/orienting with major injuries). For dead fish, additional data will include fork length and description of injuries and possible cause of mortality if it can be determined.

Mitigation Measure AS-11: Develop and Implement a Barge Operations Plan

The project proponent or their contractor will develop and implement a barge operations plan. The barge operations plan will be submitted to the resource agencies (CDFW, NMFS, and USFWS) for approval at least 60 days before the start of project activities. The plan will address the following.

Bottom scour from propeller wash.

Bank erosion or loss of submerged or emergent vegetation from propeller wash or excessive wake.

Accidental material spillage.

Sediment and benthic community disturbance from accidental or intentional barge grounding or deployment of barge spuds (extendable shafts for temporarily maintaining barge position) or anchors.

Hazardous materials spills (e.g., fuel, oil, and hydraulic fluids).

The barge operations plan will serve as a guide to barge operations and to a biological monitor, who will evaluate barge operations during construction with respect to stated performance measures. This plan, when approved by the resource agencies, will be read by barge operators and kept aboard all vessels operating at the construction site.

Mitigation Measure AS-12: Prevent the Spread or Introduction of Aquatic Invasive Species

The project proponent or their contractor will implement the following actions to prevent the potential spread or introduction of aquatic invasive species associated with operation of barges and other in-water construction activities. Species of concern related to the operation of barges and other equipment in the lower Sacramento River include invasive mussels (e.g., quagga mussels [*Dreissena bugensis*] and zebra mussels [*Dreissena polymorpha*]) and aquatic plants (e.g., Brazilian waterweed [*Egeria densa*] and hydrilla [*Hydrilla verticillata*]) (California Department of Fish and Game 2008).

- Coordinate with the CDFW Invasive Species Program to ensure that the appropriate BMPs are implemented to prevent the spread or introduction of aquatic invasive species.
- Educate construction supervisors and managers about the importance of controlling and preventing the spread of aquatic invasive species.
- Train vessel and equipment operators and maintenance personnel in the recognition and proper prevention, treatment, and disposal of aquatic invasive species.
- Prior to departure of vessels from their place of origin and before in-water construction equipment is allowed to operate within the waters of the

Sacramento River, thoroughly inspect and remove and dispose of all dirt, mud, plant matter, and animals from all surfaces that are submerged or may become submerged, or places where water can be held and transferred to the surrounding water.

Mitigation Measure AS-13: Minimize or Avoid Permanent Bridge Lighting from Directly Radiating on Water Surfaces of the Sacramento River

The project proponent or their contractor will minimize or avoid the effects of permanent bridge lighting on special-status fish species by implementing the following actions.

Minimize nighttime lighting of the bridge structure for aesthetic purposes.

Use the minimal amount of lighting necessary to safely and effectively illuminate vehicular, bicycle, and pedestrian areas on the bridge.

Shield and focus lights on vehicular, bicycle, and pedestrian areas away from the water surface of the Sacramento River.

Mitigation Measure TE-1: Avoid and Minimize Effects on Valley Elderberry Longhorn Beetle

The following measures from the *Framework for Assessing Impacts to the Valley Elderberry Longhorn Beetle* (U.S. Fish and Wildlife Service 2017) have been slightly modified for this project.

- Fencing. The elderberry shrub will be fenced or flagged as close to construction limits as feasible.
- Avoidance area. Activities that may damage or kill an elderberry shrub (e.g., trenching, paving) may need an avoidance area of at least 6 meters (20 feet) from the dripline, depending on the type of activity.
- Worker education. A qualified biologist will provide training for all contractors, work crews, and any onsite personnel on the status of the VELB, its host plant and habitat, the need to avoid damaging the elderberry shrubs, and the possible penalties for noncompliance.
- Construction monitoring. At a minimum, a qualified biologist will monitor the work area on a weekly basis to ensure that all avoidance and minimization measures are implemented.
- Timing. As much as feasible, all activities that could occur within 50 meters (165 feet) of the elderberry shrub will be conducted outside of the flight season of the VELB (March–July).

Mitigation Measure TE-2: Conduct Focused Surveys for Nesting Swainson's Hawk prior to Construction

The project proponent will retain a wildlife biologist experienced in surveying for Swainson's hawk to conduct surveys for the species in the spring/summer prior to construction. The surveys will be conducted within the limits of disturbance and in a buffer area up to 0.25 mile from the limits of disturbance. The size of the buffer area surveyed will be based on the type of habitat present and the line-of-sight from the construction area to surrounding suitable breeding habitat. Surveys will follow the methods in Recommended Timing and Methodology for Swainson's Hawk Nesting Surveys in California's Central Valley (Swainson's Hawk Technical Advisory Committee 2000). A minimum of six surveys will be conducted according to these methods. If a variance of the survey distance or number of surveys is necessary, the project proponent will coordinate with CDFW regarding appropriate survey methods based on proposed construction activities. Surveys generally will be conducted from February to July. Survey methods and results will be reported to the project proponent and CDFW.

Mitigation Measure TE-3: Purchase Channel Enhancement Credits for Impacts on Critical Habitat

Permanent impacts on critical habitat (bank and substrate below the OHWM and water column habitat), totaling 1.87 acres (up to 57,600 square feet [1.32 acre] from bridge shading of aquatic habitat and new bridge piers; 24,126 square feet [0.55 acre] from RSP; and 84 square feet [0.002 acre] from bridge fender system) will be mitigated at a 3:1 ratio. The project proponent proposes to mitigate the permanent loss of critical habitat through purchase of 5.61 acres of mitigation credits at a NMFS- and USFWS-approved anadromous fish and delta smelt conservation bank.

Mitigation Measure WW-1: Compensate for Loss of Perennial Stream

The project proponent will comply with any regulatory requirements determined as part of the state (Section 401 Water Quality Certification or WDRs, LSAA) and federal (Section 404 and Section 10 permits) processes for the work that would occur in the Sacramento River. The project proponent will compensate for permanent fill of up to 0.431 acre of non-wetland waters of the U.S. in the Sacramento River by purchasing mitigation bank credits, which can be in the form of preservation or creation credits using the following minimum ratios.

- A minimum of 2:1 (2 acres of mitigation for each acre filled), for a total of up to 0.862 acre, if credits are for preservation of habitat; or,
- A minimum of 1:1 (1 acre of mitigation for each acre filled), for a total of up to 0.431 acre if credits are for creation of habitat.

The actual compensation ratios will be determined through coordination with the Central Valley RWQCB and USACE as part of the permitting process. The project proponent will compensate for permanent loss of perennial stream by implementing one or a combination of the following options.

- Purchase credits for created riparian stream channel at a USACE-approved mitigation bank with a service area that encompasses the project area, such as the Liberty Island Conservation Bank, Cosumnes Floodplain Mitigation Bank, Fremont Landing Conservation Bank, Elsie Gridley Mitigation Bank, River Ranch Wetland Mitigation Bank, or other approved bank with available riparian stream credits. The project proponent will provide written evidence to the resource agencies that compensation has been established through the purchase of mitigation credits.
- Compensate out-of-kind for loss of perennial stream by implementing compensatory mitigation for cottonwood riparian forest impacts described in Mitigation Measure NC-4. The acreage restored or created to compensate for loss of perennial stream will be added to the acreage restored or created for loss of riparian habitat.

Finding: With implementation of these mitigation measures, the impact is reduced to a less-than-significant level and is considered less than cumulatively considerable.

Cultural Resources

Impact: Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5 (pg. 3-44)

It is possible that previously unknown archaeological resources could be uncovered during ground disturbing construction activities for any of the build alternatives. This impact is considered potentially significant. With implementation of the measures below, the potential impact would be reduced to a less-than-significant level.

Mitigation Measures: The following mitigation measures have been adopted to address this significant impact and reduce it below the level of significance.

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

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

Mitigation Measure CUL-2: Implement Avoidance and Notification Procedures for Cultural Resources Discovered during Construction

Prior to project construction the project proponents will implement the phased approach and management plan for site P-34-000619 pursuant to Stipulation XII.B of the Section 106 Programmatic Agreement, as described in the project's *Finding of No Adverse Effect* and its Appendix D, *Phased Identification Plan*. The project proponents shall inform its contractor(s) of the possibility of subsurface archaeological deposits within the project area by including the following directive in contract documents:

> "If prehistoric or historical archaeological deposits are discovered during project activities, all work within 100 feet of the discovery shall be redirected and a qualified archaeologist contacted to assess the situation, consult with agencies as appropriate, and make recommendations regarding the treatment of the discovery. Project personnel shall not collect or move any archaeological materials or human remains and associated materials. Archaeological resources can include flaked-stone tools (e.g., projectile points, knives, choppers) or obsidian, chert, basalt, or quartzite toolmaking debris; bone tools; culturally darkened soil (i.e., midden soil often containing heat-affected rock, ash and charcoal, shellfish remains, faunal bones, and cultural materials); and stone-milling equipment (e.g., mortars, pestles, handstones). Prehistoric archaeological sites often contain human remains. Historical materials can include wood, stone, concrete, or adobe footings, walls, and other structural remains; debris-filled wells or privies; and deposits of wood, glass, ceramics, metal, and other refuse."

If archaeological deposits are identified during project subsurface construction, all ground-disturbing activities within 100 feet shall be redirected and a qualified archaeologist contacted to assess the situation and consult with agencies as appropriate. The archaeologist shall first determine whether such deposits are historical resources as defined in 14 CCR §15064.5(a) and as required of the lead agency at 14 CCR §15064.5(c)(1). If these deposits do not qualify as historical resources, a determination will be made whether they qualify as unique archaeological resources, pursuant to 14 CCR §15064.5(c)(3). If the deposit qualifies as a historical resource or a unique archaeological resource, it will need to be avoided by adverse effects or such effects must be mitigated. Mitigation may consist of, but is not necessarily limited to, systematic recovery and analysis of archaeological deposits, recording the resource, preparation of a report of findings, and accessioning recovered archaeological materials at an appropriate curation facility. Public educational outreach also may be appropriate. Upon completion of the assessment, the archaeologist will prepare a report documenting the methods and results and provide recommendations for the

treatment of the archaeological materials discovered. The report will be submitted to the project proponents and the Northwest Information Center.

Mitigation Measure CUL-3: Stop Work if Human Remains are Encountered during Ground-Disturbing Activities

If human remains are encountered, these remains shall be treated in accordance with California Health and Safety Code Section 7050.5. The project proponents shall inform its contractor(s) of the cultural sensitivity of the project area for human remains by including the following directive in contract documents:

> "If human remains are encountered during project activities, work within 100 feet of the discovery shall be redirected and the County Coroner notified immediately. At the same time, an 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 must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods."

In the event that human remains are encountered during project activities, work within 100 feet of the discovery will be redirected and the County Coroner notified immediately. At the same time, an archaeologist will be contacted to assess the situation and consult with agencies as appropriate. Project personnel should not collect or move any human remains and associated materials. If the human remains are of Native American origin, the Coroner must notify the Native American Heritage Commission within 24 hours of this identification. The Native American Heritage Commission will identify a Most Likely Descendant to inspect the site and provide recommendations for the proper treatment of the remains and associated grave goods. Upon completion of the assessment, the archaeologist will prepare a report documenting the methods and results, and provide recommendations for 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 will be submitted to the project proponents and the Northwest Information Center.

Finding: With implementation of these mitigation measures, the impact is reduced to a less-than-significant level.

Geology and Soils

Impact: Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature (pg. 3-50)

Paleontological sensitivity, although unknown and undemonstrated, can be considered low for both sides of the project area because the anticipated ground disturbance would occur primarily in previously disturbed areas; consequently, project construction would be unlikely to encounter intact sensitive paleontological resources due to prior development and ground-disturbing activities in the area. In addition, given that the majority of project construction would be relatively shallow (less than 2 feet deep), it is unlikely that significant paleontological resources would be encountered through these construction activities as the soils/unit would be such a young age (i.e., less than 11,000 years old). Paleontological resources are considered to be older than 5,000 radiocarbon years (Society of Vertebrate Paleontology 2010). However, it is possible that the lower portion of the unit could contain paleontological resources. If project construction should reach these depths and should any significant paleontological resources exist, significant impacts on those resources could occur.

Mitigation Measures: The following mitigation measures have been adopted to address this significant impact and reduce it below the level of significance.

> **Mitigation Measure PAL-1: Educate Construction Personnel in Recognizing Fossil Material**
>
> All construction personnel will receive training provided by a qualified professional paleontologist experienced in teaching non-specialists to ensure that construction personnel can recognize fossil materials in the event that any are discovered during construction.
>
> **Mitigation Measure PAL-2: Stop Work if Fossil Remains Are Encountered during Construction**
>
> If fossil remains (particularly vertebrate remains) are discovered during earth-disturbing activities, activities will stop immediately until a State-registered professional geologist or qualified professional paleontologist can assess the nature and importance of the find and a qualified professional paleontologist can recommend appropriate treatment. Treatment may include preparation and recovery of fossil materials so that they can be housed in an appropriate museum or university collection and may include preparation of a report for publication describing the finds. The project proponent will ensure that recommendations regarding treatment and reporting are implemented.

Finding: With implementation of these mitigation measures, the impact is reduced to a less-than-significant level.

Hazards and Hazardous Materials

Impact: Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment (pg. 3-59)

Humans and the environment could be exposed to hazardous conditions from the accidental release of hazardous materials during construction activities. The use of heavy equipment involves small quantities of hazardous materials (e.g., petroleum and other chemicals used to operate and maintain construction equipment) that may result in hazardous conditions in the project area.

The project area also has the potential for presence of hazardous materials in the form of ADL, and lead and chromium in yellow/white traffic striping. Construction workers could be exposed to hazardous materials during ground-disturbing activities such as grading and roadbed resurfacing at any of the areas known to contain hazardous substances. The ISA identified areas of moderate concern that would be affected by the project.

Ground disturbance for the relocations and grade adjustments would be within the limits of disturbance of the proposed project. Relocations and grade adjustments would occur prior to or during construction and could result in the release of hazardous materials.

Though no direct conflict is present, there is the potential for explosive hazard if the Kinder Morgan and PG&E gas transmission lines that run adjacent to South River Road in West Sacramento and under the Sacramento River if the lines are damaged during project construction. Advance notification and coordination with utility service providers prior to and during construction would ensure that the lines are avoided.

Mitigation Measure: The following mitigation measure has been adopted to address this significant impact and reduce it below the level of significance.

> **Mitigation Measure HAZ-1: Conduct Phase II Site Assessments prior to Construction**
>
> For sites identified as high or medium risk, a Phase II preliminary environmental screening will be completed within the project boundaries at these parcels to assess subsurface soil and/or groundwater, and the presence of wells. At a minimum, the Phase II preliminary screening will investigate each parcel within the project area where construction is anticipated to disturb the subsurface soil or encounter groundwater. Should the preliminary screening indicate the presence of wells or soil or groundwater contamination within the project area, a Phase II assessment will be conducted to investigate the depth and lateral extent of contamination within the project area. Low-risk sites will be re-evaluated (e.g., conduct owner interviews and a site survey) when site access is obtained. An

additional Phase II assessment may be recommended if hazardous materials are identified.

The project proponent will conduct a Phase II assessment within the proposed acquisition area of the parcels described below (Consistent with Preferred Alignment B).

- The following APNs in West Sacramento will be assessed for possible soil/groundwater contamination (Limited to Alternative B affected parcels):

  058-034-028, 058-280-003, 058-350-008, 058-990-007, 058-990-011, 058-270-006, 058-270-011, 058-280-005, 058-280-006, 058-350-001

- The following APNs in Sacramento will be assessed for possible soil/groundwater contamination:

009-0012-008, 009-0012-009, 009-0012-064, 009-0012-029, 009-0012-071, 009-0012-072, 009-0020-001, 009-0020-002, 009-0223-007, 009-0223-012, 009-0223-016, 009-0232-005, 009-0232-009, 009-0232-016, 009-0232-017, 009-0232-018, 009-0235-007, 009-0237-005, 009-0237-010, 009-0237-028, 009-0030-054.

Areas along South River Road, Jefferson Boulevard, and 15th Street in West Sacramento and along Broadway, Front Street, 3rd Street, and 5th Street in Sacramento will be assessed for potential ADL impacts

In West Sacramento, APNs 058-270-011, 058-990-007, and 058-990-11; in Sacramento, APNs 009-0012-009, 0090012-29, 009-0020-02, 009-0223-007, 009-0223-012, and 009-0223-016 will be evaluated for the potential for metals, TPH, lead, arsenic, and creosote impacts for all construction activities that will result in soil excavation within railroad or former railroad easements at these parcels.

Based on the findings of the Phase II investigation, if a soils management plan and health and safety plan are necessary, they will be prepared and implemented.

The Phase II assessment will include sampling and laboratory analysis to confirm the presence of hazardous materials and may include the following.

- Surficial soil and water samples
- Testing of underground storage tanks
- Subsurface soil borings
- Groundwater monitoring well installation, sampling, and analysis (may be appropriate on neighboring properties as well to determine the presence of contamination)

Finding: With implementation of the mitigation measure, the impact is reduced to a less-than-significant level.

Impact: Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment. (pg. 3-59)

Known recognized environmental conditions and parcels with potentially hazardous material conditions are located within or immediately adjacent to the project area. The proposed project would be located on or next to these sites. Disturbance of these areas during construction activities could expose humans and the environment to contaminated soil. Construction on a known hazardous materials site that creates a hazard to the public or the environment would be considered a significant impact.

Mitigation Measure: The following mitigation measure has been adopted to address this significant impact and reduce it below the level of significance.

> **Mitigation Measure HAZ-2: Develop and Implement Plans to Address Worker Health and Safety**
>
> The project proponent will develop and implement the necessary plans and measures required by Caltrans and federal and state regulations, including a health and safety plan, BMPs, and an injury and illness prevention plan. The plans will be prepared and implemented to address worker safety when working with potentially hazardous materials, including potential lead or chromium in traffic stripes, ADL, and other construction-related materials within the right-of-way during any soil-disturbing activity.

Finding: With implementation of this mitigation measure, the impact is reduced to a less-than-significant level.

Noise

Impact: Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies. (pg. 3-72)

The assessment of potential noise levels during construction of the project was based on methodology developed by the Federal Transit Administration (2018) and standards from applicable local guidance, specifically the municipal codes and general plan guidance for the West Sacramento (City of West Sacramento 2016) and Sacramento (City of Sacramento 2015). Typical noise levels produced by heavy construction equipment are expected to generate maximum noise levels from 80 to 101 dBA at a reference distance of 50 feet, which would exceed the local standards of 55 dBA for stationary sources (applicable to both cities) at a distance of up to 2,240 feet.

The nearest residences are about 1,100 feet away from pile driving locations of the western bridge supports in West Sacramento, and the nearest live-aboard vessels (also considered as residences for the purpose of this analysis) are about 600 feet away from locations of the eastern bridge supports. Therefore, noise levels during pile driving are predicted to exceed local standards at residences in these areas.

Noise levels produced by heavy equipment during phases of road construction potentially would exceed local standards for stationary sources (for both cities) at distances of up to 820 feet during daytime hours and 1,970 feet during nighttime hours. The nearest residences could be a close as 50 feet away from road construction areas. This would exceed local standards at residences in West Sacramento and live-aboard vessels in Sacramento.

Noise levels from use of heavy equipment during construction are predicted to exceed local standards for stationary sources in West Sacramento and Sacramento. This impact is considered significant.

Mitigation Measures: Implementation of best noise control practices (Mitigation Measure NOI-1) would reduce the impact; however, measures may not be feasible in all situations to reduce noise below the allowed limits. Therefore, this impact is considered significant and unavoidable.

Mitigation Measure NOI-1: Use Best Noise Control Practices during Construction

The contractor(s) will implement noise control methods such that noise does not exceed applicable noise ordinance standards specified by the City of West Sacramento or the City of Sacramento, as applicable. Measures that can be implemented to control noise include the following.

- Limiting heavy equipment use to daytime hours between 7:00 a.m. and 6:00 p.m.
- Limiting pile driving to times of day that would be least disruptive to residences.
- Locating noise-generating equipment as far away as practical from residences.
- Equipping all construction equipment with standard noise attenuation devices such as mufflers to reduce noise and equipping all internal combustion engines with intake and exhaust silencers in accordance with manufacturer's standard specifications.
- Establishing equipment and material haul routes that avoid residential uses to the extent practical, limiting hauling to the hours between 7:00 a.m. and 10:00 p.m., and specifying maximum acceptable speeds for each route.
- Using electrically powered equipment in place of equipment with internal combustion engines where practical.

- Restricting the use of audible warning devices such as bells, whistles, and horns to those situations that are required by law for safety purposes.
- Providing noise-reducing enclosures around stationary noise-generating equipment.
- Providing temporary construction noise barriers between active construction sites that are near residences.

The construction contractor will develop a noise control plan that identifies specific feasible control measures that will be implemented. The noise control plan will be submitted to and approved by the project sponsor before construction begins.

Prior to construction, the project sponsor will make a construction schedule available to residents living in the vicinity of construction areas and designate a noise disturbance coordinator. The coordinator will be responsible for responding to complaints regarding construction noise and ensure that reasonable measures are implemented to correct the source of disturbance, where feasible. A sign containing the contact telephone number for the noise disturbance coordinator will be conspicuously posted on construction site boundary fencing, and this information also will be included in the notification of the construction schedule.

Finding: With implementation of this mitigation measure, the impact is reduced but is considered significant and unavoidable.

Project Alternatives

Alternatives Considered

CEQA mandates that an EIR evaluate a reasonable range of alternatives to the project that generally reduce or avoid potentially significant impacts of the project. In identifying alternatives to the proposed project, primary consideration was given to alternatives that could reduce one or more of the proposed project's significant impacts while still meeting the project's objectives. CEQA requires that every EIR also evaluate a "No Project" alternative.

- **No Build (No-Project) Alternative**
- **Alternative C – Broadway (Sacramento) to South River Road (West Sacramento)**

No Build (No-Project) Alternative

Description

Under the No Build Alternative, a bridge across the Sacramento River from the Pioneer Bluff area of West Sacramento to Broadway in Sacramento would not be built. In West Sacramento, the redevelopment of Pioneer Bluff would continue as Riverfront Mixed-Use following the City's General Plan and the guidance in the *Pioneer Bluff Transition Plan (*approved in 2014), the *Pioneer Bluff and Stone Lock Reuse Master Plan* (pending approval), and the approved mobility network (as approved by West Sacramento City Council in 2018).

In Sacramento, plans for, and implementation of, roadway improvements and redevelopment would continue consistent with the *West Broadway Specific Plan* and the *Broadway Complete Streets Plan*.

Relationship to Project Objectives

The No Build Alternative would not meet the project purpose or objectives of providing connectivity through additional crossings over the Sacramento River between the City of Sacramento and West Sacramento.

Facts in Support of Finding of Infeasibility

- The No Build Alternative would be inconsistent with the adopted findings of the Sacramento River Crossings Alternatives Study, West Sacramento 2035 General Plan, and City of Sacramento General Plan 2035 related to constructing new multimodal crossings over the Sacramento River and is inconsistent with the Pioneer Bluff and Stone Lock adopted circulation and the West Broadway Specific Plan roadway network.

- The No Build Alternative would not facilitate connections to and from the new crossing and the Sacramento River Parkway and Riverwalk Park trail systems. Pedestrians and bicyclists would be required to travel longer distances to use Tower Bridge or I Street Bridge to cross the Sacramento River.

- The No Build Alternative would not provide additional access for emergency response or evacuation in the event of a natural disaster or regional emergency.

- The No Build Alternative would not alleviate traffic congestion, resulting in increased congestion at intersections on Jefferson Boulevard with three roadway segments operating at unacceptable levels of service. The US 50 eastbound offramp at 5th Street/X Street intersection in during p.m. peak hour would exceed available capacity.

- The No Build Alternative would not facilitate local transit connectivity or access over the Sacramento River south of Pioneer Bridge. Deteriorating traffic conditions would also potentially affect transit services.

- The No Build Alternative would not facilitate convenient access downtown Sacramento, nor to the Bridge District or Pioneer Bluff in West Sacramento. The No Build Alternative would not improve the connectivity to, and accessibility of, businesses, recreational areas, and new or redevelopment opportunity sites located in the urban core of Sacramento and West Sacramento.

- The No Build Alternative would not provide a fiber optic cable to interconnect operational communications of future Broadway Bridge with the Tower Bridge and future C Street/Railyards Bridge (I Street Bridge Replacement project). As such, the No Build would limit operational coordination between the bridge and future potential for automation.

Alignment C Alternative

Description

The modified Alignment C (from the *Broadway Bridge Feasibility Study*) would connect as a "T" intersection to South River Road in West Sacramento and connect to Broadway at 5th Street in Sacramento. This alignment would require modification to the planned mobility network for South River Road in Pioneer Bluff.

Relationship to Project Objectives

Both build alternatives satisfy the purpose of the project and meet the project objectives. However, Alternative B was selected instead of Alternative C for the following reasons. Alternative B would construct a shorter moveable bridge span and would result in less of an impact on natural habitats and trees compared to Alternative C.

Alternative B also would result in better transportation operation results and would require fewer changes to the approved mobility network and redevelopment plans in both cities. New turn pockets on South River Road in West Sacramento, reconstruction of Marina View Drive at the entrance to Miller Regional
Park and a new driveway for property access in Sacramento would be needed for both alternatives. However, Alternative C would also require the creation of a new "T" intersection in West Sacramento that would result in additional traffic congestion in that city requiring implementation of mitigation measures to avoid adverse effects. Lastly, the overall cost of Alternative B is estimated to be slightly less than Alternative C.

Facts in Support of Finding of Infeasibility

- Alternative Alignment C would construct a longer moveable bridge span and would result in a greater impact on natural habitats and trees, including a greater impact to riparian habitat from vegetation removal, greater temporary effects on substrate and water column habitat.

- Alternative Alignment C would result in greater impervious surfaces and greater negative shade effects on the Sacramento River.

- Alternative Alignment C would reduce traffic level of service to an unacceptable level at three West Sacramento intersections under opening year (2030), unacceptable level of service at Jefferson Boulevard/Alameda Boulevard in West Sacramento during design year (2040), and cumulative contribution to significant cumulative impacts (unacceptable level of service) exceeding project-level thresholds.

- The longer movable bridge span of Alternative Alignment C would result in greater project with greater environmental impact.

Statement of Overriding Considerations

Pursuant to Guidelines Section 15092, the City Council finds that in approving the proposed project it has eliminated or substantially lessened all significant and potentially significant effects of the project on the environment where feasible. The City Council further finds that it has balanced the economic, legal, social, technological, and other benefits of the project against the remaining unavoidable environmental risks in determining whether to approve the project and has determined that those benefits outweigh the unavoidable environmental risks and that those risks are acceptable. The City Council makes this statement of overriding considerations in accordance with Section 15093 of the CEQA Guidelines in support of approval of the project.

The City of West Sacramento has considered the information contained in and related to the Final EIR (the Draft EIR, Comments and Responses to those documents, text changes and other revisions to the EIR, and all other public comments, responses to comments, accompanying technical memoranda and staff reports, and findings included in the public record for the project). Pursuant to CEQA Guidelines Section 15092, the City Council finds that in approving the Broadway Bridge Project, it has eliminated or substantially lessened all significant and potentially significant effects of the project on the environment where feasible as shown in the findings. The City Council further finds that it has balanced the economic, social, technological and other benefits of the project against the remaining unavoidable environmental risks in determining whether to approve the project and has determined that those benefits outweigh the unavoidable risks and that those risks are acceptable. The City Council makes this statement of overriding considerations in accordance with CEQA Guidelines Section 15093 in support of approval of the project. Specifically, in the City Council's judgment, the each of the benefits of the project as proposed separately and independently outweigh the unmitigated adverse temporary construction noise impact and the proposed project should be approved.

The overall goal of the proposed project is to construct a new movable bridge over the Sacramento River, consistent with the objectives identified in the Final EIR and

administrative record. Based on the Final EIR and administrative record, and through extensive public participation, the West Sacramento City Council has determined that the proposed Broadway Bridge (Alignment B) project should be approved, and any remaining significant environmental impacts attributable to the proposed project are outweighed by the following specific environmental, economic, fiscal, social, housing and other overriding considerations. Each benefit set forth below is supported by substantial evidence in the record and constitutes an overriding consideration warranting approval of the proposed project, independent of the other benefits, despite the unavoidable temporary construction noise impact.

The considerations that have been taken into account by the City Council in making this decision are identified below:

- Safety. The new bridge will improve bicycle safety by providing two buffered Class II bicycle lanes on the bridge, as well as two protected, separated Class I bicycle/pedestrian pathways between West Sacramento and Sacramento where none are currently available. Existing Tower Bridge to the north provides little protection for bicyclists on-road with insufficient bicycle lane widths and 10-foot sidewalks that are not sufficient for multipurpose use. The I Street Bridge even further north lacks sufficient space for a separate bicycle lane and mixes bicycle traffic with automobile traffic moving at a greater speed. That creates risk for cyclists.

- Design and Traffic Operations Standards. The new bridge would meet current standards for vehicular operations. In addition, it would comply with ADA accessibility requirements providing greater accessibility between Sacramento and West Sacramento. Pioneer Bridge, the closest crossing of the Sacramento River is designed specifically for highway use and does not meet the mobility needs for local travel over the Sacramento River.

- Land Use and Economic Development. The new bridge would accommodate multiple transportation modes, including motor vehicles, bicycles, pedestrians, and high-quality transit, thereby improving connectivity between new development areas in Sacramento and West Sacramento. This will encourage cross-river travel between developing areas in both cities to the benefit of economic development in both. For example, the West Broadway Specific Plan area is expected to contain new business, retail and housing opportunities, in addition to a regional park and marina. West Sacramento is currently building new affordable and market-rate housing adjacent to new restaurants serving the local population and visitors to Sutter Health Park and The Barn outdoor event center. The proposed project will simplify access within the urban core of these cities.

- Accommodation of Transit. The proposed project can accommodate transit modes, including bus and fixed rail transit. Improved transit between the cities of Sacramento and West Sacramento has long been an objective of both cities, as demonstrated by their support for the concept of a cross-river light-rail system led by Sacramento Regional Transit (SacRT), and regional bus transit services

provided by Yolo County Transportation District (YCTD) between Yolo and Sacramento Counties.

Having considered the benefits outlined above, the City Council finds that each and every one of the benefits of approving the project outweigh and override the unavoidable adverse environmental effect associated with the project, and therefore, the project's unavoidable adverse environmental effect is acceptable.